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# APPENDIX B.1:

## Air Quality and GHG Modeling

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# **Air Quality and Greenhouse Gas Appendix**

## **ACCESSIBILITY COMPLIANCE DISCLAIMER**

This appendix includes model outputs from CalEEMod and model spreadsheets. CalEEMod is a web-based model maintained by the California Air Pollution Control Officer's Association available at <https://www.caleemod.com/>. CalEEMod is accessed directly through a browser and requires an internet connection. The text in this appendix should be readable by a screen reader. However, this document may not fully comply with WCAG 2.1 Level AA standards because it contains model outputs. If you need an accessible version of this document, please contact us at the Lead Agency (Melinda Dacey, Principal Planner, City of Costa Mesa, [Melinda.Dacey@costamesaca.gov](mailto:Melinda.Dacey@costamesaca.gov)) and we will work to provide data in an accessible format.

# 1. GREENHOUSE GAS BACKGROUND

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## 1.1 GREENHOUSE REGULATORY SETTING

### Transportation Sector Specific Regulations

#### *Advanced Clean Trucks*

In March 2021, CARB approved the Advanced Clean Trucks (ACT) regulation to accelerate the transition to zero-emission Class 2b and Class 8 medium- and heavy-duty trucks through manufacturer sales requirements. The regulation has two components including a manufacturer sales requirement, and a reporting requirement:

- **ZE Truck Sales:** Manufacturers who certify Class 2b through 8 chassis or complete vehicles with combustion engines are required to sell ZE trucks as an increasing percentage of their annual California sales from 2024 to 2035. By 2035, ZE truck/chassis sales need to be 55 percent of Class 2b – 3 truck sales, 75 percent of Class 4 – 8 straight truck sales, and 40 percent of truck tractor sales.
- **Company and Fleet Reporting:** Large employers including retailers, manufacturers, brokers and others would be required to report information about shipments and shuttle services. Fleet owners, with 50 or more trucks, would be required to report about their existing fleet operations. This information would help identify future strategies to ensure that fleets purchase available ZE trucks and place them in service where suitable to meet their needs.

The ACT regulation was granted a separate waiver in 2023 by the Biden administration. On May 22, 2025, the U.S. Senate voted to revoke the waiver granted by the Biden administration for California's ACT rule through House Joint (H.J.) Resolution 87. On June 12, 2025, President Trump formally nullified California's ACT rule. California currently has no authority to implement ACT.

#### *Advanced Clean Fleets*

CARB adopted the Advanced Clean Fleets (ACF) regulation in April 2023, requiring the use of ZEVs for targeted fleets and that manufacturers only produce ZEV trucks starting in 2036. The ACF regulation was adopted to complement the recently adopted ACT regulation to help advance the introduction of ZE technology into California's trucks and bus fleets. By 2050, the ACF regulation is expected to introduce 1,690,000 ZEVs into the California fleet and result in \$26.5 billion in statewide health benefits from improved air quality. This regulation will help contribute to the goals set by EO N-79-20 (described further below) and will help achieve

## AQ/GHG APPENDIX

emission reductions outlined in the State Implementation Plan, SB 350, AB 32, SB 32, and AB 32. The regulation has four components including a manufacturer sales mandate, drayage fleets requirements, high priority and federal fleets phase-in, and State and local agency procurement requirements.

On January 13, 2025, CARB withdrew their requests for the federal CAA waiver from the US EPA needed to support the ACF regulation. In addition, on September 25, 2025, CARB repealed the ACF drayage truck requirements (13 CCR § 2014) and the high priority and federal fleet requirements (13 CCR § 2015 through 2015.6). California currently has no authority to implement ACF.

### *Omnibus Regulation*

CARB adopted the Heavy-Duty Low NO<sub>x</sub> Omnibus Regulation rule in September 2021, and amended in December 2023, to reduce nitrogen oxide (NO<sub>x</sub>) and particulate matter (PM) emissions from new medium- and heavy-duty engines and vehicles beginning in 2024 model year (MY). The lower NO<sub>x</sub> standards for 2024 through 2026 MY engines represent a 75 percent reduction of the 2010 MY standard and the lower PM standards represents a 50 percent reduction compared to the 2010 MY standard. The regulation was amended in 2023 to provide engine manufacturers with additional flexibility, and to prevent product availability issues for the 2024 through 2026 MY period (CARB 2025).

On May 22, 2025, the U.S. Senate voted to disapprove the USEPA's waiver authorizing California's Heavy-Duty Low NO<sub>x</sub> regulation through House Joint (H.J.) Resolution 89. The resolution was signed into law on June 12, 2025, formally nullifying the USEPA waiver under the Congressional Review Act. As a result, California currently has no authority to implement or enforce the Heavy-Duty Low NO<sub>x</sub> rule.

### *Assembly Bill 1493*

California vehicle GHG emission standards were enacted under AB 1493 (Pavley I). Pavley I is a clean-car standard that reduces GHG emissions from new passenger vehicles (light-duty auto to medium-duty vehicles) from 2009 through 2016 and is anticipated to reduce GHG emissions from new passenger vehicles by 30 percent in 2016. California implements the Pavley I standards through a waiver granted to California by the USEPA. In 2012, the USEPA issued a Final Rulemaking that sets even more stringent fuel economy and GHG emissions standards for model years 2017 through 2025 light-duty vehicles. (See also the discussion on the update to the Corporate Average Fuel Economy standards at the beginning of this Section 5.5.2 under "Federal.") In January 2012, CARB approved the Advanced Clean Cars program (formerly known as Pavley II) for model years 2017 through 2025. The program combines the control of smog, soot, and GHGs with requirements for greater numbers of ZE vehicles into a single package of

standards. Under California’s Advanced Clean Car program, by 2025 new automobiles will emit 34 percent less GHG emissions and 75 percent less smog-forming emissions.

### *Executive Order S-01-07*

On January 18, 2007, the state set a new LCFS for transportation fuels sold in the state. Executive Order S-01-07 sets a declining standard for GHG emissions measured in CO<sub>2</sub>e gram per unit of fuel energy sold in California. The LCFS required a reduction of 2.5 percent in the carbon intensity of California’s transportation fuels by 2015 and a reduction of at least 10 percent by 2020. The standard applies to refiners, blenders, producers, and importers of transportation fuels, and uses market-based mechanisms to allow these providers to choose how they reduce emissions during the “fuel cycle” using the most economically feasible methods.

### *Executive Order B-16-2012*

On March 23, 2012, the state identified that CARB, the California Energy Commission (CEC), the Public Utilities Commission, and other relevant agencies worked with the Plug-in Electric Vehicle Collaborative and the California Fuel Cell Partnership to establish benchmarks to accommodate ZE vehicles in major metropolitan areas, including infrastructure to support them (e.g., electric vehicle charging stations). The executive order also directed the number of ZE vehicles in California’s state vehicle fleet to increase through the normal course of fleet replacement so that at least 10 percent of fleet purchases of light-duty vehicles are ZE by 2015 and at least 25 percent by 2020. The executive order also establishes a target for the transportation sector of reducing GHG emissions to 80 percent below 1990 levels.

### *Executive Order N-79-20*

On September 23, 2020, Governor Newsom signed Executive Order N-79-20, whose goal is that 100 percent of in-state sales of new passenger cars and trucks will be ZE by 2035. Additionally, the fleet goals for trucks are that 100 percent of drayage trucks are ZE by 2035, and 100 percent of medium- and heavy-duty vehicles in the state are ZE by 2045, where feasible. The Executive Order’s goal for the State is to transition to 100 percent ZE off-road vehicles and equipment by 2035, where feasible.

## **Renewables Portfolio: Carbon Neutrality Regulations**

### *Senate Bills 1078, 107, and X1-2 and Executive Order S-14-08*

A major component of California’s Renewable Energy Program is the renewables portfolio standard established under Senate Bills 1078 (Sher) and 107 (Simitian). Under the RPS, certain retail sellers of electricity were required to increase the amount of renewable energy each year by at least 1 percent in order to reach at least 20 percent by December 30, 2010. Executive

## **AQ/GHG APPENDIX**

Order S-14-08, signed in November 2008, expanded the state’s renewable energy standard to 33 percent renewable power by 2020. This standard was adopted by the legislature in 2011 (SB X1-2). Renewable sources of electricity include wind, small hydropower, solar, geothermal, biomass, and biogas. The increase in renewable sources for electricity production will decrease indirect GHG emissions from development projects because electricity production from renewable sources is generally considered carbon neutral.

### *Senate Bill 350*

Senate Bill 350 (de Leon) was signed into law September 2015 and establishes tiered increases to the RPS—40 percent by 2024, 45 percent by 2027, and 50 percent by 2030. SB 350 also set a new goal to double the energy-efficiency savings in electricity and natural gas through energy efficiency and conservation measures.

### *Senate Bill 100*

On September 10, 2018, Governor Brown signed SB 100. Under SB 100, the RPS for public-owned facilities and retail sellers consist of 44 percent renewable energy by 2024, 52 percent by 2027, and 60 percent by 2030. SB 100 also established a new RPS requirement of 50 percent by 2026. Furthermore, the bill establishes an overall state policy that eligible renewable energy resources and zero-carbon resources supply 100 percent of all retail sales of electricity to California end-use customers and 100 percent of electricity procured to serve all state agencies by December 31, 2045. Under the bill, the state cannot increase carbon emissions elsewhere in the western grid or allow resource shuffling to achieve the 100 percent carbon-free electricity target.

### *Senate Bill 1020*

SB 1020 was signed into law on September 16, 2022. It requires renewable energy and zero-carbon resources to supply 90 percent of all retail electricity sales by 2035 and 95 percent by 2040. Additionally, SB 1020 requires all State agencies to procure 100 percent of electricity from renewable energy and zero-carbon resources by 2035.

## **Energy Efficiency Regulations**

### *California Building Energy Code: Energy Efficiency Standards*

Energy conservation standards for new residential and non-residential buildings were adopted by the California Energy Resources Conservation and Development Commission (now the CEC) in June 1977 and most recently revised in 2024 (California Code of Regulations [CCR] Title 24, Part 6). Title 24 Part 6 requires the design of building shells and building components to conserve energy. The standards are updated periodically to allow for consideration and possible incorporation of new energy efficiency technologies and methods.

In 2024, the CEC adopted the 2025 Building Energy Efficiency Standards, which were subsequently approved by the California Building Standards Commission. The 2025 standards became effective and replaced the existing 2022 standards on January 1, 2026. The 2025 standards would require mixed-fuel single-family homes to be electric-ready to accommodate replacement of gas appliances with electric appliances. In addition, the new standards also include prescriptive photovoltaic system and battery requirements for high-rise, multifamily buildings (i.e., more than three stories) and noncommercial buildings such as hotels, offices, medical offices, restaurants, retail stores, schools, warehouses, theaters, and convention centers.<sup>1</sup> The Building Energy and Efficiency Standards and CALGreen undergo a triennial update with a goal to achieve zero net energy for new buildings by 2030.

### *California Building Code: Green Building Standards (CALGreen)*

On July 17, 2008, the California Building Standards Commission adopted the nation’s first green building standards. The California Green Building Standards Code (24 CCR, Part 11, known as “CALGreen”) established planning and design standards for sustainable site development, energy efficiency (in excess of the California Energy Code requirements), water conservation, material conservation, and internal air contaminants.<sup>2</sup> The mandatory provisions of CALGreen became effective January 1, 2011, and were most recently updated in 2024 (2025 CALGreen update). The 2025 CALGreen update became effective on January 1, 2026, and provides updates to the residential and non-residential voluntary measures.

### *2006 Appliance Efficiency Regulations*

The 2006 Appliance Efficiency Regulations (20 CCR §§ 1601–1608) were adopted by the CEC on October 11, 2006, and approved by the California Office of Administrative Law on December 14, 2006. The regulations include standards for both federally regulated appliances and non–federally regulated appliances. Though these regulations are now often viewed as “business as usual,” they exceed the standards imposed by all other states, and they reduce GHG emissions by reducing energy demand.

### *Solid Waste Diversion Regulations*

#### ***AB 939: Integrated Waste Management Act of 1989***

California’s Integrated Waste Management Act of 1989 (AB 939, Public Resources Code §§ 40050 et seq.) set a requirement for cities and counties throughout the state to divert 50 percent of all solid waste from landfills by January 1, 2000, through source reduction, recycling, and composting. In 2008, the requirements were modified to reflect a per capita requirement

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<sup>1</sup> California Energy Commission, 2021, Amendments to the Building Energy Efficiency Standards (2022 Energy Code) Draft Environmental Report. CEC-400-2021-077-D.

<sup>2</sup> The green building standards became mandatory in the 2010 edition of the code.

**AQ/GHG APPENDIX**

rather than tonnage. To help achieve this, the act requires that each city and county prepare and submit a source reduction and recycling element. AB 939 also established the goal for all California counties to provide at least 15 years of ongoing landfill capacity.

**AB 341**

AB 341 (Chapter 476, Statutes of 2011) increased the statewide goal for waste diversion to 75 percent by 2020 and requires recycling of waste from commercial and multifamily residential land uses. Section 5.408 of CALGreen also requires that at least 65 percent of the nonhazardous construction and demolition waste from nonresidential construction operations be recycled and/or salvaged for reuse.

**AB 1327**

The California Solid Waste Reuse and Recycling Access Act (AB 1327, Public Resources Code §§ 42900 et seq.) requires areas to be set aside for collecting and loading recyclable materials in development projects. The act required the California Integrated Waste Management Board to develop a model ordinance for adoption by any local agency requiring adequate areas for collection and loading of recyclable materials as part of development projects. Local agencies are required to adopt the model or an ordinance of their own.

**AB 1826**

In October of 2014, Governor Brown signed AB 1826 requiring businesses to recycle their organic waste on and after April 1, 2016, depending on the amount of waste they generate per week. This law also requires that on and after January 1, 2016, local jurisdictions across the state implement an organic waste recycling program to divert organic waste generated by businesses and multifamily residential dwellings with five or more units. Organic waste means food waste, green waste, landscape and pruning waste, nonhazardous wood waste, and food-soiled paper waste that is mixed with food waste.

*Water Efficiency Regulations*

**SBX7-7**

The 20x2020 Water Conservation Plan was issued by the Department of Water Resources (DWR) in 2010 pursuant to Senate Bill 7, which was adopted during the 7th Extraordinary Session of 2009–2010 and therefore dubbed “SBX7-7.” SBX7-7 mandated urban water conservation and authorized the DWR to prepare a plan implementing urban water conservation requirements (20x2020 Water Conservation Plan). In addition, it required agricultural water providers to prepare agricultural water management plans, measure water deliveries to customers, and implement other efficiency measures. SBX7-7 required urban water providers to adopt a water conservation target of 20 percent reduction in urban per capita water use by 2020 compared to 2005 baseline use.

### ***AB 1881: Water Conservation in Landscaping Act***

The Water Conservation in Landscaping Act of 2006 (AB 1881) requires local agencies to adopt the updated DWR model ordinance or an equivalent. AB 1881 also requires the CEC to consult with the DWR to adopt, by regulation, performance standards and labeling requirements for landscape irrigation equipment, including irrigation controllers, moisture sensors, emission devices, and valves to reduce the wasteful, uneconomic, inefficient, or unnecessary consumption of energy or water.

### ***Short-Lived Climate Pollutant Reduction Strategy***

#### ***Senate Bill 1383***

On September 19, 2016, the Governor signed SB 1383 to supplement the GHG reduction strategies in the Scoping Plan to consider short-lived climate pollutants, including black carbon and CH<sub>4</sub>. Black carbon is the light-absorbing component of fine particulate matter produced during the incomplete combustion of fuels. SB 1383 required the state board, no later than January 1, 2018, to approve and begin implementing a comprehensive strategy to reduce emissions of short-lived climate pollutants to achieve a reduction in methane by 40 percent, hydrofluorocarbon gases by 40 percent, and anthropogenic black carbon by 50 percent below 2013 levels by 2030. The bill also established targets for reducing organic waste in landfills. On March 14, 2017, CARB adopted the Short-Lived Climate Pollutant Reduction Strategy, which identifies the state's approach to reducing anthropogenic and biogenic sources of short-lived climate pollutants. Anthropogenic sources of black carbon include on- and off-road transportation, residential wood burning, fuel combustion (charbroiling), and industrial processes. According to CARB, ambient levels of black carbon in California are 90 percent lower than in the early 1960s, despite the tripling of diesel fuel use (CARB 2017). In-use on-road rules were expected to reduce black carbon emissions from on-road sources by 80 percent between 2000 and 2020. South Coast AQMD is one of the air districts that requires air pollution control technologies for chain-driven broilers, which reduces particulate emissions from these charbroilers by over 80 percent (CARB 2017). Additionally, South Coast AQMD Rule 445 limits installation of new fireplaces in the South Coast Air Basin.

## **1.2 REFERENCES**

California Air Resources Board (CARB). 2017, March 14. Final Proposed Short-Lived Climate Pollutant Reduction Strategy. [https://ww2.arb.ca.gov/sites/default/files/2018-12/final\\_slcp\\_report%20Final%202017.pdf](https://ww2.arb.ca.gov/sites/default/files/2018-12/final_slcp_report%20Final%202017.pdf).

CARB. Heavy-Duty Omnibus Regulation Fact Sheet. <https://ww2.arb.ca.gov/our-work/programs/heavy-duty-low-nox/heavy-duty-omnibus-regulation-fact-sheet>.

# **Assumptions Worksheet**

## CalEEMod Project Characteristics Inputs (Construction): FDCSP Total Area Prep Work + Phase 3 (Worst-Case)

**Name:** Fairview Development Center Specific Plan  
**Project Location:** 2501 Harbor Blvd, Costa Mesa, CA 92626  
**County:** Orange County  
**Land Use Setting:** Urban  
**Air Basin:** SoCAB  
**Air District:** South Coast AQMD  
**Gas Utility:** Southern California Gas  
**Electric Utility:** Southern California Edison

Total Project Site Acreage Disturbed for Phase 3: 13 acres  
 Total Project Site Acreage Disturbed for FDCSP area: 96 acres

### CalEEMod Land Use Inputs

#### Land Uses

Project Components	SQFT	Tons	CY
<b>Demolition</b>			
Building Demolition <sup>1</sup>	828,114	38,093	NA
Asphalt Demolition <sup>2</sup>	1,635,915	24,236	NA

**Notes:**

- <sup>1</sup> Estimates from Developers Research for all existing buildings onsite.  
<sup>2</sup> Estimates from Google Earth for entire FDCSP Area.

#### Land Uses

Phase 3 Land Use Type	Land Use Subtype	Unit Amount	Size Metric	Lot Acreage	Land Use Square Feet	Landscaping Square Feet
Residential	Apartments Mid-Rise	947	DU	11.67	371,131	137,214
Parking	Other Asphalt Surfaces	57.94	1000 sqft	1.33	57,935	0
<b>Total</b>				<b>13.00</b>		

**Notes:**

- <sup>1</sup> Total acreage disturbed and square footages based on Google Earth estimates based on preferred land use plan and conceptual land use plan for phase 3.

#### Hauling Estimates

Component	Amount to be Hauled (tons for demolition debris; cubic yards for soil)	Activity	Haul Distance (miles) <sup>1</sup>	Total Trip Ends	Duration (days)	Trip Ends/Day
Building Demolition	38,093	Demolition	375	3,810	130	30
OEF 14: Rooftop Transformer	46	Demolition	218	6	130	1
Asphalt Demolition	24,236	Demolition	20	2,424	130	19
<i>Weighted Demolition Debris</i>	<i>62,375</i>	<i>Demolition</i>	<i>237</i>	<i>6,240</i>	<i>130</i>	<i>48</i>
REC 1: PCB Releases in Electrical Vault	370	Mass Grading	218	48	214	1
OEF 13: Existing Electrical Equipment in Vaults 6 and 13	741	Mass Grading	218	94	214	1
OEF 17: Swimming Pool Chemical Storage	3,704	Mass Grading	20	464	214	3
OEF 16: Abandoned Exploratory Borings	2,778	Mass Grading	218	348	214	2
Soil Import Replacement	7,593	Mass Grading	20	950	214	5
<i>Weighted Soil Haul</i>	<i>15,185</i>	<i>Mass Grading</i>	<i>71</i>	<i>1,900</i>	<i>214</i>	<i>9</i>

**Notes:**

- <sup>1</sup> See Soil Remediation, Building Demolition, and Asphalt Demolition sheets for more information. CalEEMod default distance assumed for soil import replacement.

**Architectural Coating**

		<b>Percent Painted</b>	
SCAQMD Rule 1113	Interior Painted:	100%	
	Exterior Painted:	100%	
	Interior Paint VOC content:	50	grams per liter
	Exterior Paing VOC content:	50	grams per liter
	Parking Paint VOC content:	100	grams per liter

Land Use	Land Use Amount	CalEEMod Factor	Total Paintable Surface		
			Area	Interior Area	Exterior Area
Apartments Mid-Rise	371,131	2.7	1,002,054	751,541	250,514
Other Asphalt Surfaces	57,935	6%	3,476		3,476

**Notes:**

- <sup>1</sup> CalEEMod methodology calculates the paintable interior and exterior areas by multiplying the total paintable surface area by 75 and 25 percent, respectively.
- <sup>2</sup> CalEEMod default assumes the total surface for painting equals 2.7 times the floor square footage for residential square footage as defined by the user.
- <sup>3</sup> CalEEMod default assumes 6% of parking land uses will be striped.

**CalEEMod Construction Measures**

SCAQMD Rule 403	Water Exposed Surfaces	Frequency per day:	2	
		PM10:	55	% Reduction
		PM2.5:	55	% Reduction
Unpaved Roads		Vehicle Speed:	25	mph
		PM10:	44	% Reduction
		PM25:	44	% Reduction
SCAQMD Rule 1186	Sweep Paved Roads	PM10:	9	% Reduction
		PM25:	9	% Reduction

### Soil Remediation Haul Trip Calculation

Source: Section 3.8, Hazards and Hazardous Materials, and Figures 3.8-1 & 3.8-2.

Environmental Conditions	Contaminants	Soil Depth (feet) <sup>1</sup>	Surface Area (square feet) <sup>1</sup>	Volumes (cubic feet)	Volumes (cubic yards)	Haul Truck Capacity (CY) <sup>2</sup>	Accepting Facility Distance (miles) <sup>3</sup>	Round Trips	Total Trip Ends
REC 1: PCB Releases in Electrical Vault	polychlorinated biphenyl	10	1,000	10,000	370	16	218	24	48
OEF 13: Existing Electrical Equipment in Vaults 6 and 13	polychlorinated biphenyl	10	2,000	20,000	741	16	218	47	94
OEF 17: Swimming Pool Chemical Storage	hydrochloric acid, sodium hypochlorite, and sodium bicarbonate	10	10,000	100,000	3,704	16	20	232	464
OEF 16: Abandoned Exploratory Borings	hydrocarbons	15	5,000	75,000	2,778	16	218	174	348

**Notes:**

<sup>1</sup> Estimates based on preliminary contamination results contained in Section 3.8, Hazards and Hazardous Materials, of the DEIR.

<sup>2</sup> CalEEMod default haul truck capacity used.

<sup>3</sup> PCBs and petroleum contamination anticipated to be transported to Chemical Waste Management Kettleman Hills Facility (35251 Old Skyline Rd, Kettleman City, CA 93239). Contaminants from OEF 17 assume default CalEEMod haul travel distance due to pool chemical materials being largely considered household hazardous waste.

## Building Demolition Haul Trip Calculation

Source: CalEEMod User's Guide Version 2022.1, Appendix C

### Conversion factors

0.046 ton/SF

20 tons truck capacity

<b>Building</b>	<b>BSF Demo<sup>1</sup></b>	<b>Tons/SF</b>	<b>Tons</b>	<b>Haul Truck Capacity (ton)<sup>2</sup></b>	<b>Accepting Facility Distance (miles)<sup>3</sup></b>	<b>Round Trips</b>	<b>Total Trip Ends</b>
Building Demolition	828,114	0.046	38,093	20	375	1,905	3,810
OEF 14: Rooftop Transformer	1,000	0.046	46	20	218	3	6

#### **Notes:**

<sup>1</sup> Estimates from Developers Research for all existing buildings onsite. Transformer area estimated using Google Earth.

<sup>2</sup> CalEEMod default haul truck capacity used.

<sup>3</sup> All building debris is assumed to contain ACM and LBP and are assumed be transported to Altamont Landfill (10840 Altamont Pass Road, Livermore, CA 94551). Existing Rooftop Oil Cooled Transformer assumed to be transported to Chemical Waste Management Kettleman Hills Facility (35251 Old Skyline Rd, Kettleman City, CA 93239).

## Pavement Volume to Weight Conversion

Component	Total SF of Area <sup>1</sup>	Assumed Thickness (foot) <sup>2</sup>	Debris Volume (cu. ft)	Weight of Crushed Asphalt (lbs/cf) <sup>3</sup>	AC Mass (lbs)	AC Mass (tons)	Haul Truck Capacity (ton) <sup>4</sup>	Round Trips	Total Trip Ends
Asphalt Demolition	1,635,915	0.333	545,305	89	48,471,556	24,236	20	1,212	2,424

### Notes:

<sup>1</sup> Asphalt pavement SF estimated based on Google Earth.

<sup>2</sup> Gibbons, Jim. 1999. Pavements and Surface Materials. Nonpoint Education for Municipal Officials, Technical Paper Number 8. University of

<sup>3</sup> CalRecycle. 2019. Solid Waste Cleanup Program Weights and Volumes for Project Estimates.

<sup>4</sup> CalEEMod default haul capacity used.

## CalEEMod Project Characteristics Inputs (Construction): Secondary Access Roadway

**Name:** Fairview Development Center Specific Plan, Secondary Access Roadway  
**Project Location:** 2501 Harbor Blvd, Costa Mesa, CA 92626  
**County:** Orange County  
**Land Use Setting:** Urban  
**Air Basin:** SoCAB  
**Air District:** South Coast AQMD  
**Gas Utility:** Southern California Gas  
**Electric Utility:** Southern California Edison

Total Project Site Acreage Disturbed: 1.02 acres

### CalEEMod Land Use Inputs

Land Use Type	Land Use Subtype	Unit Amount	Size Metric	Lot Acreage	Land Use Square Feet	Landscaping Square Feet
Linear	Road Construction	0.20	Mile	1.02	NA	0
<b>Total</b>				<b>1.02</b>		

Predominant Soil/Site Type: Weathered Rock/Earth

**Notes:**

<sup>1</sup> Google Earth estimate of length of secondary access roadway based on preferred land use plan and conceptual land use plan. Lot acreage calculated based on 42 feet width and 0.20-mile length of roadway.

### Architectural Coating

**Percent Painted**

Interior Painted: 100%  
 Exterior Painted: 100%

SCAQMD Rule 1113

Parking Paint VOC content: 100 grams per liter

Land Use	Land Use Amount	CalEEMod Factor	Total Paintable Surface Area	VOC for Linear Paint for Linear, Paving Phase
Secondary Access Roadway	44,352	6%	2,661	2,661

**Notes:**

<sup>1</sup> CalEEMod default assumes 6% of parking land uses will be striped.

### CalEEMod Construction Measures

SCAQMD Rule 403	Water Exposed Surfaces	Frequency per day:	<u>2</u>	
		PM10:	<u>55</u>	% Reduction
		PM2.5:	<u>55</u>	% Reduction
Unpaved Roads		Vehicle Speed:	<u>25</u>	mph
		PM10:	<u>44</u>	% Reduction
		PM25:	<u>44</u>	% Reduction
SCAQMD Rule 1186	Sweep Paved Roads	PM10:	<u>9</u>	% Reduction
		PM25:	<u>9</u>	% Reduction

**Construction Activities and Schedule Assumptions: FDCSP Development - Entire SP Area Site Prep Work**

Construction Activities	Construction Schedule			
	Start Date	End Date	Duration (Calendar Days)	Duration (Work Days)
<b>CalEEMod Default Schedule</b>				
Demolition	1/1/2027	5/20/2027	139	100
Site Preparation	5/24/2027	8/13/2027	81	60
Grading	8/16/2027	3/17/2028	214	155

Construction Activities	Adjusted Construction Schedule <sup>1</sup>			
	Start Date	End Date	Duration (Calendar Days)	Duration (Work Days)
Demolition	1/1/2027	7/1/2027	181	130
Site Preparation	7/2/2027	9/21/2027	81	58
Mass Grading	9/22/2027	4/23/2028	214	153
Utility Trenching	9/22/2027	4/23/2028	214	153

**Notes:**

<sup>1</sup> Demolition anticipated to take no less than 6 months. Site preparation and mass grading durations utilize CalEEMod defaults. Utility trenching assumed to occur with mass grading simultaneously.

**Construction Activities and Schedule Assumptions: FDCSP Development, Phase 3**

Construction Activities	Default CalEEMod Construction Schedule			
	Start Date	End Date	Duration (Calendar Days)	Duration (Work Days)
<b>CalEEMod Default Schedule</b>				
Grading	4/24/2028	6/2/2028	39	30
Building Construction	6/5/2028	7/27/2029	417	300
Paving	7/30/2029	8/24/2029	25	20
Architectural Coating	8/27/2029	9/21/2029	25	20

Normalization Calculations			
CalEEMod Defaults Construction Duration		Assumed Construction Duration	
515	days of construction	50	months
1.41	years of construction		
16.93	months of construction		
Normalization Factor:			2.95

Adjusted CalEEMod Schedule	Adjusted CalEEMod Construction Schedule for 50-Month Duration			
	Start Date	End Date	Duration (Calendar Days)	Duration (Work Days)
Fine Grading	4/24/2028	8/17/2028	115	84
Building Construction	8/17/2028	12/31/2031	1,231	880
Paving	1/1/2032	3/15/2032	74	53
Architectural Coating	3/16/2032	5/29/2032	74	54

**Notes:**

<sup>1</sup> Since the Specific Plan is a broad-based policy document, the timing and sequencing of individual land use development are unknown. For purposes of estimating construction emissions, CalEEMod default construction durations were normalized based on 50-month schedule following the completion of the anticipated site-wide mass grading.

**Construction Activities and Schedule Assumptions: FDCSP Development, Secondary Access Roadway**

Construction Activities	Construction Schedule			
	Start Date	End Date	Duration (Calendar Days)	Duration (Work Days)
<b>CalEEMod Default Schedule</b>				
Linear, Grubbing & Land Clearing	4/24/2028	4/29/2028	5	4
Linear, Grading & Excavation	4/30/2028	5/25/2028	25	18
Linear, Drainage, Utilities, & Sub-Grade	5/26/2028	6/11/2028	16	12
Linear, Paving	6/12/2028	6/20/2028	8	6

**Notes:**

<sup>1</sup> Assume secondary access roadway would start on same construction date as FDCSP Phase 3. Schedule based on 40 work day schedule.

**Construction Activities and Schedule Assumptions: Master Overlapping Schedule**

Construction Activities	Overlapping Construction Schedule			
	Start Date	End Date	Duration (Calendar Days)	Duration (Work Days)
<b>FDCSP - Site-wide Improvements</b>				
Demolition	1/1/2027	7/1/2027	181	130
Site Preparation	7/2/2027	9/21/2027	81	58
Mass Grading	9/22/2027	4/23/2028	214	153
Utility Trenching	9/22/2027	4/23/2028	214	153
<b>FDCSP - Phase 3 Development</b>				
Fine Grading	4/24/2028	8/17/2028	115	84
Building Construction	8/17/2028	12/31/2031	1,231	880
Paving	1/1/2032	3/15/2032	74	53
Architectural Coating	3/16/2032	5/27/2032	74	54
<b>FDCSP, Secondary Access Roadway</b>				
Linear, Grubbing & Land Clearing	4/24/2028	4/29/2028	5	4
Linear, Grading & Excavation	4/30/2028	5/25/2028	25	18
Linear, Drainage, Utilities, & Sub-Grade	5/26/2028	6/11/2028	16	12
Linear, Paving	6/12/2028	6/20/2028	8	6
<b>Overlapping CalEEMod Schedule</b>				
Demolition	1/1/2027	7/1/2027	181	130
Site Preparation	7/2/2027	9/21/2027	81	58
Mass Grading and Utility Trenching	9/22/2027	4/23/2028	214	153
Fine Grading and Linear, Grubbing & Land Clearing	4/24/2028	4/29/2028	5	5
Fine Grading and Linear, Grubbing & Excavation	4/30/2028	5/25/2028	25	19
Fine Grading and Linear, Drainage, Utilities, & Sub-Grade	5/26/2028	6/11/2028	16	11
Fine Grading and Linear, Paving	6/12/2028	6/20/2028	8	7
Fine Grading	6/21/2028	8/17/2028	57	42
Fine Grading and Building Construction	8/17/2028	8/17/2028	0	1
Building Construction	8/18/2028	12/31/2031	1230	879
Paving	1/1/2032	3/15/2032	74	53
Architectural Coating	3/16/2032	5/27/2032	72	53

**Notes:**

<sup>1</sup> Assume secondary access roadway would start on same construction date as FDCSP Phase 3.

**FDCSP Development Equipment Mix - Entire SP Area Site Prep Work**

Construction Equipment	CalEEMod Equipment	Quantity of Equipment	Hours/Day	Acres/Day	Unmitigated Engine Tier		
<b>Demolition</b>							
Concrete/Industrial Saws	Concrete/Industrial Saws	1	8	0.00	Average	<b>Trips/Day</b>	
Excavators	Excavators	3	8	0.00	Average		
Rubber Tired Dozers	Rubber Tired Dozers	2	8	1.00	Average		
Crushing/Proc. Equipment	Crushing/Proc. Equipment	1	8	0.00	Average		
Default Worker Trips							18
Default Vendor Trips						8	
Estimated Hauling Trips						48	
Water Trucks (On-site Activity)				Acres Disturbed (ac/day):	1.00	5	
				Water Truck On-site Travel (mi/day):	0.83		
<b>Construction Trips in Model</b>						<b>Trips/Day</b>	
Worker Trips						18	
Vendor + Water Truck Trips						13	
Hauling Trips						48	
Onsite Trucks (Water Truck Onsite Travel)						1	
<b>Site Preparation</b>							
Scrapers	Scrapers	3	8	3.00	Average	<b>Trips/Day</b>	
Rubber Tired Dozers	Rubber Tired Dozers	9	8	4.50	Average		
Tractors/Loaders/Backhoes	Tractors/Loaders/Backhoes	12	8	6.00	Average		
Default Worker Trips							60
Default Vendor Trips							19
Estimated Hauling Trips						0	
Water Trucks (On-site Activity)				Acres Disturbed (ac/day):	13.50	68	
				Water Truck On-site Travel (mi/day):	11.14		
<b>Construction Trips in Model</b>						<b>Trips/Day</b>	
Worker Trips						60	
Vendor + Water Truck Trips						87	
Hauling Trips						0	
Onsite Trucks (Water Truck Onsite Travel)						1	
<b>Mass Grading</b>							
Excavators	Excavators	6	8	0.00	Average	<b>Trips/Day</b>	
Graders	Graders	3	8	1.50	Average		
Rubber Tired Dozers	Rubber Tired Dozers	3	8	1.50	Average		
Scrapers	Scrapers	6	8	6.00	Average		
Tractors/Loaders/Backhoes	Tractors/Loaders/Backhoes	6	8	3.00	Average		
Default Worker Trips							60
Default Vendor Trips						23	
Estimated Hauling Trips						9	
Water Trucks (On-site Activity)				Acres Disturbed (ac/day):	12.00	60	
				Water Truck On-site Travel (mi/day):	9.90		
<b>Construction Trips in Model</b>						<b>Trips/Day</b>	
Worker Trips						60	
Vendor + Water Truck Trips						83	
Hauling Trips						9	
Onsite Trucks (Water Truck Onsite Travel)						1	
<b>Utility Trenching</b>							
Excavators	Excavators	2	8	0.00	Average	<b>Trips/Day</b>	
Graders	Graders	1	8	0.50	Average		
Rubber Tired Dozers	Rubber Tired Dozers	1	8	0.50	Average		
Scrapers	Scrapers	2	8	2.00	Average		
Tractors/Loaders/Backhoes	Tractors/Loaders/Backhoes	2	8	1.00	Average		
Default Worker Trips							20
Default Vendor Trips						0	
Estimated Hauling Trips						0	
Water Trucks (On-site Activity)				Acres Disturbed (ac/day):	4.00	20	
				Water Truck On-site Travel (mi/day):	3.30		
<b>Construction Trips in Model</b>						<b>Trips/Day</b>	
Worker Trips						20	
Vendor + Water Truck Trips						20	
Hauling Trips						0	
Onsite Trucks (Water Truck Onsite Travel)						1	

Notes: Demolition assumes CalEEMod-default equipment quantities. Grading and Site Preparation assumes 3 times the quantity of CalEEMod-default equipment. In addition, Mass Grading assumes use of scrapers. Utility Trenching assumes CalEEMod-default equipment quantities and types for grading.

**Water Truck Vendor Trip Calculation**

Amount of Water (gal/acre/day) <sup>1</sup>	Water Truck Capacity (gallons) <sup>2</sup>
10,000	2,000

Notes:

- Based on data provided in Guidance for Application for Dust Control Permit Maricopa County Air Quality Department. 2005, June. Guidance for Application of Dust Control Permit. [https://www.epa.gov/sites/default/files/2019-04/documents/mr\\_guidanceforapplicationfordustcontrolpermit.pdf](https://www.epa.gov/sites/default/files/2019-04/documents/mr_guidanceforapplicationfordustcontrolpermit.pdf)
- Based on standard water truck capacity: McLellan Industries. 2026, April (accessed). Water Trucks. <https://www.mclellanindustries.com/trucks/water-trucks/>.
- Assumes that dozers, tractors/loaders/backhoes, and graders can disturb 0.50 acres per day and scrapers can disturb 1 acre per day.

**FDCSP Development Equipment Mix - Phase 3 Development**

Construction Equipment	CalEEMod Equipment	Quantity of Equipment	Hours/Day	Acres/Day	Unmitigated Engine Tier	
<b>Fine Grading</b>						
Excavators	Excavators	2	8	0.00	Average	<b>Trips/Day</b>
Graders	Graders	1	8	0.50	Average	
Rubber Tired Dozers	Rubber Tired Dozers	1	8	0.50	Average	
Scrapers	Scrapers	2	8	2.00	Average	
Tractors/Loaders/Backhoes	Tractors/Loaders/Backhoes	2	8	1.00	Average	
Default Worker Trips						20
Default Vendor Trips						2
Estimated Hauling Trips						0
Water Trucks (On-site Activity)				Acres Disturbed (ac/day):	4.00	20
				Water Truck On-site Travel (mi/day):	3.30	
<b>Construction Trips in Model</b>						<b>Trips/Day</b>
Worker Trips						20
Vendor + Water Truck Trips						22
Hauling Trips						0
Onsite Trucks (Water Truck Onsite Travel)						1
<b>Building Construction</b>						
Cranes	Cranes	3	7	0.00	Average	<b>Trips/Day</b>
Forklifts	Forklifts	9	8	0.00	Average	
Generator Sets	Generator Sets	3	8	0.00	Average	
Tractors/Loaders/Backhoes	Tractors/Loaders/Backhoes	9	7	3.94	Average	
Welders	Welders	3	8	0.00	Average	
Default Worker Trips						68
Default Vendor Trips						101
Estimated Hauling Trips						0
Water Trucks (On-site Activity)				Acres Disturbed (ac/day):	3.94	20
				Water Truck On-site Travel (mi/day):	3.25	
<b>Construction Trips in Model</b>						<b>Trips/Day</b>
Worker Trips						68
Vendor + Water Truck Trips						121
Hauling Trips						0
Onsite Trucks (Water Truck Onsite Travel)						1
<b>Paving</b>						
Pavers	Pavers	2	8	0.00	Average	<b>Trips/Day</b>
Paving Equipment	Paving Equipment	2	8	0.00	Average	
Rollers	Rollers	2	8	0.00	Average	
Default Worker Trips						15
Default Vendor Trips						0
Estimated Hauling Trips						0
Water Trucks (On-site Activity)				Acres Disturbed (ac/day):	0.00	0
				Water Truck On-site Travel (mi/day):	0.00	
<b>Construction Trips in Model</b>						<b>Trips/Day</b>
Worker Trips						15
Vendor + Water Truck Trips						2
Hauling Trips						0
Onsite Trucks (Water Truck Onsite Travel)						0
<b>Architectural Coating</b>						
Air Compressors	Air Compressors	1	6	0.00	Average	<b>Trips/Day</b>
Default Worker Trips						14
Default Vendor Trips						0
Estimated Hauling Trips						0
Water Trucks (On-site Activity)				Acres Disturbed (ac/day):	0.00	0
				Water Truck On-site Travel (mi/day):	0.00	
<b>Construction Trips in Model</b>						<b>Trips/Day</b>
Worker Trips						14
Vendor + Water Truck Trips						0
Hauling Trips						0
Onsite Trucks (Water Truck Onsite Travel)						0

Notes: Building Construction equipment quantities multiplied by 3 from CalEEMod defaults to account for up to 3 individual development contractors developing the site simultaneously.

**Water Truck Vendor Trip Calculation**

Amount of Water (gal/acre/day) <sup>1</sup>	Water Truck Capacity (gallons) <sup>2</sup>
10,000	2,000

Notes:

- Based on data provided in Guidance for Application for Dust Control Permit Maricopa County Air Quality Department. 2005, June. Guidance for Application of Dust Control Permit. [https://www.epa.gov/sites/default/files/2019-04/documents/mr\\_guidanceforapplicationfordustcontrolpermit.pdf](https://www.epa.gov/sites/default/files/2019-04/documents/mr_guidanceforapplicationfordustcontrolpermit.pdf)
- Based on standard water truck capacity: McLellan Industries. 2024, September (accessed). Water Trucks. <https://www.mclellanindustries.com/trucks/water-trucks/>.
- Assumes that dozers, tractors/loaders/backhoes, and graders can disturb 0.50 acres per day and scrapers can disturb 1 acre per day.

## CalEEMod Construction Off-Road Equipment Inputs: FDCSP Development, Secondary Access Roadway

Where information has not been provided, CalEEMod default equipment, worker, and vendor trips have been used.

Construction Equipment Details				
CalEEMod Equipment	# of Equipment	hr/day	Unmitigated Engine Tier	total trips per day
<b>Linear, Grubbing &amp; Land Clearing</b>				
Signal Boards	0	8	Average	
Crawler Tractors	1	8	Average	
Excavators	1	8	Average	
Worker Trips				5
Vendor Trips				0
Hauling Trips				0
Onsite Truck	Acres Disturbed:	0.00		
	Onsite Travel (mi/day):	0.00		
<b>Linear, Grading &amp; Excavation</b>				
Excavators	3	8	Average	
Crawler Tractors	1	8	Average	
Graders	1	8	Average	
Rollers	2	8	Average	
Signal Boards	0	8	Average	
Scrapers	2	8	Average	
Rubber Tired Loaders	1	8	Average	
Tractors/Loaders/Backhoes	2	8	Average	
Worker Trips				30
Vendor Trips				4
Hauling Trips				0
Onsite Truck	Acres Disturbed:	4.00		
	Onsite Travel (mi/day):	3.30		
<b>Linear, Drainage, Utilities, &amp; Sub-Grade</b>				
Tractors/Loaders/Backhoes	2	8	Average	
Scrapers	2	8	Average	
Signal Boards	0	8	Average	
Rough Terrain Forklifts	1	8	Average	
Graders	1	8	Average	
Plate Compactors	1	8	Average	
Pumps	1	8	Average	
Air Compressors	1	8	Average	
Generator Sets	1	8	Average	
Worker Trips				25
Vendor Trips				0
Hauling Trips				0
Onsite Truck	Acres Disturbed:	3.50		
	Onsite Travel (mi/day):	2.89		
<b>Linear, Paving</b>				
Rollers	3	8	Average	
Paving Equipment	1	8	Average	
Pavers	1	8	Average	
Signal Boards	0	8	Average	
Tractors/Loaders/Backhoes	2	8	Average	
Worker Trips				18
Vendor Trips				2
Hauling Trips				0

**Notes:**

<sup>1</sup> Assumes that dozers, tractors/loaders/backhoes, and graders can disturb 0.50 acres per day and scrapers can disturb 1 acre per day.

**CalEEMod Project Characteristics Inputs (Operation): Proposed Land Uses**

**Name:** Fairview Development Center Specific Plan, Proposed  
**Project Location:** 2501 Harbor Blvd, Costa Mesa, CA 92626  
**County:** Orange County  
**Land Use Setting:** Urban  
**Air Basin:** SoCAB  
**Air District:** South Coast AQMD  
**Gas Utility:** Southern California Gas  
**Electric Utility:** Southern California Edison

Total Project Site Acreage Disturbed: 96.02 acres

**FDCSP Land Use Plan<sup>1</sup>**

FDCSP Land Use Plan	Acres	Dwelling Units	Non-Res SF	Building Square Feet
State DDS <sup>2</sup>	15	480		460,800
Permanent Supportive	2	200		115,000
Senior Affordable	2	200		152,400
Condominium	14	1,226		1,372,410
Townhomes	6	144		196,470
MultiFamily Apartments	12	1,030		1,066,050
Mixed-Use	9	720	35,000	780,200
Open Space	14			
ROM Infrastructure/ROW	21			
<b>Total</b>	<b>95</b>	<b>4,000</b>	<b>35,000</b>	<b>4,143,330</b>

**Notes:**

- <sup>1</sup> Information based on preferred land use plan.
- <sup>2</sup> State DDS building square footage based on dwelling units using CalEEMod defaults for the Apartments Mid-Rise land use.

**CalEEMod Land Use Inputs**

Land Use Type	Land Use Subtype	Unit Amount	Size Metric	Lot Acreage	Land Use Square Feet <sup>1</sup>	Landscaping Square Feet	Population
Residential	Apartments Mid-Rise	4,000	DU	59.20	4,143,330	0	9926
Recreational	City Park	14	acre	14.00	0	0	0
Recreational	High Turnover (Sit Down Restaurant)	35.00	1000 sqft	0.80	35,000	0	0
Parking	Other Asphalt Surfaces	22.02	acre	22.02	0	0	0
				<b>Total</b>	<b>96.02</b>		

**Notes:**

- <sup>1</sup> Apartments Mid-Rise land use represents 4,000 residential dwelling units.
- <sup>2</sup> City Park land use represents open space throughout the FDCSP area.
- <sup>3</sup> High Turnover (Sit Down Restaurant) represents commercial space.
- <sup>4</sup> Other Asphalt Surfaces accounts for ROM Infrastructure/ROW and secondary access roadway.

**Trip Generation (Calculated Off-model)**

**Hearths**

Land Use	Dwelling Units with Gas Fireplace	Dwelling Units W/O Fireplace
Apartments Mid-Rise	3,400	600

**Notes:**

- <sup>1</sup> Assumed natural gas fireplaces for dwelling units. No wood burning fireplaces or stoves per South Coast AQMD Rule 445.

**Energy (CalEEMod Defaults)**

Land Use Subtype	Total Annual Electricity Consumption (kWh/year)	Total Annual Natural Gas Consumption (kBTU/year)	Title-24 Electricity Energy Intensity (kWhr/size/year)	Title-24 Natural Gas Energy Intensity (KBTU/size/year)	Nontitle-24 Electricity Energy Intensity (kWhr/size/year)	Nontitle-24 Natural Gas Energy Intensity (KBTU/size/year)
Apartments Mid-Rise	14,663,336.40	44,427,371.59	4,156,111.92	38,707,733.22	10,507,224.48	5,719,638.37
High Turnover (Sit Down Restaurant)	1,212,061.25	4,029,606.23	648,224.94	734,824.86	563,836.31	3,294,781.37
<b>Total</b>	<b>15,875,397.65</b>	<b>48,456,977.82</b>	<b>4,804,336.86</b>	<b>39,442,558.08</b>	<b>11,071,060.79</b>	<b>9,014,419.74</b>

**Water Use**

Land Use	Average Day Water Demand (gpd) <sup>1</sup>	Annual Indoor Water Demand (gpy) <sup>2</sup>	Annual Outdoor Water (gpy) <sup>2</sup>
Apartments Mid-Rise	720,000	262,800,000	
City Park	43,959		16,045,035
High Turnover (Sit Down Restaurant)	2,009	733,285	
<b>Total</b>	<b>765,968</b>	<b>263,533,285</b>	<b>16,045,035</b>

Source: West & Associates Engineering, Inc., Water Supply Assessment (WSA), Fairview Developmental Center Specific Plan, March 2026.

Notes:

<sup>1</sup> Used average day water demand from Table 2, Developmental Water Demand, of the WSA.

<sup>2</sup> Assume 365 days per year and 100% aerobic treatment.

**Solid Waste**

Land Use	Unit	Size	Default Solid Waste Generation Rate (tons/unit/year)	Modified Solid Waste Generation Rate (tons/unit/year)	Solid Waste (tons/year)
Apartments Mid-Rise	Resident	9,926	0.25	1.33	13,221
City Park	Acre	14	0.09	0.00	0
High Turnover (Sit Down Restaurant)	1000 sqft	35	11.90	4.34	152
<b>Total</b>					<b>13,373</b>

Source: CalRecycle, 2026, Jurisdiction Diversion/Disposal Rate Detail.

Notes:

<sup>1</sup> Based on per capita waste generation rate (PPD) of 7.3 for residents and 9.5 for employees. Refer to Section 3.17, *Utilities and Service Systems*.

**Architectural Coating**

	Percent Painted
Interior Painted:	100%
Exterior Painted:	100%

SCAQMD Rule 1113

Interior Paint VOC content:	50	grams per liter
Exterior Paing VOC content:	50	grams per liter
Parking Paint VOC content:	100	grams per liter

Land Use	Land Use Amount	CalEEMod Factor	Total Paintable Surface Area	Interior Area	Exterior Area
Apartments Mid-Rise	4,143,330	2.7	11,186,991	8,390,243	2,796,748
High Turnover (Sit Down Restaurant)	35,000	2.0	70,000	52,500	17,500
Parking	959,191	6%	57,551	NA	NA

Notes:

<sup>1</sup> CalEEMod methodology calculates the paintable interior and exterior areas by multiplying the total paintable surface area by 75 and 25 percent, respectively.

<sup>2</sup> CalEEMod default assumes the total surface for painting equals 2.0 times the floor square footage for nonresidential square footage and 2.7 times the floor square footage for residential square footage as defined by the user.

<sup>3</sup> CalEEMod default assumes 6% of parking land uses will be striped.

**Utility Information (CalEEMod defaults)**

Electric Utility: SCE

Gas Utility: Southern California Gas

	Forecasted GHG Intensity Factors	
CO2:	260.79	lbs/MWh
CH4:	0.033	lbs/MWh
N2O:	0.004	lbs/MWh

# **Emissions Worksheet**

**Regional Construction Emissions Worksheet: Fairview Development Center Specific Plan**

Maximum Daily Emissions per construction phase (lbs/day)

\*Showing highest summer or winter emissions

<b>FDCSP - Site-wide improvements</b>									
<b>Demolition (2027) - Unmitigated</b>									
		Summer	2027	ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Onsite									
	Off-Road Equipment			36.12349164	20.74999766	66.73207559	0.034616867	1.382963353	1.175793551
	Demolition							6.631472591	1.004194421
	Onsite Truck			0.000613546	0.016108516	0.011228363	4.03446E-05	0.308073958	0.030827931
	Total			<b>36.12410519</b>	<b>20.76610618</b>	<b>66.74330396</b>	<b>0.034657212</b>	<b>8.322509902</b>	<b>2.210815903</b>
Offsite									
	Worker			0.04996226	0.052470018	0.865369494	0	0.22874145	0.05361663
	Vendor			0.008368747	0.39906315	0.198155887	0.00292333	0.114150153	0.033653365
	Hauling			0.279369778	38.01122135	14.78437565	0.251856088	10.79634487	3.388780358
	Total			<b>0.337700786</b>	<b>38.46275452</b>	<b>15.84790103</b>	<b>0.254779418</b>	<b>11.13923647</b>	<b>3.476050353</b>
<b>TOTAL</b>				<b>36.4618</b>	<b>59.2289</b>	<b>82.5912</b>	<b>0.2894</b>	<b>19.4617</b>	<b>5.6869</b>

<b>Site Preparation (2027) - Unmitigated</b>									
		Summer	2027	ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Onsite									
	Off-Road Equipment			11.20253	101.2067935	101.1903113	0.1991786	4.195892449	3.860221053
	Dust From Material Movement							24.23948572	11.95383756
	Onsite Truck			0.000840843	0.049975708	0.024184269	0.000267641	4.134872165	0.413762834
	Total			<b>11.20337085</b>	<b>101.2567692</b>	<b>101.2144955</b>	<b>0.199446241</b>	<b>32.57025033</b>	<b>16.22782145</b>
Offsite									
	Worker			0.171299178	0.179897206	2.966981122	0	0.784256401	0.183828445
	Vendor			0.056006233	2.670653386	1.326120167	0.019563821	0.763927947	0.225218674
	Hauling			0	0	0	0	0	0
	Total			<b>0.227305411</b>	<b>2.850550592</b>	<b>4.293101289</b>	<b>0.019563821</b>	<b>1.548184348</b>	<b>0.409047118</b>
<b>TOTAL</b>				<b>11.4307</b>	<b>104.1073</b>	<b>105.5076</b>	<b>0.2190</b>	<b>34.1184</b>	<b>16.6369</b>

<b>Mass Grading (2027) - Unmitigated</b>									
		Summer	2027	ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Onsite									
	Off-Road Equipment			8.836387426	76.74031627	81.84493623	0.182788444	3.129201603	2.878865481
	Dust From Material Movement							10.77023784	4.275202301
	Onsite Truck			0.000813506	0.045902447	0.022626042	0.000240304	3.674617095	0.367706648
	Total			<b>8.837200932</b>	<b>76.78621871</b>	<b>81.86756227</b>	<b>0.183028748</b>	<b>17.57405654</b>	<b>7.52177443</b>
Offsite									
	Worker			0.171299178	0.179897206	2.966981122	0	0.784256401	0.183828445
	Vendor			0.053431234	2.547864725	1.265149125	0.018664335	0.728804823	0.214863792
	Hauling			0.019444772	2.219481774	0.894657903	0.014285955	0.606440258	0.190350795
	Total			<b>0.244175183</b>	<b>4.947243705</b>	<b>5.12678815</b>	<b>0.03295029</b>	<b>2.119501482</b>	<b>0.589043032</b>
<b>TOTAL</b>				<b>9.0814</b>	<b>81.7335</b>	<b>86.9944</b>	<b>0.2160</b>	<b>19.6936</b>	<b>8.1108</b>

<b>Mass Grading (2028) - Unmitigated</b>									
		Summer	2027	ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Onsite									
	Off-Road Equipment			8.634075255	72.98684666	81.50652671	0.182798519	2.955302687	2.71887847
	Dust From Material Movement							10.77023784	4.275202301
	Onsite Truck			0.000813506	0.044394486	0.022211573	0.000240304	3.674617095	0.367706648
	Total			<b>8.634888761</b>	<b>73.03124114</b>	<b>81.52873828</b>	<b>0.183038823</b>	<b>17.40015762</b>	<b>7.361787419</b>
Offsite									
	Worker			0.166008083	0.154103121	2.798988878	0	0.784256401	0.183828445
	Vendor			0.051601397	2.443564029	1.224160823	0.018664335	0.728804823	0.214863792
	Hauling			0.019444772	2.133170801	0.866681247	0.014285955	0.606440258	0.190350795
	Total			<b>0.237054252</b>	<b>4.730837951</b>	<b>4.889830948</b>	<b>0.03295029</b>	<b>2.119501482</b>	<b>0.589043032</b>
<b>TOTAL</b>				<b>8.8719</b>	<b>77.7621</b>	<b>86.4186</b>	<b>0.2160</b>	<b>19.5197</b>	<b>7.9508</b>

<b>Utility Trenching (2027) - Unmitigated</b>									
		Summer	2027	ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Onsite									
	Off-Road Equipment			2.945462475	25.58010542	27.28164541	0.060929481	1.043067201	0.959621827
	Onsite Truck			0.000668001	0.024222188	0.014332251	9.47988E-05	1.224872365	0.122568883
	Total			<b>2.946130476</b>	<b>25.60432761</b>	<b>27.29597766</b>	<b>0.06102428</b>	<b>2.267939566</b>	<b>1.08219071</b>
Offsite									
	Worker			0.057099726	0.059965735	0.988993707	0	0.2614188	0.061276148
	Vendor			0.012874996	0.613943307	0.304855211	0.00449743	0.17561562	0.051774408
	Hauling			0	0	0	0	0	0
	Total			<b>0.069974722</b>	<b>0.673909042</b>	<b>1.293848918</b>	<b>0.00449743</b>	<b>0.43703442</b>	<b>0.113050556</b>
<b>TOTAL</b>				<b>3.0161</b>	<b>26.2782</b>	<b>28.5898</b>	<b>0.0655</b>	<b>2.7050</b>	<b>1.1952</b>

<b>Utility Trenching (2028) - Unmitigated</b>									
		Summer	2028	ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Onsite									
	Off-Road Equipment			2.878025085	24.32894889	27.16884224	0.06093284	0.985100896	0.906292823
	Onsite Truck			0.000668001	0.023587257	0.014208793	9.47988E-05	1.224872365	0.122568883
	Total			<b>2.878693086</b>	<b>24.35253614</b>	<b>27.18305103</b>	<b>0.061027638</b>	<b>2.209973261</b>	<b>1.028861706</b>
Offsite									
	Worker			0.055336028	0.051367707	0.932996293	0	0.2614188	0.061276148
	Vendor			0.012434072	0.588810609	0.294978512	0.00449743	0.17561562	0.051774408
	Hauling			0	0	0	0	0	0
	Total			<b>0.067770099</b>	<b>0.640178316</b>	<b>1.227974804</b>	<b>0.00449743</b>	<b>0.43703442</b>	<b>0.113050556</b>
<b>TOTAL</b>				<b>2.9465</b>	<b>24.9927</b>	<b>28.4110</b>	<b>0.0655</b>	<b>2.6470</b>	<b>1.1419</b>

**FDCSP - Worst-Case Development Phase (Phase 3) Scenario**

**Fine Grading (2028) - Unmitigated**

		Summer	2028	ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Onsite									
	Off-Road Equipment			2.878025085	24.32894889	27.16884224	0.06093284	0.985100896	0.906292823
	Dust From Material Movement							9.2035872	3.653754925
	Onsite Truck			0.000668001	0.023587257	0.014208793	9.47988E-05	1.224872365	0.122568883
	Total			<b>2.878693086</b>	<b>24.35253614</b>	<b>27.18305103</b>	<b>0.061027638</b>	<b>11.41356046</b>	<b>4.682616631</b>
Offsite									
	Worker			0.055336028	0.051367707	0.932996293	0	0.2614188	0.061276148
	Vendor			0.013677479	0.64769167	0.324476363	0.004947173	0.193177182	0.056951849
	Hauling			0	0	0	0	0	0
	Total			<b>0.069013506</b>	<b>0.699059377</b>	<b>1.257472656</b>	<b>0.004947173</b>	<b>0.454595982</b>	<b>0.118227997</b>
<b>TOTAL</b>				<b>2.9477</b>	<b>25.0516</b>	<b>28.4405</b>	<b>0.0660</b>	<b>11.8682</b>	<b>4.8008</b>

Building Construction (2028) - Unmitigated									
		Summer	2028	ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Onsite									
	Off-Road Equipment			2.974297679	26.77485555	38.80574878	0.070201356	0.90071496	0.828657757
	Onsite Truck			0.000666898	0.023429627	0.014148166	9.36965E-05	1.206313693	0.120711778
	Total			<b>2.974964577</b>	<b>26.79828517</b>	<b>38.81989695</b>	<b>0.070295052</b>	<b>2.107028652</b>	<b>0.949369535</b>
Offsite									
	Worker			0.188142494	0.174650204	3.172187395	0	0.888823922	0.208338904
	Vendor			0.075226133	3.562304187	1.784619995	0.027209452	1.062474501	0.313235167
	Hauling			0	0	0	0	0	0
	Total			<b>0.263368627</b>	<b>3.736954391</b>	<b>4.956807391</b>	<b>0.027209452</b>	<b>1.951298422</b>	<b>0.521574071</b>
<b>TOTAL</b>				<b>3.2383</b>	<b>30.5352</b>	<b>43.7767</b>	<b>0.0975</b>	<b>4.0583</b>	<b>1.4709</b>

Building Construction (2029) - Unmitigated									
		Summer	2029	ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Onsite									
	Off-Road Equipment			2.895413611	25.74496931	38.70370076	0.070185429	0.826926489	0.760772371
	Onsite Truck			0.000666898	0.022801309	0.013955261	9.36965E-05	1.206313693	0.120711778
	Total			<b>2.89608051</b>	<b>25.76777062</b>	<b>38.71765602</b>	<b>0.070279125</b>	<b>2.033240182</b>	<b>0.88148415</b>
Offsite									
	Worker			0.182145921	0.173151061	2.983295329	0	0.888823922	0.208338904
	Vendor			0.075226133	3.404916178	1.72219831	0.027209452	1.062474501	0.313235167
	Hauling			0	0	0	0	0	0
	Total			<b>0.257372054</b>	<b>3.578067238</b>	<b>4.70549364</b>	<b>0.027209452</b>	<b>1.951298422</b>	<b>0.521574071</b>
<b>TOTAL</b>				<b>3.1535</b>	<b>29.3458</b>	<b>43.4231</b>	<b>0.0975</b>	<b>3.9845</b>	<b>1.4031</b>

Building Construction (2030) - Unmitigated									
		Summer	2030	ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Onsite									
	Off-Road Equipment			2.821009758	25.17588199	38.65428057	0.07018683	0.780352112	0.717923942
	Onsite truck			0.000666898	0.022244642	0.01381196	9.36965E-05	1.206313693	0.120711778
	Total			<b>2.821676656</b>	<b>25.19812663</b>	<b>38.66809253</b>	<b>0.070280527</b>	<b>1.986665805</b>	<b>0.838635721</b>
Offsite									
	Worker			0.174650204	0.143917765	2.823636542	0	0.888823922	0.208338904
	Vendor			0.075226133	3.280072808	1.662444216	0.027209452	1.062474501	0.313235167
	Hauling			0	0	0	0	0	0
	Total			<b>0.249876337</b>	<b>3.423990573</b>	<b>4.486080758</b>	<b>0.027209452</b>	<b>1.951298422</b>	<b>0.521574071</b>
<b>TOTAL</b>				<b>3.0716</b>	<b>28.6221</b>	<b>43.1542</b>	<b>0.0975</b>	<b>3.9380</b>	<b>1.3602</b>

Building Construction (2031) - Unmitigated									
		Summer	2031	ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Onsite									
	Off-Road Equipment			2.755159607	24.35567007	38.53614396	0.070188036	0.729694346	0.6713188
	Onsite truck			0.000666898	0.021638371	0.013619056	9.36965E-05	1.206313693	0.120711778
	Total			<b>2.755826506</b>	<b>24.37730844</b>	<b>38.54976301</b>	<b>0.070281732</b>	<b>1.936008039</b>	<b>0.792030578</b>
Offsite									
	Worker			0.165655344	0.142418621	2.665476932	0	0.888823922	0.208338904
	Vendor			0.075226133	3.155229438	1.600022531	0.027209452	1.062474501	0.313235167
	Hauling			0	0	0	0	0	0
	Total			<b>0.240881477</b>	<b>3.29764806</b>	<b>4.265499464</b>	<b>0.027209452</b>	<b>1.951298422</b>	<b>0.521574071</b>
<b>TOTAL</b>				<b>2.9967</b>	<b>27.6750</b>	<b>42.8153</b>	<b>0.0975</b>	<b>3.8873</b>	<b>1.3136</b>

Paving (2032) - Unmitigated									
		Winter	2032	ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Onsite									
	Off-Road Equipment			0.609136911	5.997780634	9.859252782	0.013951413	0.198696805	0.182801059
	Paving			0.06575307	0	0	0	0	0
	Onsite truck			0	0	0	0	0	0
	Total			<b>0.67488998</b>	<b>5.997780634</b>	<b>9.859252782</b>	<b>0.013951413</b>	<b>0.198696805</b>	<b>0.182801059</b>
Offsite									
	Worker			0.035218846	0.031746566	0.481324234	0	0.1960641	0.045957111
	Vendor			0.001199315	0.052276012	0.026032184	0.000449743	0.017561562	0.005177441
	Hauling			0	0	0	0	0	0
	Total			<b>0.036418161</b>	<b>0.084022578</b>	<b>0.507356417</b>	<b>0.000449743</b>	<b>0.213625662</b>	<b>0.051134552</b>
<b>TOTAL</b>				<b>0.7113</b>	<b>6.0818</b>	<b>10.3666</b>	<b>0.0144</b>	<b>0.4123</b>	<b>0.2339</b>

Architectural Coating (2032) - Unmitigated									
		Summer	2030	ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Onsite									
	Off-Road Equipment			0.093086824	0.770045914	1.100691509	0.001725869	0.008127337	0.00747715
	Architectural Coatings			44.13293166	0	0	0	0	0
	Onsite truck			0	0	0	0	0	0
	Total			<b>44.22601848</b>	<b>0.770045914</b>	<b>1.100691509</b>	<b>0.001725869</b>	<b>0.008127337</b>	<b>0.00747715</b>
Offsite									
	Worker			0.032870923	0.023302861	0.522231003	0	0.18299316	0.042893304
	Vendor			0	0	0	0	0	0
	Hauling			0	0	0	0	0	0
	Total			<b>0.032870923</b>	<b>0.023302861</b>	<b>0.522231003</b>	<b>0</b>	<b>0.18299316</b>	<b>0.042893304</b>
<b>TOTAL</b>				<b>44.2589</b>	<b>0.7933</b>	<b>1.6229</b>	<b>0.0017</b>	<b>0.1911</b>	<b>0.0504</b>

**FDCSP Secondary Access Roadway**

**Linear, Grubbing & Land Clearing (2028) - Unmitigated**

Summer		2028	ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Onsite								
	Off-Road Equipment		0.312936879	2.824092449	3.439577673	0.004527261	0.142061998	0.130697038
	Dust From Material Movement						0.206797573	0.022329288
	Onsite Truck		0	0	0	0	0	0
	Total		<b>0.312936879</b>	<b>2.824092449</b>	<b>3.439577673</b>	<b>0.004527261</b>	<b>0.348859571</b>	<b>0.153026326</b>
Offsite								
	Worker		0.013834007	0.012841927	0.233249073	0	0.0653547	0.015319037
	Vendor		0	0	0	0	0	0
	Hauling		0	0	0	0	0	0
	Total		<b>0.013834007</b>	<b>0.012841927</b>	<b>0.233249073</b>	<b>0</b>	<b>0.0653547</b>	<b>0.015319037</b>
<b>TOTAL</b>			<b>0.3268</b>	<b>2.8369</b>	<b>3.6728</b>	<b>0.0045</b>	<b>0.4142</b>	<b>0.1683</b>

**Linear, Grading & Excavation (2028) - Unmitigated**

Summer		2028	ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Onsite								
	Off-Road Equipment		2.728372563	22.01898378	28.84193038	0.059976938	0.896441242	0.824725943
	Dust From Material Movement						1.240785439	0.133975727
	Onsite Truck		0.000668001	0.023587257	0.014208793	9.47988E-05	1.224872365	0.122568883
	Total		<b>2.729040563</b>	<b>22.04257104</b>	<b>28.85613918</b>	<b>0.060071737</b>	<b>3.362099046</b>	<b>1.081270552</b>
Offsite								
	Worker		0.083004042	0.077051561	1.399494439	0	0.392128201	0.091914222
	Vendor		0.002486814	0.117762122	0.058995702	0.000899486	0.035123124	0.010354882
	Hauling		0	0	0	0	0	0
	Total		<b>0.085490856</b>	<b>0.194813682</b>	<b>1.458490141</b>	<b>0.000899486</b>	<b>0.427251325</b>	<b>0.102269104</b>
<b>TOTAL</b>			<b>2.8145</b>	<b>22.2374</b>	<b>30.3146</b>	<b>0.0610</b>	<b>3.7894</b>	<b>1.1835</b>

**Linear, Drainage, Utilities, & Sub-Grade (2028) - Unmitigated**

Summer		2028	ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Onsite								
	Off-Road Equipment		2.244350642	18.63788942	23.05752785	0.054344647	0.704958636	0.648561946
	Dust From Material Movement						1.033987866	0.111646439
	Onsite Truck		0.000658962	0.022294687	0.013711651	8.57598E-05	1.072691253	0.107340628
	Total		<b>2.245009604</b>	<b>18.66018411</b>	<b>23.0712395</b>	<b>0.054430407</b>	<b>2.811637755</b>	<b>0.867549012</b>
Offsite								
	Worker		0.069170035	0.064209634	1.166245366	0	0.326773501	0.076595185
	Vendor		0	0	0	0	0	0
	Hauling		0	0	0	0	0	0
	Total		<b>0.069170035</b>	<b>0.064209634</b>	<b>1.166245366</b>	<b>0</b>	<b>0.326773501</b>	<b>0.076595185</b>
<b>TOTAL</b>			<b>2.3142</b>	<b>18.7244</b>	<b>24.2375</b>	<b>0.0544</b>	<b>3.1384</b>	<b>0.9441</b>

**Linear, Paving (2028) - Unmitigated**

Summer		2028	ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Onsite								
	Off-Road Equipment		0.773821046	6.924968709	10.75800708	0.014952947	0.243980647	0.224462195
	Architectural Coatings		2.056213959					
	Onsite truck		0	0	0	0	0	0
	Total		<b>2.830035006</b>	<b>6.924968709</b>	<b>10.75800708</b>	<b>0.014952947</b>	<b>0.243980647</b>	<b>0.224462195</b>
Offsite								
	Worker		0.048419024	0.044946744	0.816371756	0	0.22874145	0.05361663
	Vendor		0.001243407	0.058881061	0.029497851	0.000449743	0.017561562	0.005177441
	Hauling		0	0	0	0	0	0
	Total		<b>0.049662431</b>	<b>0.103827805</b>	<b>0.845869607</b>	<b>0.000449743</b>	<b>0.246303012</b>	<b>0.058794071</b>
<b>TOTAL</b>			<b>2.8797</b>	<b>7.0288</b>	<b>11.6039</b>	<b>0.0154</b>	<b>0.4903</b>	<b>0.2833</b>

**Worst-Case Scenario Construction: Maximum Daily Emissions**

	ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
<b>Site-wide improvements</b>						
Demolition	36	59	83	0	19	6
Site Preparation	11	104	106	0	34	17
Mass Grading and Utility Trenching 2027	12	108	116	0	22	9
Mass Grading and Utility Trenching 2028	12	103	115	0	22	9
<b>Worst-Case Development Phase (Phase 3) Scenario and Secondary Access Roadway</b>						
Fine Grading and Linear, Grubbing & Land Clearing	3	28	32	0	12	5
Fine Grading and Linear, Grubbing & Excavation	6	47	59	0	16	6
Fine Grading and Linear, Drainage, Utilities, & Sub-Grade	5	44	53	0	15	6
Fine Grading and Linear, Paving	6	32	40	0	12	5
Fine Grading	3	25	28	0	12	5
Fine Grading and Building Construction	6	56	72	0	16	6
Building Construction 2028	3	31	44	0	4	1
Building Construction 2029	3	29	43	0	4	1
Building Construction 2030	3	29	43	0	4	1
Building Construction 2031	3	28	43	0	4	1
Paving	1	6	10	0	0	0
Architectural Coating	44	1	2	0	0	0
Maximum Daily Emissions	44	108	116	0	34	17
<b>South Coast Regional Significance Thresholds</b>	<b>75</b>	<b>100</b>	<b>550</b>	<b>150</b>	<b>150</b>	<b>55</b>
Exceeds Threshold?	No	Yes	No	No	No	No

**Regional Operation Emissions: Fairview Development Center Specific Plan**

**Maximum Daily Emissions (lbs/day)**

Proposed Project Buildout Year						
<b>Summer</b>						
	<b>ROG</b>	<b>NOx</b>	<b>CO</b>	<b>SO2</b>	<b>PM10 Total</b>	<b>PM2.5 Total</b>
Mobile <sup>1</sup>	3.26	7.03	436.80	0.26	5.54	1.85
Area <sup>2</sup>	119.97	58.51	253.60	0.37	4.66	4.64
Energy <sup>2</sup>	0.72	12.30	5.68	0.08	0.99	0.99
Total	123.95	77.84	696.09	0.71	11.19	7.48
<b>Winter</b>						
	<b>ROG</b>	<b>NOx</b>	<b>CO</b>	<b>SO2</b>	<b>PM10 Total</b>	<b>PM2.5 Total</b>
Mobile <sup>1</sup>	3.26	7.03	436.80	0.26	5.54	1.85
Area <sup>2</sup>	100.01	56.40	24.00	0.36	4.56	4.56
Energy <sup>2</sup>	0.72	12.30	5.68	0.08	0.99	0.99
Total	103.99	75.73	466.48	0.70	11.09	7.40
<b>Max Daily</b>						
	<b>ROG</b>	<b>NOx</b>	<b>CO</b>	<b>SO2</b>	<b>PM10 Total</b>	<b>PM2.5 Total</b>
Mobile <sup>1</sup>	3.26	7.03	436.80	0.26	5.54	1.85
Area <sup>2</sup>	119.97	58.51	253.60	0.37	4.66	4.64
Energy <sup>2</sup>	0.72	12.30	5.68	0.08	0.99	0.99
Total	123.95	77.84	696.09	0.71	11.19	7.48
<b>Regional Thresholds</b>	<b>55</b>	<b>55</b>	<b>550</b>	<b>150</b>	<b>150</b>	<b>55</b>
Exceeds Thresholds?	Yes	Yes	Yes	No	No	No

Notes:

<sup>1</sup> Mobile emissions estimates reflect calendar year 2045 conditions and were derived using EMFAC 2025 v.2.1.0.

<sup>2</sup> Area and energy emissions estimates are based on CalEEMod default assumptions for specified land use size.



**Regional Construction & Operation Overlap Regional Emissions: Fairview Development Center Specific Plan**

**Maximum Daily Emissions (lbs/day)**

	<b>ROG</b>	<b>NOx</b>	<b>CO</b>	<b>SO2</b>	<b>PM10 Total</b>	<b>PM2.5 Total</b>
Maximum Daily Construction Emissions <sup>1</sup>	44	108	116	0	34	17
Maximum Daily Operation Emissions <sup>2</sup>	124	78	696	1	11	7
<b>Total Combined Maximum Daily Emissions</b>	<b>168</b>	<b>186</b>	<b>812</b>	<b>1</b>	<b>45</b>	<b>24</b>
<b>Regional Thresholds</b>	<b>55</b>	<b>55</b>	<b>550</b>	<b>150</b>	<b>150</b>	<b>55</b>
Exceeds Thresholds?	Yes	Yes	Yes	No	No	No

Notes:

<sup>1</sup> Maximum daily construction emissions are based on worst-case development scenario representing the most intensive development phase.

<sup>2</sup> Maximum daily operational emissions based on worst-case full buildout conditions.

**GHG Emissions: Fairview Development Center Specific Plan**

**Worst-Case Construction Emissions**

Year	Site-Wide Improvements	Secondary Access Roadway	Max Building Development Phase
	Annual Emissions (MTCO <sub>2</sub> e)	Annual Emissions (MTCO <sub>2</sub> e)	Phase 3 Annual Emissions (MTCO <sub>2</sub> e)
2027	4,308	NA	NA
2028	1,216	96	815
2029	NA	NA	1,390
2030	NA	NA	1,374
2031	NA	NA	1,359
2032	NA	NA	49
<b>Total</b>	<b>5,524</b>	<b>96</b>	<b>4,986</b>

  

<b>Estimated Phase 1-6 Annual Emissions (MTCO<sub>2</sub>e)<sup>1</sup></b>
<b>29,916</b>

  

<b>TOTAL Annual Emissions (MTCO<sub>2</sub>e)</b>
<b>35,536</b>

Notes:

<sup>1</sup> Total construction-related GHG emissions for Phases 1-6 were estimated by multiplying the maximum building development phase (Phase 3) by total number of phases (6). Phase 3 generated approximately 4,986 MTCO<sub>2</sub>e and therefore estimated Phase 1-6 yielded approximately 29,916 MTCO<sub>2</sub>e.

**Operation Emissions - Full Buildout**

Source	Buildout MTCO <sub>2</sub> e/Year	Percent of Project Total
Mobile <sup>1</sup>	10,030	47%
Area	882	4%
Energy	4,471	21%
Water <sup>2</sup>	386	2%
Waste <sup>3</sup>	4,169	20%
Refrig.	14	0%
Amortized Construction	1,185	6%
<b>Total All Sectors</b>	<b>21,136</b>	<b>100%</b>
GHG Threshold	3,000	
<b>Exceed Threshold?</b>	<b>Yes</b>	

Notes:

<sup>1</sup> Mobile emissions estimates reflect calendar year 2045 conditions and were based on daily VMT provided by Fehr & Peers (Appendix L2) and EMFAC2025 v.2.1.0.  
<sup>2</sup> Annual water demand calculated based on average day water demand provided by West & Associates Engineering, Inc. WSA Fairview Developmental Center Specific Plan (Appendix H.1).  
<sup>3</sup> Annual solid waste generation calculated based on per capita waste generation rates for residents and employees, Section 3.17, Utilities and Services System.  
<sup>4</sup> Worst-case scenario construction emissions (site-wide improvements, secondary access roadway, estimated Phase 1-6 emissions) are amortized over a 30-year period.

**Table 1: Project Land Use**

Land Use Description	Quantity	Units
Multi-Family	4,000	Dwelling Units
Commercial	35,000	Square Feet
Open Space	14	Acres
Indirect Employee/Other Service		

**Table 2: Project SED Input Assumptions**

Input	Project
Multi-Family Households	4,000
Total Population (2.36 persons per household)	9,926
Retail Employment	74

Note: 1. Retail employment was estimated using 475 sqft/employee factor, consistent with the city's Housing Element Rezoing.

**Table 3: VMT Forecasts & Impact Assessment**

Area	OD VMT/Day	Service Population	OD VMT/Day per Service Population
<b>Baseline Year 2025</b>			
Project	138,120	10,000	13.8
Citywide Average	6,786,444	227,111	29.9
Threshold of Significance (15% Below Citywide VMT/SP)			25.4
VMT Exceeds Threshold?		<b>No</b>	
<b>Cumulative Year 2045</b>			
Project	139,173	10,000	13.9
Citywide Average	7,779,136	263,879	29.5
Threshold of Significance (15% Below Citywide VMT/SP)			25.1
VMT Exceeds Threshold?		<b>No</b>	

**Table 4: Net Effect on VMT Forecasts & Impact Assessment**

Metric	City Boundary	
	No Project VMT/Day	With Project VMT/Day
<b>Base Year 2025</b>		
Boundary VMT	4,350,607	4,394,636
Service Population	227,111	237,111
Boundary VMT per Service Population	19.2	18.5
VMT Exceeds Threshold?		<b>No</b>
<b>Cumulative Year 2045</b>		
Boundary VMT	4,596,437	4,638,876
Service Population	263,879	273,879
Boundary VMT per Service Population	17.4	16.9
VMT Exceeds Threshold?		<b>No</b>

## FDCSP — TRANSPORTATION SECTOR

Source: EMFAC2025 V 2.1.0, Web Database - Emissions Rates, Orange (SC) Sub Area.  
 Based on the Intergovernmental Panel on Climate Change (IPCC) Fourth Assessment Report (AR4) Global Warming Potentials (GWPs)

### Criteria Air Pollutant Emissions

	lbs/day					
	ROG	NOx	CO	SOx	PM10	PM2.5
Existing (2025)	10	42	880	0	8	3
Proposed (2045)	3	7	437	0	6	2

### GHG EMISSIONS

	MTons/year			
	CO <sub>2</sub>	CH <sub>4</sub>	N <sub>2</sub> O	CO <sub>2</sub> e
Existing (2025)	18,524	1	1	18,876
Proposed (2045)	9,875	0	1	10,030

Note: MTons = metric tons; CO<sub>2</sub>e = carbon dioxide-equivalent.

# Year 2025 E+P Scenario: Criteria Air Pollutants

Source: EMFAC2025 (v2.1.0) Emissions Rates. Orange (SC).

<sup>1</sup> Based on data provided Fehr&Peers, 2026.

Daily VMT <sup>1</sup>		138,120		lbs/day				
Vehicle Type	Fuel Type	Percent of VMT	ROG	NOx	CO	SOx	PM10	PM2.5
LDA	Gasoline	3.62E-01	3.80E+00	7.85E+00	3.76E+02	1.51E-01	2.01E+00	8.21E-01
LDA	Diesel	8.84E-04	2.04E-02	9.88E-02	1.99E-01	2.49E-04	1.76E-02	1.42E-02
LDA	Electricity	5.71E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.04E-01	5.55E-02
LDA	Plug-in Hybrid	2.58E-02	1.32E-02	2.57E-02	1.85E+00	4.81E-03	1.06E-01	3.57E-02
LDT1	Gasoline	3.29E-02	6.93E-01	2.45E+00	4.74E+01	1.64E-02	2.12E-01	9.10E-02
LDT1	Diesel	1.20E-05	1.31E-03	6.12E-03	7.20E-03	5.74E-06	1.16E-03	1.07E-03
LDT1	Electricity	3.04E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.09E-02	2.95E-03
LDT1	Plug-in Hybrid	1.74E-03	9.15E-04	1.78E-03	1.28E-01	3.34E-04	7.02E-03	2.29E-03
LDT2	Gasoline	2.42E-01	1.81E+00	6.11E+00	2.46E+02	1.20E-01	1.42E+00	5.66E-01
LDT2	Diesel	5.23E-04	4.45E-03	1.12E-02	4.44E-02	1.86E-04	4.01E-03	2.12E-03
LDT2	Electricity	1.30E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.65E-03	1.26E-03
LDT2	Plug-in Hybrid	1.90E-02	1.01E-02	1.97E-02	1.42E+00	3.68E-03	7.70E-02	2.53E-02
LHD1	Gasoline	1.84E-02	1.22E-01	8.46E-01	6.54E+00	1.42E-02	4.87E-01	1.70E-01
LHD1	Diesel	8.51E-03	2.15E-01	3.31E+00	8.45E-01	4.14E-03	2.88E-01	1.31E-01
LHD1	Electricity	8.13E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.16E-03	3.87E-04
LHD2	Gasoline	3.97E-03	1.83E-02	1.61E-01	1.50E+00	3.31E-03	1.21E-01	4.21E-02
LHD2	Diesel	7.55E-03	1.39E-01	1.22E+00	2.80E-01	4.12E-03	2.65E-01	1.07E-01
LHD2	Electricity	6.33E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.03E-03	3.46E-04
MCY	Gasoline	3.86E-03	1.38E+00	6.19E-01	1.40E+01	1.02E-03	2.18E-02	8.89E-03
MDV	Gasoline	1.51E-01	1.57E+00	5.99E+00	1.71E+02	9.16E-02	9.00E-01	3.59E-01
MDV	Diesel	4.30E-03	1.72E-02	7.12E-02	3.52E-01	1.85E-03	2.64E-02	1.15E-02
MDV	Electricity	5.18E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.85E-02	5.03E-03
MDV	Plug-in Hybrid	4.61E-03	2.50E-03	4.87E-03	3.51E-01	9.12E-04	1.89E-02	6.33E-03
MH	Gasoline	8.27E-04	1.18E-02	8.58E-02	3.45E-01	1.90E-03	1.41E-02	4.84E-03
MH	Diesel	4.34E-04	6.95E-03	3.82E-01	2.80E-02	4.35E-04	1.69E-02	1.13E-02
Motor Coach	Diesel	1.03E-04	3.95E-04	4.49E-02	2.92E-03	1.77E-04	3.49E-03	1.43E-03
OBUS	Gasoline	3.95E-04	6.05E-03	5.17E-02	1.56E-01	8.65E-04	6.74E-03	2.26E-03
OBUS	Diesel	1.86E-04	5.53E-03	9.01E-02	1.79E-02	2.08E-04	5.18E-03	2.98E-03
OBUS	Electricity	4.08E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.19E-04	1.32E-04
OBUS	Natural Gas	5.74E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.67E-04	3.17E-04
PTO	Diesel	5.36E-04	4.32E-03	3.22E-01	3.78E-02	1.07E-03	8.54E-04	8.17E-04
SBUS	Gasoline	2.43E-04	2.02E-02	7.62E-02	3.96E-01	2.82E-04	4.24E-03	1.53E-03
SBUS	Diesel	1.75E-04	6.25E-03	3.40E-01	1.55E-02	2.21E-04	4.70E-03	2.53E-03
SBUS	Electricity	1.07E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.12E-04	3.57E-05
SBUS	Natural Gas	2.55E-04	4.82E-03	3.21E-02	1.13E+00	0.00E+00	4.91E-03	1.82E-03
T6 CAIRP Class 4	Diesel	1.11E-05	1.79E-05	7.87E-04	1.09E-04	1.20E-05	1.99E-04	7.43E-05
T6 CAIRP Class 5	Diesel	2.02E-05	3.17E-05	1.51E-03	1.95E-04	2.16E-05	3.60E-04	1.34E-04
T6 CAIRP Class 6	Diesel	4.85E-05	7.47E-05	3.81E-03	4.70E-04	5.19E-05	8.66E-04	3.22E-04
T6 CAIRP Class 7	Diesel	2.44E-04	4.52E-04	2.94E-02	2.84E-03	2.47E-04	4.40E-03	1.66E-03
T6 CAIRP Class 7	Natural Gas	2.30E-07	4.02E-07	1.12E-05	1.65E-04	0.00E+00	3.84E-06	1.28E-06
T6 Instate Delivery Class 4	Diesel	6.18E-04	3.49E-03	9.53E-02	1.55E-02	6.76E-04	1.25E-02	5.46E-03
T6 Instate Delivery Class 4	Natural Gas	1.07E-06	2.42E-06	3.27E-05	7.06E-04	0.00E+00	1.83E-05	6.19E-06
T6 Instate Delivery Class 5	Diesel	5.65E-04	1.30E-03	7.10E-02	7.57E-03	6.07E-04	1.03E-02	3.87E-03
T6 Instate Delivery Class 5	Electricity	1.45E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.48E-05	4.65E-06
T6 Instate Delivery Class 5	Natural Gas	1.32E-06	3.01E-06	3.87E-05	8.62E-04	0.00E+00	2.26E-05	7.63E-06
T6 Instate Delivery Class 6	Diesel	1.76E-03	8.58E-03	3.31E-01	3.65E-02	1.91E-03	3.38E-02	1.37E-02
T6 Instate Delivery Class 6	Natural Gas	7.18E-06	1.47E-05	3.13E-04	5.17E-03	0.00E+00	1.22E-04	4.08E-05
T6 Instate Delivery Class 7	Diesel	4.00E-04	7.90E-04	5.05E-02	5.23E-03	4.30E-04	7.20E-03	2.67E-03
T6 Instate Delivery Class 7	Electricity	6.08E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.21E-04	1.95E-04
T6 Instate Delivery Class 7	Natural Gas	1.08E-05	2.41E-05	3.42E-04	7.17E-03	0.00E+00	1.83E-04	6.19E-05
T6 Instate Other Class 4	Diesel	7.72E-04	2.75E-03	8.71E-02	1.37E-02	8.66E-04	1.46E-02	5.82E-03
T6 Instate Other Class 4	Natural Gas	4.84E-07	9.95E-07	2.01E-05	3.41E-04	0.00E+00	8.20E-06	2.75E-06
T6 Instate Other Class 5	Diesel	2.77E-03	5.81E-03	2.96E-01	3.55E-02	3.04E-03	5.01E-02	1.88E-02
T6 Instate Other Class 5	Natural Gas	3.50E-06	7.43E-06	1.31E-04	2.39E-03	0.00E+00	5.95E-05	2.00E-05
T6 Instate Other Class 6	Diesel	1.83E-03	4.53E-03	2.18E-01	2.59E-02	2.00E-03	3.35E-02	1.28E-02
T6 Instate Other Class 6	Natural Gas	3.34E-06	7.17E-06	1.18E-04	2.25E-03	0.00E+00	5.67E-05	1.91E-05
T6 Instate Other Class 7	Diesel	8.06E-04	2.20E-03	1.25E-01	1.22E-02	8.75E-04	1.48E-02	5.67E-03
T6 Instate Other Class 7	Electricity	4.25E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.33E-05	1.36E-05
T6 Instate Other Class 7	Natural Gas	1.83E-05	3.98E-05	6.19E-04	1.22E-02	0.00E+00	3.10E-04	1.05E-04
T6 Instate Tractor Class 6	Diesel	1.28E-05	3.12E-05	1.42E-03	1.68E-04	1.34E-05	2.33E-04	8.84E-05
T6 Instate Tractor Class 6	Natural Gas	4.54E-08	1.07E-07	1.01E-06	2.75E-05	0.00E+00	7.75E-07	2.63E-07
T6 Instate Tractor Class 7	Diesel	5.31E-04	9.54E-04	6.38E-02	6.41E-03	5.24E-04	9.52E-03	3.53E-03
T6 Instate Tractor Class 7	Electricity	8.12E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.28E-05	2.60E-05
T6 Instate Tractor Class 7	Natural Gas	1.07E-05	2.40E-05	3.03E-04	6.80E-03	0.00E+00	1.81E-04	6.13E-05
T6 Instate Tractor Class 7	Fuel Cell Electric Vehicle	5.89E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.01E-06	1.89E-06
T6 OOS Class 4	Diesel	6.50E-06	9.78E-06	4.75E-04	6.07E-05	6.94E-06	1.16E-04	4.32E-05
T6 OOS Class 5	Diesel	1.18E-05	1.79E-05	9.25E-04	1.11E-04	1.25E-05	2.10E-04	7.84E-05
T6 OOS Class 6	Diesel	2.83E-05	4.22E-05	2.34E-03	2.69E-04	3.00E-05	5.06E-04	1.89E-04
T6 OOS Class 7	Diesel	1.65E-04	2.82E-04	1.95E-02	1.81E-03	1.64E-04	2.97E-03	1.12E-03
T6 Public Class 4	Diesel	2.98E-05	4.33E-04	5.43E-02	1.28E-03	3.32E-05	7.07E-04	3.64E-04

T6 Public Class 4	Electricity	9.31E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.45E-05	2.97E-05
T6 Public Class 4	Natural Gas	4.89E-06	9.95E-06	1.80E-04	3.22E-03	0.00E+00	8.26E-05	2.78E-05
T6 Public Class 5	Diesel	5.02E-05	3.10E-04	3.02E-02	1.14E-03	5.49E-05	1.03E-03	4.59E-04
T6 Public Class 5	Electricity	1.51E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.54E-05	4.83E-06
T6 Public Class 5	Natural Gas	1.30E-05	2.77E-05	3.89E-04	7.99E-03	0.00E+00	2.19E-04	7.40E-05
T6 Public Class 6	Diesel	5.67E-05	1.07E-03	1.05E-01	3.05E-03	6.38E-05	1.56E-03	8.99E-04
T6 Public Class 6	Electricity	1.44E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.46E-05	4.59E-06
T6 Public Class 6	Natural Gas	7.94E-06	1.62E-05	2.86E-04	5.19E-03	0.00E+00	1.34E-04	4.51E-05
T6 Public Class 7	Diesel	1.27E-04	3.03E-03	3.12E-01	8.47E-03	1.43E-04	3.90E-03	2.40E-03
T6 Public Class 7	Electricity	4.94E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.02E-05	1.58E-05
T6 Public Class 7	Natural Gas	1.06E-05	2.28E-05	2.98E-04	6.39E-03	0.00E+00	1.79E-04	6.05E-05
T6 Utility Class 5	Diesel	9.69E-05	1.69E-04	1.32E-02	9.86E-04	1.05E-04	1.74E-03	6.46E-04
T6 Utility Class 5	Natural Gas	2.79E-07	4.90E-07	1.49E-05	2.10E-04	0.00E+00	4.68E-06	1.56E-06
T6 Utility Class 6	Diesel	1.71E-05	2.52E-05	2.22E-03	1.62E-04	1.79E-05	3.05E-04	1.13E-04
T6 Utility Class 6	Natural Gas	1.56E-07	2.82E-07	7.74E-06	1.14E-04	0.00E+00	2.62E-06	8.72E-07
T6 Utility Class 7	Diesel	1.94E-05	2.63E-05	2.57E-03	1.84E-04	2.02E-05	3.44E-04	1.27E-04
T6 Utility Class 7	Natural Gas	2.48E-07	4.45E-07	1.26E-05	1.83E-04	0.00E+00	4.16E-06	1.38E-06
T6TS	Gasoline	5.92E-03	4.74E-02	3.86E-01	1.21E+00	1.24E-02	1.01E-01	3.41E-02
T6TS	Electricity	3.88E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.96E-04	1.24E-04
T7 CAIRP Class 8	Diesel	5.42E-03	1.94E-02	1.79E+00	9.01E-02	8.09E-03	2.18E-01	8.97E-02
T7 CAIRP Class 8	Natural Gas	1.16E-05	4.67E-05	1.60E-03	2.10E-02	0.00E+00	4.03E-04	1.32E-04
T7 NNOOS Class 8	Diesel	6.24E-03	2.07E-02	2.22E+00	9.34E-02	9.07E-03	2.53E-01	1.05E-01
T7 NOOS Class 8	Diesel	2.22E-03	7.74E-03	8.27E-01	3.64E-02	3.33E-03	9.09E-02	3.84E-02
T7 POLA Class 8	Diesel	2.85E-03	9.88E-03	9.14E-01	5.48E-02	4.59E-03	1.14E-01	4.59E-02
T7 POLA Class 8	Natural Gas	1.92E-04	8.04E-04	1.56E-02	2.30E-01	0.00E+00	6.76E-03	2.22E-03
T7 Public Class 8	Diesel	2.64E-04	6.57E-03	8.49E-01	2.64E-02	4.47E-04	1.52E-02	7.94E-03
T7 Public Class 8	Electricity	1.83E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.17E-04	1.26E-04
T7 Public Class 8	Natural Gas	1.22E-04	5.06E-04	1.40E-02	1.89E-01	0.00E+00	4.31E-03	1.41E-03
T7 Single Concrete/Transit Mix Class 8	Diesel	2.80E-04	1.01E-03	7.96E-02	5.48E-03	4.47E-04	1.11E-02	4.36E-03
T7 Single Concrete/Transit Mix Class 8	Natural Gas	2.07E-05	8.74E-05	2.10E-03	3.02E-02	0.00E+00	7.35E-04	2.41E-04
T7 Single Dump Class 8	Diesel	7.93E-04	2.75E-03	2.71E-01	1.51E-02	1.29E-03	3.10E-02	1.20E-02
T7 Single Dump Class 8	Natural Gas	7.35E-05	3.10E-04	7.92E-03	1.11E-01	0.00E+00	2.60E-03	8.53E-04
T7 Single Other Class 8	Diesel	1.39E-03	5.89E-03	4.63E-01	2.89E-02	2.21E-03	5.49E-02	2.15E-02
T7 Single Other Class 8	Natural Gas	1.39E-04	5.89E-04	1.36E-02	1.96E-01	0.00E+00	4.94E-03	1.62E-03
T7 SWCV Class 8	Diesel	2.13E-04	2.38E-04	6.71E-01	8.04E-04	7.84E-04	1.68E-02	6.12E-03
T7 SWCV Class 8	Electricity	2.30E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.89E-06	3.21E-06
T7 SWCV Class 8	Natural Gas	6.10E-04	6.61E-03	2.59E-01	2.30E+00	0.00E+00	4.58E-02	1.54E-02
T7 Tractor Class 8	Diesel	3.28E-03	1.27E-02	1.14E+00	6.20E-02	4.89E-03	1.30E-01	5.22E-02
T7 Tractor Class 8	Electricity	3.93E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.90E-04	2.68E-04
T7 Tractor Class 8	Natural Gas	1.51E-04	6.23E-04	1.43E-02	1.97E-01	0.00E+00	5.28E-03	1.73E-03
T7 Tractor Class 8	Fuel Cell Electric Vehicle	9.42E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.13E-05	6.43E-06
T7 Utility Class 8	Diesel	3.15E-05	7.96E-05	8.23E-03	4.39E-04	4.91E-05	1.20E-03	4.54E-04
T7IS	Gasoline	1.78E-05	3.39E-03	2.83E-02	1.85E-01	5.14E-05	5.77E-04	1.94E-04
T7IS	Electricity	1.89E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.42E-07	1.08E-07
UBUS	Gasoline	3.50E-04	1.14E-03	1.21E-02	8.62E-02	1.22E-03	1.15E-02	4.01E-03
UBUS	Electricity	1.56E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.47E-03	1.13E-03
UBUS	Natural Gas	6.38E-04	8.04E-03	1.99E-02	4.70E+00	0.00E+00	2.45E-02	8.37E-03
		100.00%	10.07	42.16	880.13	0.48	7.64	3.03

# Year 2045: Criteria Air Pollutants

Source: EMFAC2025 (v2.1.0) Emissions Rates. Orange (SC).

<sup>1</sup> Based on data provided Fehr&Peers, 2026.

Fleet Mix - Orange (SC)	Passenger Vehicles	Trucks
Fehr&Peers	96%	4%
EMFAC default	89%	11%

Daily VMT <sup>1</sup>		139,173								lbs/day	
Vehicle Type	Fuel Type	Percent of VMT	Adjusted Percent	ROG	NOx	CO	SOx	PM10	PM2.5		
LDA	Gasoline	16.35%	17.72%	5.83E-01	1.24E+00	1.39E+02	6.36E-02	8.88E-01	3.12E-01		
LDA	Diesel	0.00%	0.00%	3.02E-04	1.90E-03	5.72E-03	8.88E-06	2.69E-04	1.51E-04		
LDA	Electricity	15.34%	16.63%	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.99E-01	1.63E-01		
LDA	Plug-in Hybrid	6.88%	7.46%	1.82E-02	3.55E-02	2.54E+00	6.63E-03	2.85E-01	8.26E-02		
LDA	Fuel Cell Electric Vehicle	0.09%	0.10%	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.47E-03	9.44E-04		
LDT1	Gasoline	1.23%	1.34%	6.51E-02	1.70E-01	1.28E+01	5.79E-03	7.74E-02	2.84E-02		
LDT1	Diesel	0.00%	0.00%	1.31E-06	2.27E-05	1.63E-05	2.53E-08	1.03E-06	8.38E-07		
LDT1	Electricity	1.50%	1.63%	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.87E-02	1.59E-02		
LDT1	Plug-in Hybrid	0.62%	0.68%	2.06E-03	4.01E-03	2.88E-01	7.50E-04	2.61E-02	7.65E-03		
LDT1	Fuel Cell Electric Vehicle	0.02%	0.02%	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.89E-04	1.87E-04		
LDT2	Gasoline	19.06%	20.67%	5.50E-01	1.34E+00	1.71E+02	8.85E-02	1.12E+00	3.91E-01		
LDT2	Diesel	0.03%	0.04%	2.58E-03	3.99E-03	2.70E-02	1.14E-04	2.39E-03	1.06E-03		
LDT2	Electricity	2.43%	2.63%	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.48E-02	2.58E-02		
LDT2	Plug-in Hybrid	6.85%	7.42%	2.15E-02	4.19E-02	3.01E+00	7.84E-03	2.85E-01	8.32E-02		
LDT2	Fuel Cell Electric Vehicle	0.09%	0.10%	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.52E-03	9.57E-04		
LHD1	Gasoline	1.67%	0.55%	7.50E-03	9.81E-02	1.57E+00	3.40E-03	1.48E-01	5.14E-02		
LHD1	Diesel	0.97%	0.32%	2.97E-02	2.37E-01	2.04E-01	1.41E-03	9.96E-02	4.03E-02		
LHD1	Electricity	0.10%	0.03%	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.68E-03	1.56E-03		
LHD1	Fuel Cell Electric Vehicle	0.01%	0.00%	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.06E-04	1.68E-04		
LHD2	Gasoline	0.50%	0.17%	3.05E-03	3.87E-02	6.57E-01	1.14E-03	5.09E-02	1.77E-02		
LHD2	Diesel	1.74%	0.58%	8.09E-02	2.81E-01	1.37E-01	2.91E-03	2.02E-01	8.06E-02		
LHD2	Electricity	0.07%	0.02%	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.89E-03	1.30E-03		
LHD2	Fuel Cell Electric Vehicle	0.01%	0.00%	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.20E-04	1.41E-04		
MCY	Gasoline	0.47%	0.51%	1.49E+00	7.21E-01	1.52E+01	1.33E-03	2.93E-02	1.22E-02		
MDV	Gasoline	8.66%	9.39%	3.36E-01	9.87E-01	8.78E+01	4.94E-02	5.27E-01	1.86E-01		
MDV	Diesel	0.78%	0.85%	1.94E-02	3.08E-02	6.37E-01	3.29E-03	4.51E-02	1.51E-02		
MDV	Electricity	6.10%	6.61%	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.38E-01	6.48E-02		
MDV	Plug-in Hybrid	1.19%	1.28%	3.87E-03	7.53E-03	5.40E-01	1.41E-03	4.95E-02	1.45E-02		
MDV	Fuel Cell Electric Vehicle	1.13%	1.22%	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.41E-02	1.20E-02		
MH	Gasoline	0.08%	0.03%	6.59E-04	1.39E-02	1.21E-02	6.16E-04	4.57E-03	1.55E-03		
MH	Diesel	0.03%	0.01%	1.13E-03	6.21E-02	3.47E-03	1.12E-04	2.72E-03	1.33E-03		
Motor Coach	Diesel	0.01%	0.00%	1.32E-04	6.86E-03	9.05E-04	7.50E-05	1.72E-03	6.59E-04		
OBUS	Gasoline	0.01%	0.00%	1.40E-04	1.36E-03	3.46E-03	3.40E-05	2.96E-04	9.99E-05		
OBUS	Diesel	0.01%	0.00%	4.53E-04	1.05E-02	1.89E-03	4.80E-05	8.85E-04	3.62E-04		
OBUS	Electricity	0.01%	0.00%	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.87E-04	1.53E-04		
OBUS	Natural Gas	0.00%	0.00%	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.50E-04	8.21E-05		
OBUS	Fuel Cell Electric Vehicle	0.00%	0.00%	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.89E-05	1.54E-05		
PTO	Diesel	0.07%	0.02%	9.23E-04	5.60E-02	1.15E-02	4.00E-04	1.93E-04	1.84E-04		
SBUS	Gasoline	0.02%	0.01%	3.20E-04	2.76E-03	6.09E-03	5.25E-05	9.08E-04	3.20E-04		
SBUS	Diesel	0.01%	0.00%	8.51E-05	1.83E-03	5.67E-04	3.22E-05	5.41E-04	1.91E-04		
SBUS	Electricity	0.02%	0.01%	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.92E-04	1.92E-04		
SBUS	Natural Gas	0.02%	0.01%	1.20E-03	5.15E-03	2.49E-01	0.00E+00	1.54E-03	5.71E-04		
SBUS	Fuel Cell Electric Vehicle	0.00%	0.00%	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.27E-05	2.03E-05		
T6 CAIRP Class 4	Diesel	0.00%	0.00%	6.85E-06	1.07E-04	4.37E-05	4.76E-06	8.85E-05	3.24E-05		
T6 CAIRP Class 5	Diesel	0.00%	0.00%	1.24E-05	1.94E-04	7.92E-05	8.62E-06	1.60E-04	5.86E-05		
T6 CAIRP Class 6	Diesel	0.01%	0.00%	2.99E-05	4.74E-04	1.91E-04	2.07E-05	3.85E-04	1.41E-04		
T6 CAIRP Class 7	Diesel	0.03%	0.01%	1.65E-04	2.36E-03	1.05E-03	9.33E-05	1.92E-03	7.05E-04		
T6 CAIRP Class 7	Natural Gas	0.00%	0.00%	1.28E-07	8.42E-07	2.61E-05	0.00E+00	9.68E-07	3.29E-07		
T6 Instate Delivery Class 4	Diesel	0.08%	0.03%	4.01E-04	7.36E-03	2.80E-03	2.54E-04	4.78E-03	1.73E-03		
T6 Instate Delivery Class 4	Natural Gas	0.00%	0.00%	4.32E-06	2.74E-05	9.80E-04	0.00E+00	3.07E-05	1.05E-05		
T6 Instate Delivery Class 5	Diesel	0.08%	0.03%	3.45E-04	6.64E-03	2.50E-03	2.38E-04	4.46E-03	1.61E-03		
T6 Instate Delivery Class 5	Electricity	0.00%	0.00%	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.03E-07	9.52E-08		
T6 Instate Delivery Class 5	Natural Gas	0.00%	0.00%	4.05E-06	2.58E-05	9.20E-04	0.00E+00	2.88E-05	9.81E-06		
T6 Instate Delivery Class 6	Diesel	0.22%	0.07%	1.09E-03	2.17E-02	7.61E-03	7.04E-04	1.32E-02	4.77E-03		
T6 Instate Delivery Class 6	Natural Gas	0.00%	0.00%	1.20E-05	7.89E-05	2.75E-03	0.00E+00	8.58E-05	2.92E-05		
T6 Instate Delivery Class 7	Diesel	0.05%	0.02%	2.60E-04	4.60E-03	1.90E-03	1.64E-04	3.08E-03	1.11E-03		
T6 Instate Delivery Class 7	Electricity	0.00%	0.00%	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.09E-04	3.43E-05		
T6 Instate Delivery Class 7	Natural Gas	0.00%	0.00%	9.59E-06	6.33E-05	2.20E-03	0.00E+00	6.84E-05	2.33E-05		
T6 Instate Delivery Class 7	Fuel Cell Electric Vehicle	0.00%	0.00%	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.07E-05	3.36E-06		
T6 Instate Other Class 4	Diesel	0.10%	0.03%	4.74E-04	7.99E-03	3.40E-03	3.24E-04	6.04E-03	2.18E-03		
T6 Instate Other Class 4	Natural Gas	0.00%	0.00%	5.31E-06	3.37E-05	1.19E-03	0.00E+00	3.81E-05	1.30E-05		
T6 Instate Other Class 5	Diesel	0.37%	0.12%	1.72E-03	2.92E-02	1.23E-02	1.17E-03	2.18E-02	7.87E-03		
T6 Instate Other Class 5	Natural Gas	0.00%	0.00%	1.91E-05	1.21E-04	4.26E-03	0.00E+00	1.37E-04	4.66E-05		
T6 Instate Other Class 6	Diesel	0.25%	0.08%	1.13E-03	1.98E-02	8.14E-03	7.74E-04	1.44E-02	5.20E-03		
T6 Instate Other Class 6	Natural Gas	0.00%	0.00%	1.27E-05	8.06E-05	2.83E-03	0.00E+00	9.10E-05	3.10E-05		
T6 Instate Other Class 7	Diesel	0.10%	0.03%	5.05E-04	8.38E-03	3.63E-03	3.22E-04	6.01E-03	2.17E-03		
T6 Instate Other Class 7	Electricity	0.00%	0.00%	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.40E-06	4.41E-07		
T6 Instate Other Class 7	Natural Gas	0.00%	0.00%	1.84E-05	1.19E-04	4.13E-03	0.00E+00	1.32E-04	4.50E-05		

T6 Instate Tractor Class 6	Diesel	0.00%	0.00%	7.17E-06	1.33E-04	5.15E-05	5.37E-06	1.01E-04	3.64E-05
T6 Instate Tractor Class 6	Natural Gas	0.00%	0.00%	9.35E-08	5.91E-07	2.09E-05	0.00E+00	6.71E-07	2.28E-07
T6 Instate Tractor Class 7	Diesel	0.07%	0.02%	3.05E-04	5.22E-03	2.19E-03	1.90E-04	3.97E-03	1.43E-03
T6 Instate Tractor Class 7	Electricity	0.00%	0.00%	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.30E-05	2.61E-05
T6 Instate Tractor Class 7	Natural Gas	0.00%	0.00%	1.22E-05	7.70E-05	2.72E-03	0.00E+00	8.74E-05	2.98E-05
T6 Instate Tractor Class 7	Fuel Cell Electric Vehicle	0.00%	0.00%	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.76E-05	8.67E-06
T6 OOS Class 4	Diesel	0.00%	0.00%	3.98E-06	6.43E-05	2.54E-05	2.79E-06	5.16E-05	1.89E-05
T6 OOS Class 5	Diesel	0.00%	0.00%	7.21E-06	1.18E-04	4.59E-05	5.04E-06	9.35E-05	3.42E-05
T6 OOS Class 6	Diesel	0.00%	0.00%	1.74E-05	2.90E-04	1.11E-04	1.21E-05	2.25E-04	8.22E-05
T6 OOS Class 7	Diesel	0.02%	0.01%	1.08E-04	1.63E-03	6.92E-04	6.33E-05	1.30E-03	4.77E-04
T6 Public Class 4	Diesel	0.00%	0.00%	1.91E-06	1.71E-04	6.56E-06	2.68E-07	4.86E-06	2.01E-06
T6 Public Class 4	Electricity	0.00%	0.00%	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.18E-05	1.94E-05
T6 Public Class 4	Natural Gas	0.00%	0.00%	3.52E-07	3.11E-06	8.28E-05	0.00E+00	2.69E-06	9.10E-07
T6 Public Class 4	Fuel Cell Electric Vehicle	0.00%	0.00%	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.72E-06	2.11E-06
T6 Public Class 5	Diesel	0.00%	0.00%	2.15E-06	1.29E-04	1.12E-05	8.53E-07	1.46E-05	5.57E-06
T6 Public Class 5	Electricity	0.00%	0.00%	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.56E-04	4.91E-05
T6 Public Class 5	Natural Gas	0.00%	0.00%	1.06E-06	8.68E-06	2.44E-04	0.00E+00	8.04E-06	2.73E-06
T6 Public Class 5	Fuel Cell Electric Vehicle	0.00%	0.00%	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.72E-05	5.39E-06
T6 Public Class 6	Diesel	0.00%	0.00%	1.93E-06	1.87E-04	7.70E-06	4.20E-07	7.49E-06	2.98E-06
T6 Public Class 6	Electricity	0.00%	0.00%	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.01E-04	3.18E-05
T6 Public Class 6	Natural Gas	0.00%	0.00%	5.46E-07	4.47E-06	1.25E-04	0.00E+00	4.13E-06	1.40E-06
T6 Public Class 6	Fuel Cell Electric Vehicle	0.00%	0.00%	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.11E-05	3.49E-06
T6 Public Class 7	Diesel	0.00%	0.00%	2.51E-06	2.55E-04	1.04E-05	5.17E-07	9.53E-06	3.88E-06
T6 Public Class 7	Electricity	0.01%	0.00%	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.70E-04	5.33E-05
T6 Public Class 7	Natural Gas	0.00%	0.00%	8.21E-07	5.82E-06	1.80E-04	0.00E+00	6.12E-06	2.08E-06
T6 Public Class 7	Fuel Cell Electric Vehicle	0.00%	0.00%	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.87E-05	5.86E-06
T6 Utility Class 5	Diesel	0.01%	0.00%	3.49E-05	6.71E-04	2.36E-04	2.99E-05	5.60E-04	2.03E-04
T6 Utility Class 5	Natural Gas	0.00%	0.00%	3.35E-07	2.14E-06	7.11E-05	0.00E+00	2.48E-06	8.42E-07
T6 Utility Class 6	Diesel	0.00%	0.00%	6.06E-06	1.13E-04	4.11E-05	5.21E-06	9.73E-05	3.53E-05
T6 Utility Class 6	Natural Gas	0.00%	0.00%	5.84E-08	3.73E-07	1.24E-05	0.00E+00	4.32E-07	1.47E-07
T6 Utility Class 7	Diesel	0.00%	0.00%	6.85E-06	1.45E-04	4.64E-05	5.95E-06	1.11E-04	4.03E-05
T6 Utility Class 7	Natural Gas	0.00%	0.00%	6.63E-08	4.24E-07	1.41E-05	0.00E+00	4.90E-07	1.67E-07
T6TS	Gasoline	0.14%	0.05%	1.54E-03	1.29E-02	3.61E-02	8.80E-04	8.09E-03	2.74E-03
T6TS	Electricity	0.21%	0.07%	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.28E-03	2.29E-03
T6TS	Fuel Cell Electric Vehicle	0.02%	0.01%	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.03E-04	2.52E-04
T7 CAIRP Class 8	Diesel	0.94%	0.31%	1.06E-02	3.64E-01	3.97E-02	3.95E-03	1.27E-01	4.91E-02
T7 CAIRP Class 8	Natural Gas	0.00%	0.00%	4.05E-05	6.55E-04	9.21E-03	0.00E+00	3.70E-04	1.22E-04
T7 NNOOS Class 8	Diesel	1.04%	0.35%	1.07E-02	4.27E-01	4.01E-02	4.38E-03	1.41E-01	5.42E-02
T7 NOOS Class 8	Diesel	0.37%	0.12%	3.89E-03	1.49E-01	1.46E-02	1.55E-03	4.98E-02	1.92E-02
T7 POLA Class 8	Diesel	0.38%	0.13%	3.34E-03	1.49E-01	1.34E-02	1.71E-03	5.11E-02	1.93E-02
T7 POLA Class 8	Natural Gas	0.04%	0.01%	5.52E-04	8.85E-03	1.29E-01	0.00E+00	5.01E-03	1.65E-03
T7 Public Class 8	Diesel	0.00%	0.00%	1.09E-05	1.42E-03	3.90E-05	1.90E-06	5.06E-05	2.07E-05
T7 Public Class 8	Electricity	0.02%	0.01%	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.60E-03	4.86E-04
T7 Public Class 8	Natural Gas	0.00%	0.00%	2.73E-05	4.59E-04	6.59E-03	0.00E+00	2.46E-04	8.10E-05
T7 Public Class 8	Fuel Cell Electric Vehicle	0.00%	0.00%	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.76E-04	5.34E-05
T7 Single Concrete/Transit Mi	Diesel	0.03%	0.01%	2.21E-04	1.11E-02	9.65E-04	1.31E-04	3.78E-03	1.41E-03
T7 Single Concrete/Transit Mi	Natural Gas	0.00%	0.00%	3.39E-05	5.43E-04	8.16E-03	0.00E+00	3.06E-04	1.01E-04
T7 Single Dump Class 8	Diesel	0.08%	0.03%	6.43E-04	3.18E-02	2.80E-03	3.76E-04	1.09E-02	4.07E-03
T7 Single Dump Class 8	Natural Gas	0.01%	0.00%	9.77E-05	1.56E-03	2.35E-02	0.00E+00	8.82E-04	2.91E-04
T7 Single Other Class 8	Diesel	0.22%	0.07%	1.70E-03	8.68E-02	7.41E-03	1.03E-03	2.98E-02	1.11E-02
T7 Single Other Class 8	Natural Gas	0.02%	0.01%	2.68E-04	4.28E-03	6.44E-02	0.00E+00	2.42E-03	7.97E-04
T7 SWCV Class 8	Diesel	0.00%	0.00%	3.32E-06	1.08E-04	3.77E-06	1.96E-06	5.32E-05	2.02E-05
T7 SWCV Class 8	Electricity	0.00%	0.00%	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.30E-04	7.47E-05
T7 SWCV Class 8	Natural Gas	0.06%	0.02%	4.11E-05	3.68E-02	3.13E-01	0.00E+00	1.50E-02	5.05E-03
T7 SWCV Class 8	Fuel Cell Electric Vehicle	0.00%	0.00%	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.53E-05	8.22E-06
T7 Tractor Class 8	Diesel	0.58%	0.19%	5.31E-03	2.21E-01	1.99E-02	2.42E-03	7.74E-02	2.96E-02
T7 Tractor Class 8	Electricity	0.01%	0.00%	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.69E-04	1.73E-04
T7 Tractor Class 8	Natural Gas	0.02%	0.01%	2.97E-04	4.79E-03	6.79E-02	0.00E+00	2.71E-03	8.92E-04
T7 Tractor Class 8	Fuel Cell Electric Vehicle	0.00%	0.00%	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.94E-04	5.90E-05
T7 Utility Class 8	Diesel	0.00%	0.00%	2.25E-05	9.59E-04	8.99E-05	1.44E-05	4.13E-04	1.54E-04
T7IS	Gasoline	0.00%	0.00%	2.06E-04	1.31E-03	9.34E-03	2.63E-06	3.15E-05	1.06E-05
T7IS	Electricity	0.00%	0.00%	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.22E-06	1.98E-06
T7IS	Fuel Cell Electric Vehicle	0.00%	0.00%	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.86E-07	2.18E-07
UBUS	Gasoline	0.03%	0.01%	1.53E-04	1.83E-03	3.42E-02	1.37E-04	2.73E-03	9.49E-04
UBUS	Electricity	0.09%	0.03%	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.37E-03	2.08E-03
UBUS	Natural Gas	0.00%	0.00%	1.96E-04	4.67E-04	2.55E-04	0.00E+00	4.52E-04	1.74E-04
UBUS	Fuel Cell Electric Vehicle	0.01%	0.00%	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.07E-04	2.31E-04
		100.00%	100.00%	3.26	7.03	436.80	0.26	5.54	1.85

# Year 2025 E+P Scenario: Mobile GHG Emissions

Source: EMFAC2025 (v2.1.0) Emissions Rates Orange (SC).

<sup>1</sup> Based on data provided Fehr&Peers, 2026.

<sup>2</sup> Adjusted Daily vehicles miles traveled (VMT) multiplied by 312 days/year for weekday ferry terminal VMT and 15 days/year for weekend ferry terminal VMT, and 347 days/year for future visitor serving uses to account for reduced traffic on weekends and holidays. This assumption is consistent with the California Air Resources Board's (CARB) methodology within the 2008 Climate Change Scoping Plan Measure Documentation Supplement.

			CO2	CH4	N2O		
			AR4 GWP	AR4 GWP	AR4 GWP		
			1	25	298		
Annual VMT <sup>1,2</sup>			47,927,607				MT/Year
Vehicle Type	Fuel Type	Percent of VMT	CO2	CH4	N2O	CO2e	
LDA	Gasoline	3.62E-01	5,525.55	0.13	0.12	5,564.41	
LDA	Diesel	8.84E-04	11.94	0.00	0.00	12.50	
LDA	Electricity	5.71E-02	0.00	0.00	0.00	0.00	
LDA	Plug-in Hybrid	2.58E-02	176.25	0.00	0.00	176.60	
LDT1	Gasoline	3.29E-02	600.39	0.02	0.03	608.74	
LDT1	Diesel	1.20E-05	0.27	0.00	0.00	0.29	
LDT1	Electricity	3.04E-03	0.00	0.00	0.00	0.00	
LDT1	Plug-in Hybrid	1.74E-03	12.23	0.00	0.00	12.26	
LDT2	Gasoline	2.42E-01	4,404.57	0.08	0.09	4,432.37	
LDT2	Diesel	5.23E-04	8.92	0.00	0.00	9.34	
LDT2	Electricity	1.30E-03	0.00	0.00	0.00	0.00	
LDT2	Plug-in Hybrid	1.90E-02	135.09	0.00	0.00	135.36	
LHD1	Gasoline	1.84E-02	520.71	0.00	0.01	524.14	
LHD1	Diesel	8.51E-03	198.42	0.00	0.03	207.77	
LHD1	Electricity	8.13E-05	0.00	0.00	0.00	0.00	
LHD2	Gasoline	3.97E-03	121.38	0.00	0.00	122.11	
LHD2	Diesel	7.55E-03	197.58	0.00	0.03	206.89	
LHD2	Electricity	6.33E-05	0.00	0.00	0.00	0.00	
MCY	Gasoline	3.86E-03	37.27	0.03	0.01	40.23	
MDV	Gasoline	1.51E-01	3,359.00	0.06	0.07	3,382.49	
MDV	Diesel	4.30E-03	88.42	0.00	0.01	92.58	
MDV	Electricity	5.18E-03	0.00	0.00	0.00	0.00	
MDV	Plug-in Hybrid	4.61E-03	33.44	0.00	0.00	33.50	
MH	Gasoline	8.27E-04	69.61	0.00	0.00	69.89	
MH	Diesel	4.34E-04	20.82	0.00	0.01	22.77	
Motor Coach	Diesel	1.03E-04	8.47	0.00	0.00	9.05	
OBUS	Gasoline	3.95E-04	31.70	0.00	0.00	31.85	
OBUS	Diesel	1.86E-04	9.95	0.00	0.00	10.93	
OBUS	Electricity	4.08E-05	0.00	0.00	0.00	0.00	
OBUS	Natural Gas	5.74E-05	0.00	0.00	0.00	0.00	
PTO	Diesel	5.36E-04	51.26	0.00	0.01	54.30	
SBUS	Gasoline	2.43E-04	10.33	0.00	0.00	10.51	
SBUS	Diesel	1.75E-04	10.57	0.00	0.00	11.12	
SBUS	Electricity	1.07E-05	0.00	0.00	0.00	0.00	
SBUS	Natural Gas	2.55E-04	19.63	0.10	0.00	23.59	
T6 CAIRP Class 4	Diesel	1.11E-05	0.57	0.00	0.00	0.64	
T6 CAIRP Class 5	Diesel	2.02E-05	1.04	0.00	0.00	1.15	
T6 CAIRP Class 6	Diesel	4.85E-05	2.49	0.00	0.00	2.77	
T6 CAIRP Class 7	Diesel	2.44E-04	11.82	0.00	0.00	13.21	
T6 CAIRP Class 7	Natural Gas	2.30E-07	0.01	0.00	0.00	0.01	
T6 Instate Delivery Class 4	Diesel	6.18E-04	32.38	0.00	0.01	35.80	
T6 Instate Delivery Class 4	Natural Gas	1.07E-06	0.04	0.00	0.00	0.05	
T6 Instate Delivery Class 5	Diesel	5.65E-04	29.11	0.00	0.01	32.33	
T6 Instate Delivery Class 5	Electricity	1.45E-06	0.00	0.00	0.00	0.00	
T6 Instate Delivery Class 5	Natural Gas	1.32E-06	0.05	0.00	0.00	0.06	
T6 Instate Delivery Class 6	Diesel	1.76E-03	91.58	0.00	0.03	101.11	
T6 Instate Delivery Class 6	Natural Gas	7.18E-06	0.28	0.00	0.00	0.31	
T6 Instate Delivery Class 7	Diesel	4.00E-04	20.61	0.00	0.01	22.88	
T6 Instate Delivery Class 7	Electricity	6.08E-05	0.00	0.00	0.00	0.00	
T6 Instate Delivery Class 7	Natural Gas	1.08E-05	0.41	0.00	0.00	0.48	
T6 Instate Other Class 4	Diesel	7.72E-04	41.51	0.00	0.01	45.86	
T6 Instate Other Class 4	Natural Gas	4.84E-07	0.02	0.00	0.00	0.02	

T6 Instate Other Class 5	Diesel	2.77E-03	145.58	0.00	0.05	161.33
T6 Instate Other Class 5	Natural Gas	3.50E-06	0.13	0.00	0.00	0.16
T6 Instate Other Class 6	Diesel	1.83E-03	95.67	0.00	0.03	106.03
T6 Instate Other Class 6	Natural Gas	3.34E-06	0.13	0.00	0.00	0.15
T6 Instate Other Class 7	Diesel	8.06E-04	41.96	0.00	0.02	46.53
T6 Instate Other Class 7	Electricity	4.25E-06	0.00	0.00	0.00	0.00
T6 Instate Other Class 7	Natural Gas	1.83E-05	0.70	0.00	0.00	0.82
T6 Instate Tractor Class 6	Diesel	1.28E-05	0.64	0.00	0.00	0.72
T6 Instate Tractor Class 6	Natural Gas	4.54E-08	0.00	0.00	0.00	0.00
T6 Instate Tractor Class 7	Diesel	5.31E-04	25.12	0.00	0.01	28.14
T6 Instate Tractor Class 7	Electricity	8.12E-06	0.00	0.00	0.00	0.00
T6 Instate Tractor Class 7	Natural Gas	1.07E-05	0.40	0.00	0.00	0.47
T6 Instate Tractor Class 7	Fuel Cell Electric Vehicle	5.89E-07	0.00	0.00	0.00	0.00
T6 OOS Class 4	Diesel	6.50E-06	0.33	0.00	0.00	0.37
T6 OOS Class 5	Diesel	1.18E-05	0.60	0.00	0.00	0.67
T6 OOS Class 6	Diesel	2.83E-05	1.44	0.00	0.00	1.60
T6 OOS Class 7	Diesel	1.65E-04	7.88	0.00	0.00	8.83
T6 Public Class 4	Diesel	2.98E-05	1.59	0.00	0.00	1.67
T6 Public Class 4	Electricity	9.31E-06	0.00	0.00	0.00	0.00
T6 Public Class 4	Natural Gas	4.89E-06	0.18	0.00	0.00	0.21
T6 Public Class 5	Diesel	5.02E-05	2.63	0.00	0.00	2.86
T6 Public Class 5	Electricity	1.51E-06	0.00	0.00	0.00	0.00
T6 Public Class 5	Natural Gas	1.30E-05	0.49	0.00	0.00	0.57
T6 Public Class 6	Diesel	5.67E-05	3.06	0.00	0.00	3.22
T6 Public Class 6	Electricity	1.44E-06	0.00	0.00	0.00	0.00
T6 Public Class 6	Natural Gas	7.94E-06	0.30	0.00	0.00	0.35
T6 Public Class 7	Diesel	1.27E-04	6.87	0.00	0.00	7.16
T6 Public Class 7	Electricity	4.94E-06	0.00	0.00	0.00	0.00
T6 Public Class 7	Natural Gas	1.06E-05	0.39	0.00	0.00	0.46
T6 Utility Class 5	Diesel	9.69E-05	5.05	0.00	0.00	5.60
T6 Utility Class 5	Natural Gas	2.79E-07	0.01	0.00	0.00	0.01
T6 Utility Class 6	Diesel	1.71E-05	0.86	0.00	0.00	0.96
T6 Utility Class 6	Natural Gas	1.56E-07	0.01	0.00	0.00	0.01
T6 Utility Class 7	Diesel	1.94E-05	0.97	0.00	0.00	1.08
T6 Utility Class 7	Natural Gas	2.48E-07	0.01	0.00	0.00	0.01
T6TS	Gasoline	5.92E-03	454.64	0.00	0.00	456.01
T6TS	Electricity	3.88E-05	0.00	0.00	0.00	0.00
T7 CAIRP Class 8	Diesel	5.42E-03	387.90	0.00	0.10	418.86
T7 CAIRP Class 8	Natural Gas	1.16E-05	0.64	0.00	0.00	0.72
T7 NNOOS Class 8	Diesel	6.24E-03	434.63	0.00	0.12	470.26
T7 NOOS Class 8	Diesel	2.22E-03	159.74	0.00	0.04	172.41
T7 POLA Class 8	Diesel	2.85E-03	219.93	0.00	0.05	236.16
T7 POLA Class 8	Natural Gas	1.92E-04	10.03	0.01	0.00	11.37
T7 Public Class 8	Diesel	2.64E-04	21.42	0.00	0.00	22.09
T7 Public Class 8	Electricity	1.83E-05	0.00	0.00	0.00	0.00
T7 Public Class 8	Natural Gas	1.22E-04	6.55	0.01	0.00	7.42
T7 Single Concrete/Transit Mix Class 8	Diesel	2.80E-04	21.44	0.00	0.01	23.03
T7 Single Concrete/Transit Mix Class 8	Natural Gas	2.07E-05	1.10	0.00	0.00	1.25
T7 Single Dump Class 8	Diesel	7.93E-04	61.76	0.00	0.02	66.27
T7 Single Dump Class 8	Natural Gas	7.35E-05	4.04	0.00	0.00	4.58
T7 Single Other Class 8	Diesel	1.39E-03	105.71	0.00	0.03	113.55
T7 Single Other Class 8	Natural Gas	1.39E-04	7.45	0.01	0.00	8.45
T7 SWCV Class 8	Diesel	2.13E-04	37.59	0.00	0.00	37.81
T7 SWCV Class 8	Electricity	2.30E-07	0.00	0.00	0.00	0.00
T7 SWCV Class 8	Natural Gas	6.10E-04	33.03	0.17	0.01	40.03
T7 Tractor Class 8	Diesel	3.28E-03	234.29	0.00	0.06	252.95
T7 Tractor Class 8	Electricity	3.93E-05	0.00	0.00	0.00	0.00
T7 Tractor Class 8	Natural Gas	1.51E-04	7.94	0.01	0.00	9.02
T7 Tractor Class 8	Fuel Cell Electric Vehicle	9.42E-07	0.00	0.00	0.00	0.00
T7 Utility Class 8	Diesel	3.15E-05	2.35	0.00	0.00	2.53
T7IS	Gasoline	1.78E-05	1.88	0.00	0.00	1.93
T7IS	Electricity	1.89E-08	0.00	0.00	0.00	0.00
UBUS	Gasoline	3.50E-04	19.41	0.00	0.00	19.48
UBUS	Electricity	1.56E-04	0.00	0.00	0.00	0.00
UBUS	Natural Gas	6.38E-04	51.66	0.09	0.01	57.45
		100.00%	18,523.85	0.74	1.12	18,876

# Year 2045: Mobile GHG Emissions

Source: EMFAC2025 (v2.1.0) Emissions Rates. Orange (SC).

<sup>1</sup> Based on data provided Fehr&Peers, 2026.

<sup>2</sup> Adjusted Daily vehicles miles traveled (VMT) multiplied by 312 days/year for weekday ferry terminal VMT and 15 days/year for weekend ferry terminal VMT, and 347 days/year for future visitor serving uses to account for reduced traffic on weekends and holidays. This assumption is consistent with the California Air Resources Board's (CARB) methodology within the 2008 Climate Change Scoping Plan Measure Documentation Supplement.

Fleet Mix - Orange (SC)	Passenger Vehicles	Trucks
Fehr&Peers	96%	4%
EMFAC default	89%	11%

				CO2	CH4	N2O			
				AR4 GWP	AR4 GWP	AR4 GWP			
				1	25	298			
<b>Annual VMT</b>				<b>48,293,106</b>				<b>MT/Year</b>	
Vehicle Type	Fuel Type	Percent of VMT	Adjusted Percent	CO2	CH4	N2O	CO2e		
LDA	Gasoline	16.35%	17.72%	2,332.22	0.02	0.03	2,341.39		
LDA	Diesel	0.00%	0.00%	0.43	0.00	0.00	0.45		
LDA	Electricity	15.34%	16.63%	0.00	0.00	0.00	0.00		
LDA	Plug-in Hybrid	6.88%	7.46%	243.21	0.00	0.00	243.69		
LDA	Fuel Cell Electric Vehi	0.09%	0.10%	0.00	0.00	0.00	0.00		
LDT1	Gasoline	1.23%	1.34%	212.09	0.00	0.00	213.10		
LDT1	Diesel	0.00%	0.00%	0.00	0.00	0.00	0.00		
LDT1	Electricity	1.50%	1.63%	0.00	0.00	0.00	0.00		
LDT1	Plug-in Hybrid	0.62%	0.68%	27.50	0.00	0.00	27.56		
LDT1	Fuel Cell Electric Vehi	0.02%	0.02%	0.00	0.00	0.00	0.00		
LDT2	Gasoline	19.06%	20.67%	3,245.46	0.03	0.04	3,256.72		
LDT2	Diesel	0.03%	0.04%	5.44	0.00	0.00	5.70		
LDT2	Electricity	2.43%	2.63%	0.00	0.00	0.00	0.00		
LDT2	Plug-in Hybrid	6.85%	7.42%	287.54	0.00	0.00	288.11		
LDT2	Fuel Cell Electric Vehi	0.09%	0.10%	0.00	0.00	0.00	0.00		
LHD1	Gasoline	1.67%	0.55%	124.58	0.00	0.00	125.24		
LHD1	Diesel	0.97%	0.32%	67.42	0.00	0.01	70.59		
LHD1	Electricity	0.10%	0.03%	0.00	0.00	0.00	0.00		
LHD1	Fuel Cell Electric Vehi	0.01%	0.00%	0.00	0.00	0.00	0.00		
LHD2	Gasoline	0.50%	0.17%	41.62	0.00	0.00	41.86		
LHD2	Diesel	1.74%	0.58%	139.50	0.00	0.02	146.07		
LHD2	Electricity	0.07%	0.02%	0.00	0.00	0.00	0.00		
LHD2	Fuel Cell Electric Vehi	0.01%	0.00%	0.00	0.00	0.00	0.00		
MCY	Gasoline	0.47%	0.51%	48.87	0.04	0.01	52.45		
MDV	Gasoline	8.66%	9.39%	1,812.04	0.02	0.02	1,818.44		
MDV	Diesel	0.78%	0.85%	157.43	0.00	0.02	164.83		
MDV	Electricity	6.10%	6.61%	0.00	0.00	0.00	0.00		
MDV	Plug-in Hybrid	1.19%	1.28%	51.63	0.00	0.00	51.74		
MDV	Fuel Cell Electric Vehi	1.13%	1.22%	0.00	0.00	0.00	0.00		
MH	Gasoline	0.08%	0.03%	22.57	0.00	0.00	22.64		
MH	Diesel	0.03%	0.01%	5.37	0.00	0.00	5.99		
Motor Coach	Diesel	0.01%	0.00%	3.60	0.00	0.00	3.88		
OBUS	Gasoline	0.01%	0.00%	1.25	0.00	0.00	1.25		
OBUS	Diesel	0.01%	0.00%	2.30	0.00	0.00	2.55		
OBUS	Electricity	0.01%	0.00%	0.00	0.00	0.00	0.00		
OBUS	Natural Gas	0.00%	0.00%	0.00	0.00	0.00	0.00		
OBUS	Fuel Cell Electric Vehi	0.00%	0.00%	0.00	0.00	0.00	0.00		
PTO	Diesel	0.07%	0.02%	19.18	0.00	0.00	20.56		
SBUS	Gasoline	0.02%	0.01%	1.92	0.00	0.00	1.93		
SBUS	Diesel	0.01%	0.00%	1.55	0.00	0.00	1.71		
SBUS	Electricity	0.02%	0.01%	0.00	0.00	0.00	0.00		
SBUS	Natural Gas	0.02%	0.01%	5.28	0.02	0.00	6.18		
SBUS	Fuel Cell Electric Vehi	0.00%	0.00%	0.00	0.00	0.00	0.00		
T6 CAIRP Class 4	Diesel	0.00%	0.00%	0.23	0.00	0.00	0.26		
T6 CAIRP Class 5	Diesel	0.00%	0.00%	0.41	0.00	0.00	0.47		
T6 CAIRP Class 6	Diesel	0.01%	0.00%	0.99	0.00	0.00	1.12		
T6 CAIRP Class 7	Diesel	0.03%	0.01%	4.47	0.00	0.00	5.10		
T6 CAIRP Class 7	Natural Gas	0.00%	0.00%	0.00	0.00	0.00	0.00		
T6 Instate Delivery Class 4	Diesel	0.08%	0.03%	12.19	0.00	0.01	13.74		
T6 Instate Delivery Class 4	Natural Gas	0.00%	0.00%	0.06	0.00	0.00	0.07		
T6 Instate Delivery Class 5	Diesel	0.08%	0.03%	11.42	0.00	0.00	12.87		
T6 Instate Delivery Class 5	Electricity	0.00%	0.00%	0.00	0.00	0.00	0.00		
T6 Instate Delivery Class 5	Natural Gas	0.00%	0.00%	0.06	0.00	0.00	0.07		
T6 Instate Delivery Class 6	Diesel	0.22%	0.07%	33.76	0.00	0.01	38.04		
T6 Instate Delivery Class 6	Natural Gas	0.00%	0.00%	0.17	0.00	0.00	0.20		

T6 Instate Delivery Class 7	Diesel	0.05%	0.02%	7.87	0.00	0.00	8.87
T6 Instate Delivery Class 7	Electricity	0.00%	0.00%	0.00	0.00	0.00	0.00
T6 Instate Delivery Class 7	Natural Gas	0.00%	0.00%	0.13	0.00	0.00	0.16
T6 Instate Delivery Class 7	Fuel Cell Electric Vehi	0.00%	0.00%	0.00	0.00	0.00	0.00
T6 Instate Other Class 4	Diesel	0.10%	0.03%	15.54	0.00	0.01	17.50
T6 Instate Other Class 4	Natural Gas	0.00%	0.00%	0.07	0.00	0.00	0.09
T6 Instate Other Class 5	Diesel	0.37%	0.12%	56.23	0.00	0.02	63.32
T6 Instate Other Class 5	Natural Gas	0.00%	0.00%	0.27	0.00	0.00	0.32
T6 Instate Other Class 6	Diesel	0.25%	0.08%	37.08	0.00	0.02	41.76
T6 Instate Other Class 6	Natural Gas	0.00%	0.00%	0.18	0.00	0.00	0.21
T6 Instate Other Class 7	Diesel	0.10%	0.03%	15.41	0.00	0.01	17.36
T6 Instate Other Class 7	Electricity	0.00%	0.00%	0.00	0.00	0.00	0.00
T6 Instate Other Class 7	Natural Gas	0.00%	0.00%	0.26	0.00	0.00	0.31
T6 Instate Tractor Class 6	Diesel	0.00%	0.00%	0.26	0.00	0.00	0.29
T6 Instate Tractor Class 6	Natural Gas	0.00%	0.00%	0.00	0.00	0.00	0.00
T6 Instate Tractor Class 7	Diesel	0.07%	0.02%	9.11	0.00	0.00	10.40
T6 Instate Tractor Class 7	Electricity	0.00%	0.00%	0.00	0.00	0.00	0.00
T6 Instate Tractor Class 7	Natural Gas	0.00%	0.00%	0.17	0.00	0.00	0.20
T6 Instate Tractor Class 7	Fuel Cell Electric Vehi	0.00%	0.00%	0.00	0.00	0.00	0.00
T6 OOS Class 4	Diesel	0.00%	0.00%	0.13	0.00	0.00	0.15
T6 OOS Class 5	Diesel	0.00%	0.00%	0.24	0.00	0.00	0.27
T6 OOS Class 6	Diesel	0.00%	0.00%	0.58	0.00	0.00	0.65
T6 OOS Class 7	Diesel	0.02%	0.01%	3.04	0.00	0.00	3.46
T6 Public Class 4	Diesel	0.00%	0.00%	0.01	0.00	0.00	0.01
T6 Public Class 4	Electricity	0.00%	0.00%	0.00	0.00	0.00	0.00
T6 Public Class 4	Natural Gas	0.00%	0.00%	0.01	0.00	0.00	0.01
T6 Public Class 4	Fuel Cell Electric Vehi	0.00%	0.00%	0.00	0.00	0.00	0.00
T6 Public Class 5	Diesel	0.00%	0.00%	0.04	0.00	0.00	0.05
T6 Public Class 5	Electricity	0.00%	0.00%	0.00	0.00	0.00	0.00
T6 Public Class 5	Natural Gas	0.00%	0.00%	0.02	0.00	0.00	0.02
T6 Public Class 5	Fuel Cell Electric Vehi	0.00%	0.00%	0.00	0.00	0.00	0.00
T6 Public Class 6	Diesel	0.00%	0.00%	0.02	0.00	0.00	0.02
T6 Public Class 6	Electricity	0.00%	0.00%	0.00	0.00	0.00	0.00
T6 Public Class 6	Natural Gas	0.00%	0.00%	0.01	0.00	0.00	0.01
T6 Public Class 6	Fuel Cell Electric Vehi	0.00%	0.00%	0.00	0.00	0.00	0.00
T6 Public Class 7	Diesel	0.00%	0.00%	0.02	0.00	0.00	0.03
T6 Public Class 7	Electricity	0.01%	0.00%	0.00	0.00	0.00	0.00
T6 Public Class 7	Natural Gas	0.00%	0.00%	0.01	0.00	0.00	0.01
T6 Public Class 7	Fuel Cell Electric Vehi	0.00%	0.00%	0.00	0.00	0.00	0.00
T6 Utility Class 5	Diesel	0.01%	0.00%	1.44	0.00	0.00	1.62
T6 Utility Class 5	Natural Gas	0.00%	0.00%	0.00	0.00	0.00	0.01
T6 Utility Class 6	Diesel	0.00%	0.00%	0.25	0.00	0.00	0.28
T6 Utility Class 6	Natural Gas	0.00%	0.00%	0.00	0.00	0.00	0.00
T6 Utility Class 7	Diesel	0.00%	0.00%	0.29	0.00	0.00	0.32
T6 Utility Class 7	Natural Gas	0.00%	0.00%	0.00	0.00	0.00	0.00
T6TS	Gasoline	0.14%	0.05%	32.28	0.00	0.00	32.35
T6TS	Electricity	0.21%	0.07%	0.00	0.00	0.00	0.00
T6TS	Fuel Cell Electric Vehi	0.02%	0.01%	0.00	0.00	0.00	0.00
T7 CAIRP Class 8	Diesel	0.94%	0.31%	189.14	0.00	0.06	207.07
T7 CAIRP Class 8	Natural Gas	0.00%	0.00%	0.45	0.00	0.00	0.52
T7 NNOOS Class 8	Diesel	1.04%	0.35%	209.72	0.00	0.07	229.58
T7 NOOS Class 8	Diesel	0.37%	0.12%	74.19	0.00	0.02	81.22
T7 POLA Class 8	Diesel	0.38%	0.13%	81.98	0.00	0.02	89.22
T7 POLA Class 8	Natural Gas	0.04%	0.01%	6.12	0.01	0.00	7.05
T7 Public Class 8	Diesel	0.00%	0.00%	0.09	0.00	0.00	0.10
T7 Public Class 8	Electricity	0.02%	0.01%	0.00	0.00	0.00	0.00
T7 Public Class 8	Natural Gas	0.00%	0.00%	0.31	0.00	0.00	0.36
T7 Public Class 8	Fuel Cell Electric Vehi	0.00%	0.00%	0.00	0.00	0.00	0.00
T7 Single Concrete/Transit Mix Class 8	Diesel	0.03%	0.01%	6.27	0.00	0.00	6.81
T7 Single Concrete/Transit Mix Class 8	Natural Gas	0.00%	0.00%	0.37	0.00	0.00	0.43
T7 Single Dump Class 8	Diesel	0.08%	0.03%	18.02	0.00	0.01	19.57
T7 Single Dump Class 8	Natural Gas	0.01%	0.00%	1.08	0.00	0.00	1.24
T7 Single Other Class 8	Diesel	0.22%	0.07%	49.32	0.00	0.01	53.57
T7 Single Other Class 8	Natural Gas	0.02%	0.01%	2.96	0.00	0.00	3.40
T7 SWCV Class 8	Diesel	0.00%	0.00%	0.09	0.00	0.00	0.10
T7 SWCV Class 8	Electricity	0.00%	0.00%	0.00	0.00	0.00	0.00
T7 SWCV Class 8	Natural Gas	0.06%	0.02%	7.77	0.00	0.00	8.93
T7 SWCV Class 8	Fuel Cell Electric Vehi	0.00%	0.00%	0.00	0.00	0.00	0.00
T7 Tractor Class 8	Diesel	0.58%	0.19%	116.03	0.00	0.04	127.00
T7 Tractor Class 8	Electricity	0.01%	0.00%	0.00	0.00	0.00	0.00
T7 Tractor Class 8	Natural Gas	0.02%	0.01%	3.31	0.00	0.00	3.81
T7 Tractor Class 8	Fuel Cell Electric Vehi	0.00%	0.00%	0.00	0.00	0.00	0.00
T7 Utility Class 8	Diesel	0.00%	0.00%	0.69	0.00	0.00	0.75
T7IS	Gasoline	0.00%	0.00%	0.10	0.00	0.00	0.10

T7IS	Electricity	0.00%	0.00%	0.00	0.00	0.00	0.00
T7IS	Fuel Cell Electric Vehi	0.00%	0.00%	0.00	0.00	0.00	0.00
UBUS	Gasoline	0.03%	0.01%	2.17	0.00	0.00	2.18
UBUS	Electricity	0.09%	0.03%	0.00	0.00	0.00	0.00
UBUS	Natural Gas	0.00%	0.00%	0.32	0.00	0.00	0.39
UBUS	Fuel Cell Electric Vehi	0.01%	0.00%	0.00	0.00	0.00	0.00
		100.00%	100.00%	9,875.24	0.15	0.51	10,030.01





**CalEEMod Construction:  
Site-Wide Improvements**

# FDCSP Construction, Specific Plan Area Prep Work Custom Report

## Table of Contents

1. Basic Project Information
  - 1.1. Basic Project Information
  - 1.2. Land Use Types
  - 1.3. User-Selected Emission Reduction Measures by Emissions Sector
2. Emissions Summary
  - 2.1. Construction Emissions Compared Against Thresholds
  - 2.2. Construction Emissions by Year
    - 2.2.1. Total Construction Emissions by Year, Unmitigated
    - 2.2.2. Onsite Construction Emissions by Year, Unmitigated
    - 2.2.3. Offsite Construction Emissions by Year, Unmitigated
3. Construction Emissions Details
  - 3.1. Demolition (2027)
    - 3.1.1. Onsite - Unmitigated
    - 3.1.2. Offsite - Unmitigated
  - 3.2. Site Preparation (2027)

3.2.1. Onsite - Unmitigated

3.2.2. Offsite - Unmitigated

3.3. Mass Grading (2027)

3.3.1. Onsite - Unmitigated

3.3.2. Offsite - Unmitigated

3.4. Mass Grading (2028)

3.4.1. Onsite - Unmitigated

3.4.2. Offsite - Unmitigated

3.5. Utility Trenching (2027)

3.5.1. Onsite - Unmitigated

3.5.2. Offsite - Unmitigated

3.6. Utility Trenching (2028)

3.6.1. Onsite - Unmitigated

3.6.2. Offsite - Unmitigated

5. Activity Data

5.1. Construction Schedule

5.2. Off-Road Equipment

5.2.1. Unmitigated

### 5.3. Construction Vehicles

#### 5.3.1. Unmitigated

### 5.4. Vehicles

#### 5.4.1. Construction Vehicle Control Strategies

### 5.5. Architectural Coatings

### 5.6. Dust Mitigation

#### 5.6.1. Construction Earthmoving Activities

#### 5.6.2. Construction Earthmoving Control Strategies

### 5.7. Construction Paving

### 5.8. Construction Electricity Consumption and Emissions Factors

## 8. User Changes to Default Data

### 8.1. Justifications

### 8.3. Land Use

### 8.4. Construction

#### 8.4.1. Construction Phases

#### 8.4.2. Off-Road Equipment

#### 8.4.4. Dust from Material Movement

#### 8.4.6. Trips and VMT

## 8.6. Measure Input Overrides

### 8.6.1. Construction Measure Inputs

# 1. Basic Project Information

## 1.1. Basic Project Information

Data Field	Value
Project Name	FDCSP Construction, Specific Plan Area Prep Work
Construction Start Date	1/1/2027
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	2.50000
Precipitation (days)	19.2000
Location	33.664745347716845, -117.92830489231781
County	Orange
City	Costa Mesa
Air District	South Coast AQMD
Air Basin	South Coast
TAZ	5912
EDFZ	7
Electric Utility	Southern California Edison
Gas Utility	Southern California Gas
App Version	2022.1.1.41

## 1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
User Defined Parking	95.0000	User Defined Unit	95.0000	0.00000	0.00000	0.00000	—	—

### 1.3. User-Selected Emission Reduction Measures by Emissions Sector

Sector	#	Measure Title
Construction	C-5	Use Advanced Engine Tiers

## 2. Emissions Summary

### 2.1. Construction Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	39.6694	36.4618	108.012	115.584	0.28944	4.22419	29.9025	34.1184	3.89041	12.7566	16.6369	—	41,536.5	41,536.5	2.71092	6.12393	74.4771	43,503.7
Mit.	37.3274	34.5442	41.8431	147.848	0.28551	1.14761	29.9025	30.2630	1.00412	12.7566	13.1171	—	41,111.3	41,111.3	2.69367	6.12048	74.4771	43,077.0
% Reduced	6%	5%	61%	-28%	1%	73%	—	11%	74%	—	21%	—	1%	1%	1%	< 0.5%	—	1%
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	39.6648	36.4568	108.244	115.070	0.28944	4.22419	18.1743	22.3985	3.89041	5.41565	9.30606	—	41,527.1	41,527.1	2.71102	6.12393	1.92985	43,421.8
Mit.	37.3228	34.5392	43.3973	147.334	0.28551	1.14761	18.1743	18.7223	1.00412	5.41565	5.96358	—	41,101.9	41,101.9	2.69377	6.12048	1.92985	42,995.1
% Reduced	6%	5%	60%	-28%	1%	73%	—	16%	74%	—	36%	—	1%	1%	1%	< 0.5%	—	1%
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	19.2201	17.1923	59.8025	68.8745	0.19353	2.17712	14.4670	16.6441	1.98402	4.50413	6.48815	—	25,233.9	25,233.9	1.40350	2.47667	13.3376	26,020.3
Mit.	14.2721	13.1764	22.2099	72.0176	0.18699	0.57432	14.4670	15.0413	0.52321	4.50413	5.02735	—	24,526.1	24,526.1	1.37479	2.47093	13.3376	25,310.1
% Reduced	26%	23%	63%	-5%	3%	74%	—	10%	74%	—	23%	—	3%	3%	2%	< 0.5%	—	3%

Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	3.50767	3.13759	10.9140	12.5696	0.03532	0.39732	2.64023	3.03755	0.36208	0.82200	1.18409	—	4,177.76	4,177.76	0.23237	0.41004	2.20818	4,307.96
Mit.	2.60465	2.40470	4.05330	13.1432	0.03413	0.10481	2.64023	2.74504	0.09549	0.82200	0.91749	—	4,060.57	4,060.57	0.22761	0.40909	2.20818	4,190.38
% Reduced	26%	23%	63%	-5%	3%	74%	—	10%	74%	—	23%	—	3%	3%	2%	< 0.5%	—	3%

## 2.2. Construction Emissions by Year

### 2.2.1. Total Construction Emissions by Year, Unmitigated

Includes both onsite and offsite emissions.

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2027	39.6694	36.4618	108.012	115.584	0.28944	4.22419	29.9025	34.1184	3.89041	12.7566	16.6369	—	41,536.5	41,536.5	2.71092	6.12393	74.4771	43,503.7
2028	14.3606	11.8184	102.755	114.830	0.28151	3.99232	18.1743	22.1667	3.67709	5.41565	9.09274	—	32,603.6	32,603.6	1.37553	0.98584	13.5701	32,945.4
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2027	39.6648	36.4568	108.244	115.070	0.28944	4.22419	18.1743	22.3985	3.89041	5.41565	9.30606	—	41,527.1	41,527.1	2.71102	6.12393	1.92985	43,421.8
2028	14.3536	11.8157	103.003	114.341	0.28151	3.99232	18.1743	22.1667	3.67709	5.41565	9.09274	—	32,557.1	32,557.1	1.37957	1.01847	0.35184	32,895.5
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2027	19.2201	17.1923	59.8025	68.8745	0.19353	2.17712	14.4670	16.6441	1.98402	4.50413	6.48815	—	25,233.9	25,233.9	1.40350	2.47667	13.3376	26,020.3
2028	3.20317	2.63699	22.9880	25.5364	0.06280	0.89066	3.99094	4.88159	0.82033	1.20092	2.02124	—	7,265.89	7,265.89	0.30777	0.22721	1.30735	7,342.60
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2027	3.50767	3.13759	10.9140	12.5696	0.03532	0.39732	2.64023	3.03755	0.36208	0.82200	1.18409	—	4,177.76	4,177.76	0.23237	0.41004	2.20818	4,307.96
2028	0.58458	0.48125	4.19532	4.66040	0.01146	0.16254	0.72835	0.89089	0.14971	0.21917	0.36888	—	1,202.95	1,202.95	0.05095	0.03762	0.21645	1,215.65

### 2.2.2. Onsite Construction Emissions by Year, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2027	36.7530	36.1241	102.391	109.164	0.24405	4.19638	28.3739	32.5703	3.86071	12.3671	16.2278	—	26,438.8	26,438.8	1.07504	0.22163	0.08448	26,531.8
2028	13.7063	11.5136	97.3838	108.712	0.24407	3.94099	15.6691	19.6101	3.62575	4.76490	8.39065	—	26,438.5	26,438.5	1.07474	0.22135	0.07782	26,531.4
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2027	36.7529	36.1240	102.394	109.164	0.24405	4.17285	15.6691	19.8420	3.83907	4.76490	8.60397	—	26,438.8	26,438.8	1.07504	0.22163	0.00219	26,531.7
2028	13.7062	11.5134	97.3865	108.712	0.24407	3.94099	15.6691	19.6101	3.62575	4.76490	8.39065	—	26,438.5	26,438.5	1.07474	0.22135	0.00201	26,531.3
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2027	17.9818	16.9753	43.7250	61.4315	0.09227	1.98417	9.98616	11.9703	1.79107	3.26650	5.05757	—	9,909.61	9,909.61	0.40307	0.08298	0.01291	9,944.43
2028	3.05776	2.56857	21.7262	24.2528	0.05445	0.87920	3.43821	4.31741	0.80888	1.05728	1.86615	—	5,898.21	5,898.21	0.23976	0.04938	0.00748	5,918.93
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2027	3.28167	3.09800	7.97981	11.2112	0.01684	0.36211	1.82247	2.18458	0.32687	0.59614	0.92301	—	1,640.65	1,640.65	0.06673	0.01374	0.00214	1,646.41
2028	0.55804	0.46876	3.96503	4.42613	0.00994	0.16045	0.62747	0.78793	0.14762	0.19295	0.34057	—	976.516	976.516	0.03970	0.00818	0.00124	979.946

### 2.2.3. Offsite Construction Emissions by Year, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2027	2.91640	0.33770	38.4628	15.8479	0.25478	0.50452	10.6347	11.1392	0.50452	2.97153	3.47605	—	38,027.5	38,027.5	2.56768	6.09477	74.4718	39,982.4
2028	0.65426	0.30482	5.37102	6.11781	0.03745	0.05134	2.50520	2.55654	0.05134	0.65076	0.70209	—	6,165.16	6,165.16	0.30080	0.76449	13.4923	6,413.99

Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2027	2.91188	0.33280	40.0162	15.7462	0.25478	0.50452	10.6347	11.1392	0.50452	2.97153	3.47605	—	38,018.1	38,018.1	2.56778	6.09477	1.92971	39,900.5
2028	0.64736	0.30227	5.61688	5.62818	0.03745	0.05134	2.50520	2.55654	0.05134	0.65076	0.70209	—	6,118.61	6,118.61	0.30483	0.79712	0.34982	6,364.12
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2027	1.23832	0.21696	16.0776	7.44301	0.10125	0.19295	4.48083	4.67378	0.19295	1.23763	1.43058	—	15,324.3	15,324.3	1.00043	2.39369	13.3246	16,075.9
2028	0.14541	0.06842	1.26186	1.28366	0.00835	0.01145	0.55273	0.56418	0.01145	0.14364	0.15509	—	1,367.68	1,367.68	0.06801	0.17783	1.29987	1,423.67
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2027	0.22599	0.03960	2.93415	1.35835	0.01848	0.03521	0.81775	0.85296	0.03521	0.22587	0.26108	—	2,537.11	2,537.11	0.16563	0.39630	2.20605	2,661.55
2028	0.02654	0.01249	0.23029	0.23427	0.00152	0.00209	0.10087	0.10296	0.00209	0.02621	0.02830	—	226.435	226.435	0.01126	0.02944	0.21521	235.705

### 3. Construction Emissions Details

#### 3.1. Demolition (2027)

##### 3.1.1. Onsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	36.7513	36.1235	20.7500	66.7321	0.03462	1.38296	—	1.38296	1.17579	—	1.17579	—	3,504.70	3,504.70	0.14228	0.02846	—	3,516.74
Demolition	—	—	—	—	—	—	6.63147	6.63147	—	1.00419	1.00419	—	—	—	—	—	—	—
Onsite truck	0.00161	0.00061	0.01611	0.01123	0.00004	0.00004	0.30804	0.30807	0.00004	0.03079	0.03083	—	4.29630	4.29630	0.00095	0.00070	0.00531	4.53518

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	36.7513	36.1235	20.7500	66.7321	0.03462	1.38296	—	1.38296	1.17579	—	1.17579	—	3,504.70	3,504.70	0.14228	0.02846	—	3,516.74
Demolition	—	—	—	—	—	—	6.63147	6.63147	—	1.00419	1.00419	—	—	—	—	—	—	—
Onsite truck	0.00152	0.00053	0.01686	0.01154	0.00004	0.00004	0.30804	0.30807	0.00004	0.03079	0.03083	—	4.32145	4.32145	0.00095	0.00070	0.00014	4.55516
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	13.0895	12.8659	7.39041	23.7676	0.01233	0.49256	—	0.49256	0.41878	—	0.41878	—	1,248.25	1,248.25	0.05068	0.01014	—	1,252.54
Demolition	—	—	—	—	—	—	2.36189	2.36189	—	0.35766	0.35766	—	—	—	—	—	—	—
Onsite truck	0.00057	0.00020	0.00588	0.00405	0.00001	0.00001	0.10394	0.10396	0.00001	0.01039	0.01040	—	1.53396	1.53396	0.00034	0.00025	0.00082	1.61796
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.38884	2.34803	1.34875	4.33758	0.00225	0.08989	—	0.08989	0.07643	—	0.07643	—	206.662	206.662	0.00839	0.00168	—	207.372
Demolition	—	—	—	—	—	—	0.43105	0.43105	—	0.06527	0.06527	—	—	—	—	—	—	—
Onsite truck	0.00010	0.00004	0.00107	0.00074	< 0.000005	< 0.000005	0.01897	0.01897	< 0.000005	0.00190	0.00190	—	0.25396	0.25396	0.00006	0.00004	0.00014	0.26787

### 3.1.2. Offsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
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Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05826	0.04996	0.05247	0.86537	0.00000	0.00000	0.22874	0.22874	0.00000	0.05362	0.05362	—	224.042	224.042	0.00231	0.00829	0.71038	227.282
Vendor	0.03164	0.00837	0.39906	0.19816	0.00292	0.00292	0.11123	0.11415	0.00292	0.03073	0.03365	—	400.201	400.201	0.02035	0.05463	0.95730	417.946
Hauling	2.82650	0.27937	38.0112	14.7844	0.25186	0.50160	10.2947	10.7963	0.50160	2.88718	3.38878	—	37,403.2	37,403.2	2.54502	6.03185	72.8041	39,337.2
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05826	0.04958	0.05363	0.74423	0.00000	0.00000	0.22874	0.22874	0.00000	0.05362	0.05362	—	213.225	213.225	0.00270	0.00829	0.01847	215.783
Vendor	0.03135	0.00808	0.41592	0.20274	0.00292	0.00292	0.11123	0.11415	0.00292	0.03073	0.03365	—	400.411	400.411	0.02006	0.05463	0.02479	417.216
Hauling	2.82227	0.27514	39.5467	14.7992	0.25186	0.50160	10.2947	10.7963	0.50160	2.88718	3.38878	—	37,404.5	37,404.5	2.54502	6.03185	1.88645	39,267.5
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02061	0.01766	0.02150	0.27640	0.00000	0.00000	0.08047	0.08047	0.00000	0.01885	0.01885	—	76.9803	76.9803	0.00096	0.00295	0.10942	77.9942
Vendor	0.01127	0.00298	0.14909	0.07129	0.00104	0.00104	0.03920	0.04024	0.00104	0.01084	0.01188	—	142.569	142.569	0.00715	0.01946	0.14695	148.693
Hauling	1.00632	0.09875	14.2574	5.26793	0.08970	0.17865	3.63133	3.80998	0.17865	1.01949	1.19814	—	13,321.9	13,321.9	0.90644	2.14833	11.1896	13,995.9
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00376	0.00322	0.00392	0.05044	0.00000	0.00000	0.01468	0.01468	0.00000	0.00344	0.00344	—	12.7450	12.7450	0.00016	0.00049	0.01812	12.9128
Vendor	0.00206	0.00054	0.02721	0.01301	0.00019	0.00019	0.00715	0.00734	0.00019	0.00198	0.00217	—	23.6039	23.6039	0.00118	0.00322	0.02433	24.6177
Hauling	0.18365	0.01802	2.60197	0.96140	0.01637	0.03260	0.66272	0.69532	0.03260	0.18606	0.21866	—	2,205.59	2,205.59	0.15007	0.35568	1.85257	2,317.19

### 3.2. Site Preparation (2027)

#### 3.2.1. Onsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road	13.3319	11.2025	101.207	101.190	0.19918	4.19589	—	4.19589	3.86022	—	3.86022	—	21,573.4	21,573.4	0.87511	0.17502	—	21,647.4
Dust From Material Movement	—	—	—	—	—	—	24.2395	24.2395	—	11.9538	11.9538	—	—	—	—	—	—	—
Onsite truck	0.00411	0.00084	0.04998	0.02418	0.00027	0.00049	4.13438	4.13487	0.00049	0.41327	0.41376	—	38.1262	38.1262	0.00323	0.00616	0.07129	40.1135
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.11850	1.78013	16.0822	16.0796	0.03165	0.66674	—	0.66674	0.61340	—	0.61340	—	3,428.09	3,428.09	0.13906	0.02781	—	3,439.86
Dust From Material Movement	—	—	—	—	—	—	3.85175	3.85175	—	1.89951	1.89951	—	—	—	—	—	—	—
Onsite truck	0.00065	0.00013	0.00830	0.00386	0.00004	0.00008	0.62243	0.62251	0.00008	0.06222	0.06230	—	6.06009	6.06009	0.00051	0.00098	0.00489	6.36945
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.38663	0.32487	2.93500	2.93452	0.00578	0.12168	—	0.12168	0.11195	—	0.11195	—	567.560	567.560	0.02302	0.00460	—	569.508
Dust From Material Movement	—	—	—	—	—	—	0.70295	0.70295	—	0.34666	0.34666	—	—	—	—	—	—	—
Onsite truck	0.00012	0.00002	0.00151	0.00071	0.00001	0.00001	0.11359	0.11361	0.00001	0.01136	0.01137	—	1.00332	1.00332	0.00008	0.00016	0.00081	1.05453

3.2.2. Offsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.19974	0.17130	0.17990	2.96698	0.00000	0.00000	0.78426	0.78426	0.00000	0.18383	0.18383	—	768.143	768.143	0.00794	0.02844	2.43558	779.252
Vendor	0.21175	0.05601	2.67065	1.32612	0.01956	0.01956	0.74436	0.76393	0.01956	0.20565	0.22522	—	2,678.27	2,678.27	0.13618	0.36557	6.40656	2,797.02
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03153	0.02701	0.03290	0.42281	0.00000	0.00000	0.12308	0.12308	0.00000	0.02883	0.02883	—	117.755	117.755	0.00147	0.00452	0.16738	119.305
Vendor	0.03365	0.00890	0.44516	0.21286	0.00311	0.00311	0.11705	0.12016	0.00311	0.03237	0.03548	—	425.683	425.683	0.02133	0.05809	0.43878	443.966
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00575	0.00493	0.00600	0.07716	0.00000	0.00000	0.02246	0.02246	0.00000	0.00526	0.00526	—	19.4956	19.4956	0.00024	0.00075	0.02771	19.7524
Vendor	0.00614	0.00162	0.08124	0.03885	0.00057	0.00057	0.02136	0.02193	0.00057	0.00591	0.00648	—	70.4766	70.4766	0.00353	0.00962	0.07264	73.5036
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.3. Mass Grading (2027)

3.3.1. Onsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

FDCSP Construction, Specific Plan Area Prep Work Custom Report, 4/1/2026

Off-Road Equipment	10.5160	8.83639	76.7403	81.8449	0.18279	3.12920	—	3.12920	2.87887	—	2.87887	—	19,794.2	19,794.2	0.80294	0.16059	—	19,862.2
Dust From Material Movement	—	—	—	—	—	—	10.7702	10.7702	—	4.27520	4.27520	—	—	—	—	—	—	—
Onsite truck	0.00381	0.00081	0.04590	0.02263	0.00024	0.00044	3.67418	3.67462	0.00044	0.36727	0.36771	—	34.0574	34.0574	0.00295	0.00550	0.06336	35.8345
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	10.5160	8.83639	76.7403	81.8449	0.18279	3.12920	—	3.12920	2.87887	—	2.87887	—	19,794.2	19,794.2	0.80294	0.16059	—	19,862.2
Dust From Material Movement	—	—	—	—	—	—	10.7702	10.7702	—	4.27520	4.27520	—	—	—	—	—	—	—
Onsite truck	0.00372	0.00073	0.04785	0.02293	0.00024	0.00044	3.67418	3.67462	0.00044	0.36727	0.36771	—	34.0826	34.0826	0.00295	0.00550	0.00164	35.7979
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.07851	1.74653	15.1679	16.1768	0.03613	0.61849	—	0.61849	0.56901	—	0.56901	—	3,912.36	3,912.36	0.15870	0.03174	—	3,925.79
Dust From Material Movement	—	—	—	—	—	—	2.12876	2.12876	—	0.84500	0.84500	—	—	—	—	—	—	—
Onsite truck	0.00075	0.00015	0.00947	0.00450	0.00005	0.00009	0.68803	0.68812	0.00009	0.06878	0.06887	—	6.73360	6.73360	0.00058	0.00109	0.00540	7.07771
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipm	0.37933	0.31874	2.76813	2.95226	0.00659	0.11287	—	0.11287	0.10384	—	0.10384	—	647.736	647.736	0.02628	0.00526	—	649.959
Dust From Material Movement	—	—	—	—	—	—	0.38850	0.38850	—	0.15421	0.15421	—	—	—	—	—	—	—
Onsite truck	0.00014	0.00003	0.00173	0.00082	0.00001	0.00002	0.12557	0.12558	0.00002	0.01255	0.01257	—	1.11482	1.11482	0.00010	0.00018	0.00089	1.17180

### 3.3.2. Offsite - Unmitigated

#### Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.19974	0.17130	0.17990	2.96698	0.00000	0.00000	0.78426	0.78426	0.00000	0.18383	0.18383	—	768.143	768.143	0.00794	0.02844	2.43558	779.252
Vendor	0.20201	0.05343	2.54786	1.26515	0.01866	0.01866	0.71014	0.72880	0.01866	0.19620	0.21486	—	2,555.13	2,555.13	0.12992	0.34877	6.11201	2,668.42
Hauling	0.16766	0.01944	2.21948	0.89466	0.01429	0.02818	0.57827	0.60644	0.02818	0.16218	0.19035	—	2,110.89	2,110.89	0.14782	0.34048	4.08947	2,220.14
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.19974	0.16998	0.18387	2.55163	0.00000	0.00000	0.78426	0.78426	0.00000	0.18383	0.18383	—	731.058	731.058	0.00926	0.02844	0.06334	739.828
Vendor	0.20018	0.05160	2.65546	1.29443	0.01866	0.01866	0.71014	0.72880	0.01866	0.19620	0.21486	—	2,556.47	2,556.47	0.12809	0.34877	0.15827	2,663.77
Hauling	0.16687	0.01865	2.30976	0.89744	0.01429	0.02818	0.57827	0.60644	0.02818	0.16218	0.19035	—	2,111.11	2,111.11	0.14782	0.34048	0.10596	2,216.38
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03922	0.03360	0.04092	0.52590	0.00000	0.00000	0.15310	0.15310	0.00000	0.03586	0.03586	—	146.468	146.468	0.00183	0.00562	0.20819	148.397
Vendor	0.03993	0.01056	0.52826	0.25259	0.00369	0.00369	0.13890	0.14259	0.00369	0.03841	0.04210	—	505.138	505.138	0.02532	0.06893	0.52067	526.834
Hauling	0.03310	0.00376	0.46143	0.17707	0.00282	0.00557	0.11319	0.11876	0.00557	0.03178	0.03735	—	417.239	417.239	0.02922	0.06730	0.34880	438.373
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00716	0.00613	0.00747	0.09598	0.00000	0.00000	0.02794	0.02794	0.00000	0.00654	0.00654	—	24.2495	24.2495	0.00030	0.00093	0.03447	24.5688

Vendor	0.00729	0.00193	0.09641	0.04610	0.00067	0.00067	0.02535	0.02602	0.00067	0.00701	0.00768	—	83.6314	83.6314	0.00419	0.01141	0.08620	87.2234
Hauling	0.00604	0.00069	0.08421	0.03231	0.00052	0.00102	0.02066	0.02167	0.00102	0.00580	0.00682	—	69.0788	69.0788	0.00484	0.01114	0.05775	72.5777

### 3.4. Mass Grading (2028)

#### 3.4.1. Onsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	10.2753	8.63408	72.9868	81.5065	0.18280	2.95530	—	2.95530	2.71888	—	2.71888	—	19,794.8	19,794.8	0.80296	0.16059	—	19,862.7
Dust From Material Movement	—	—	—	—	—	—	10.7702	10.7702	—	4.27520	4.27520	—	—	—	—	—	—	—
Onsite truck	0.00379	0.00081	0.04439	0.02221	0.00024	0.00044	3.67418	3.67462	0.00044	0.36727	0.36771	—	33.2821	33.2821	0.00271	0.00528	0.05836	34.9830
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	10.2753	8.63408	72.9868	81.5065	0.18280	2.95530	—	2.95530	2.71888	—	2.71888	—	19,794.8	19,794.8	0.80296	0.16059	—	19,862.7
Dust From Material Movement	—	—	—	—	—	—	10.7702	10.7702	—	4.27520	4.27520	—	—	—	—	—	—	—
Onsite truck	0.00372	0.00073	0.04613	0.02252	0.00024	0.00044	3.67418	3.67462	0.00044	0.36727	0.36771	—	33.3080	33.3080	0.00271	0.00528	0.00151	34.9522

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.29233	1.92619	16.2828	18.1835	0.04078	0.65930	—	0.65930	0.60656	—	0.60656	—	4,416.06	4,416.06	0.17913	0.03583	—	4,431.21
Dust From Material Movement	—	—	—	—	—	—	2.40275	2.40275	—	0.95376	0.95376	—	—	—	—	—	—	—
Onsite truck	0.00084	0.00017	0.01035	0.00498	0.00005	0.00010	0.77659	0.77669	0.00010	0.07764	0.07773	—	7.42739	7.42739	0.00061	0.00118	0.00561	7.79946
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.41835	0.35153	2.97161	3.31848	0.00744	0.12032	—	0.12032	0.11070	—	0.11070	—	731.129	731.129	0.02966	0.00593	—	733.638
Dust From Material Movement	—	—	—	—	—	—	0.43850	0.43850	—	0.17406	0.17406	—	—	—	—	—	—	—
Onsite truck	0.00015	0.00003	0.00189	0.00091	0.00001	0.00002	0.14173	0.14175	0.00002	0.01417	0.01419	—	1.22969	1.22969	0.00010	0.00020	0.00093	1.29129

### 3.4.2. Offsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.19445	0.16601	0.15410	2.79899	0.00000	0.00000	0.78426	0.78426	0.00000	0.18383	0.18383	—	754.441	754.441	0.00794	0.00397	2.17663	757.999
Vendor	0.18335	0.05160	2.44356	1.22416	0.01866	0.01866	0.71014	0.72880	0.01866	0.19620	0.21486	—	2,495.89	2,495.89	0.12626	0.34877	5.49814	2,608.48
Hauling	0.16746	0.01944	2.13317	0.86668	0.01429	0.02818	0.57827	0.60644	0.02818	0.16218	0.19035	—	2,061.93	2,061.93	0.13353	0.32639	3.76715	2,166.30

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.19312	0.16469	0.18122	2.40414	0.00000	0.00000	0.78426	0.78426	0.00000	0.18383	0.18383	—	718.057	718.057	0.00926	0.02844	0.05634	726.820
Vendor	0.17969	0.05160	2.55116	1.25161	0.01866	0.01866	0.71014	0.72880	0.01866	0.19620	0.21486	—	2,497.29	2,497.29	0.12809	0.34877	0.14279	2,604.56
Hauling	0.16687	0.01865	2.20936	0.86946	0.01429	0.02818	0.57827	0.60644	0.02818	0.16218	0.19035	—	2,062.16	2,062.16	0.13353	0.32639	0.09750	2,162.86
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04338	0.03704	0.04043	0.56069	0.00000	0.00000	0.17280	0.17280	0.00000	0.04047	0.04047	—	162.382	162.382	0.00207	0.00634	0.21000	164.535
Vendor	0.04050	0.01192	0.56922	0.27596	0.00416	0.00416	0.15678	0.16095	0.00416	0.04336	0.04752	—	556.945	556.945	0.02858	0.07781	0.52993	581.376
Hauling	0.03732	0.00425	0.50157	0.19362	0.00319	0.00629	0.12776	0.13405	0.00629	0.03587	0.04216	—	460.021	460.021	0.02979	0.07282	0.36223	482.828
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00792	0.00676	0.00738	0.10233	0.00000	0.00000	0.03154	0.03154	0.00000	0.00739	0.00739	—	26.8843	26.8843	0.00034	0.00105	0.03477	27.2406
Vendor	0.00739	0.00218	0.10388	0.05036	0.00076	0.00076	0.02861	0.02937	0.00076	0.00791	0.00867	—	92.2086	92.2086	0.00473	0.01288	0.08774	96.2534
Hauling	0.00681	0.00078	0.09154	0.03533	0.00058	0.00115	0.02332	0.02446	0.00115	0.00655	0.00769	—	76.1618	76.1618	0.00493	0.01206	0.05997	79.9376

### 3.5. Utility Trenching (2027)

#### 3.5.1. Onsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.50534	2.94546	25.5801	27.2816	0.06093	1.04307	—	1.04307	0.95962	—	0.95962	—	6,598.08	6,598.08	0.26765	0.05353	—	6,620.72
Onsite truck	0.00221	0.00067	0.02422	0.01433	0.00009	0.00015	1.22473	1.22487	0.00015	0.12242	0.12257	—	12.4010	12.4010	0.00150	0.00201	0.02112	13.0588

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.50534	2.94546	25.5801	27.2816	0.06093	1.04307	—	1.04307	0.95962	—	0.95962	—	6,598.08	6,598.08	0.26765	0.05353	—	6,620.72
Onsite truck	0.00212	0.00058	0.02530	0.01464	0.00009	0.00015	1.22473	1.22487	0.00015	0.12242	0.12257	—	12.4262	12.4262	0.00150	0.00201	0.00055	13.0634
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.69284	0.58218	5.05595	5.39226	0.01204	0.20616	—	0.20616	0.18967	—	0.18967	—	1,304.12	1,304.12	0.05290	0.01058	—	1,308.60
Onsite truck	0.00043	0.00012	0.00495	0.00286	0.00002	0.00003	0.22934	0.22937	0.00003	0.02293	0.02296	—	2.45318	2.45318	0.00030	0.00040	0.00180	2.58081
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.12644	0.10625	0.92271	0.98409	0.00220	0.03762	—	0.03762	0.03461	—	0.03461	—	215.912	215.912	0.00876	0.00175	—	216.653
Onsite truck	0.00008	0.00002	0.00090	0.00052	< 0.000005	0.00001	0.04186	0.04186	0.00001	0.00418	0.00419	—	0.40615	0.40615	0.00005	0.00007	0.00030	0.42728

### 3.5.2. Offsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06658	0.05710	0.05997	0.98899	0.00000	0.00000	0.26142	0.26142	0.00000	0.06128	0.06128	—	256.048	256.048	0.00265	0.00948	0.81186	259.751
Vendor	0.04868	0.01287	0.61394	0.30486	0.00450	0.00450	0.17112	0.17562	0.00450	0.04728	0.05177	—	615.694	615.694	0.03131	0.08404	1.47277	642.994
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06658	0.05666	0.06129	0.85054	0.00000	0.00000	0.26142	0.26142	0.00000	0.06128	0.06128	—	243.686	243.686	0.00309	0.00948	0.02111	246.609
Vendor	0.04824	0.01243	0.63987	0.31191	0.00450	0.00450	0.17112	0.17562	0.00450	0.04728	0.05177	—	616.018	616.018	0.03086	0.08404	0.03814	641.871
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01307	0.01120	0.01364	0.17530	0.00000	0.00000	0.05103	0.05103	0.00000	0.01195	0.01195	—	48.8227	48.8227	0.00061	0.00187	0.06940	49.4657
Vendor	0.00962	0.00254	0.12729	0.06087	0.00089	0.00089	0.03347	0.03436	0.00089	0.00926	0.01015	—	121.720	121.720	0.00610	0.01661	0.12546	126.948
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00239	0.00204	0.00249	0.03199	0.00000	0.00000	0.00931	0.00931	0.00000	0.00218	0.00218	—	8.08315	8.08315	0.00010	0.00031	0.01149	8.18961
Vendor	0.00176	0.00046	0.02323	0.01111	0.00016	0.00016	0.00611	0.00627	0.00016	0.00169	0.00185	—	20.1521	20.1521	0.00101	0.00275	0.02077	21.0177
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

### 3.6. Utility Trenching (2028)

#### 3.6.1. Onsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.42509	2.87803	24.3289	27.1688	0.06093	0.98510	—	0.98510	0.90629	—	0.90629	—	6,598.26	6,598.26	0.26765	0.05353	—	6,620.90
Onsite truck	0.00219	0.00067	0.02359	0.01421	0.00009	0.00015	1.22473	1.22487	0.00015	0.12242	0.12257	—	12.1295	12.1295	0.00140	0.00194	0.01945	12.7616

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.42509	2.87803	24.3289	27.1688	0.06093	0.98510	—	0.98510	0.90629	—	0.90629	—	6,598.26	6,598.26	0.26765	0.05353	—	6,620.90
Onsite truck	0.00212	0.00058	0.02459	0.01452	0.00009	0.00015	1.22473	1.22487	0.00015	0.12242	0.12257	—	12.1555	12.1555	0.00140	0.00194	0.00050	12.7686
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.76411	0.64206	5.42759	6.06115	0.01359	0.21977	—	0.21977	0.20219	—	0.20219	—	1,472.02	1,472.02	0.05971	0.01194	—	1,477.07
Onsite truck	0.00048	0.00014	0.00545	0.00320	0.00002	0.00003	0.25886	0.25890	0.00003	0.02588	0.02591	—	2.70844	2.70844	0.00031	0.00043	0.00187	2.84697
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.13945	0.11718	0.99054	1.10616	0.00248	0.04011	—	0.04011	0.03690	—	0.03690	—	243.710	243.710	0.00989	0.00198	—	244.546
Onsite truck	0.00009	0.00003	0.00099	0.00058	< 0.000005	0.00001	0.04724	0.04725	0.00001	0.00472	0.00473	—	0.44841	0.44841	0.00005	0.00007	0.00031	0.47135

3.6.2. Offsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06482	0.05534	0.05137	0.93300	0.00000	0.00000	0.26142	0.26142	0.00000	0.06128	0.06128	—	251.480	251.480	0.00265	0.00132	0.72554	252.666
Vendor	0.04418	0.01243	0.58881	0.29498	0.00450	0.00450	0.17112	0.17562	0.00450	0.04728	0.05177	—	601.420	601.420	0.03042	0.08404	1.32485	628.549
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06437	0.05490	0.06041	0.80138	0.00000	0.00000	0.26142	0.26142	0.00000	0.06128	0.06128	—	239.352	239.352	0.00309	0.00948	0.01878	242.273
Vendor	0.04330	0.01243	0.61474	0.30159	0.00450	0.00450	0.17112	0.17562	0.00450	0.04728	0.05177	—	601.756	601.756	0.03086	0.08404	0.03441	627.606
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01446	0.01235	0.01348	0.18690	0.00000	0.00000	0.05760	0.05760	0.00000	0.01349	0.01349	—	54.1275	54.1275	0.00069	0.00211	0.07000	54.8449
Vendor	0.00976	0.00287	0.13716	0.06650	0.00100	0.00100	0.03778	0.03878	0.00100	0.01045	0.01145	—	134.204	134.204	0.00689	0.01875	0.12770	140.091
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00264	0.00225	0.00246	0.03411	0.00000	0.00000	0.01051	0.01051	0.00000	0.00246	0.00246	—	8.96142	8.96142	0.00011	0.00035	0.01159	9.08020
Vendor	0.00178	0.00052	0.02503	0.01214	0.00018	0.00018	0.00689	0.00708	0.00018	0.00191	0.00209	—	22.2189	22.2189	0.00114	0.00310	0.02114	23.1936
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

## 5. Activity Data

### 5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
Demolition	Demolition	1/1/2027	7/1/2027	5.00000	130.000	—
Site Preparation	Site Preparation	7/2/2027	9/21/2027	5.00000	58.0000	—
Mass Grading	Grading	9/22/2027	4/23/2028	5.00000	153.000	—
Utility Trenching	Trenching	9/22/2027	4/23/2028	5.00000	153.000	—

### 5.2. Off-Road Equipment

#### 5.2.1. Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
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Demolition	Rubber Tired Dozers	Diesel	Average	2.00000	8.00000	367.000	0.40000
Demolition	Excavators	Diesel	Average	3.00000	8.00000	36.0000	0.38000
Demolition	Concrete/Industrial Saws	Diesel	Average	1.000000	8.00000	33.0000	0.73000
Demolition	Crushing/Proc. Equipment	Gasoline	Average	1.000000	8.00000	12.0000	0.85000
Site Preparation	Rubber Tired Dozers	Diesel	Average	9.00000	8.00000	367.000	0.40000
Site Preparation	Tractors/Loaders/Back hoes	Diesel	Average	12.0000	8.00000	84.0000	0.37000
Site Preparation	Scrapers	Diesel	Average	3.00000	8.00000	423.000	0.48000
Mass Grading	Graders	Diesel	Average	3.00000	8.00000	148.000	0.41000
Mass Grading	Excavators	Diesel	Average	6.00000	8.00000	36.0000	0.38000
Mass Grading	Tractors/Loaders/Back hoes	Diesel	Average	6.00000	8.00000	84.0000	0.37000
Mass Grading	Scrapers	Diesel	Average	6.00000	8.00000	423.000	0.48000
Mass Grading	Rubber Tired Dozers	Diesel	Average	3.00000	8.00000	367.000	0.40000
Utility Trenching	Excavators	Diesel	Average	2.00000	8.00000	36.0000	0.38000
Utility Trenching	Graders	Diesel	Average	1.000000	8.00000	148.000	0.41000
Utility Trenching	Rubber Tired Dozers	Diesel	Average	1.000000	8.00000	367.000	0.40000
Utility Trenching	Scrapers	Diesel	Average	2.00000	8.00000	423.000	0.48000
Utility Trenching	Tractors/Loaders/Back hoes	Diesel	Average	2.00000	8.00000	84.0000	0.37000

### 5.3. Construction Vehicles

#### 5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Demolition	Worker	17.5000	18.5000	LDA,LDT1,LDT2
Demolition	Vendor	13.0000	10.2000	HHDT,MHDT
Demolition	Hauling	48.0000	237.000	HHDT

Demolition	Onsite truck	1.000000	0.83000	HHDT
Site Preparation	Worker	60.0000	18.5000	LDA,LDT1,LDT2
Site Preparation	Vendor	87.0000	10.2000	HHDT,MHDT
Site Preparation	Hauling	0.00000	20.0000	HHDT
Site Preparation	Onsite truck	1.000000	11.1400	HHDT
Mass Grading	Worker	60.0000	18.5000	LDA,LDT1,LDT2
Mass Grading	Vendor	83.0000	10.2000	HHDT,MHDT
Mass Grading	Hauling	9.00000	71.0000	HHDT
Mass Grading	Onsite truck	1.000000	9.90000	HHDT
Utility Trenching	Worker	20.0000	18.5000	LDA,LDT1,LDT2
Utility Trenching	Vendor	20.0000	10.2000	HHDT,MHDT
Utility Trenching	Hauling	0.00000	20.0000	HHDT
Utility Trenching	Onsite truck	1.000000	3.30000	HHDT

## 5.4. Vehicles

### 5.4.1. Construction Vehicle Control Strategies

Control Strategies Applied	PM10 Reduction	PM2.5 Reduction
Water unpaved roads twice daily	55%	55%
Limit vehicle speeds on unpaved roads to 25 mph	44%	44%
Sweep paved roads once per month	9%	9%

## 5.5. Architectural Coatings

## 5.6. Dust Mitigation

### 5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (Cubic Yards)	Material Exported (Cubic Yards)	Acres Graded (acres)	Material Demolished (Ton of Debris)	Acres Paved (acres)
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Demolition	0.00000	0.00000	0.00000	62,375.0	0.00000
Site Preparation	0.00000	0.00000	7,207.50	0.00000	0.00000
Mass Grading	7,593.00	7,593.00	25,974.0	0.00000	0.00000

### 5.6.2. Construction Earthmoving Control Strategies

Control Strategies Applied	Frequency (per day)	PM10 Reduction	PM2.5 Reduction
Water Exposed Area	2	61%	61%
Water Demolished Area	2	36%	36%

### 5.7. Construction Paving

### 5.8. Construction Electricity Consumption and Emissions Factors

#### kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2027	0.00000	531.983	0.03300	0.00400
2028	0.00000	531.983	0.03300	0.00400

## 8. User Changes to Default Data

### 8.1. Justifications

Screen	Justification
Land Use	Total acreage of disturbance for entire Site Plan area prep work.
Construction: Construction Phases	Adjusted schedule to reflect anticipated overall site work.
Construction: Off-Road Equipment	Included crusher for asphalt demolition reprocessing; equipment mix for utility trenching phase assumes defaults for grading activities.
Construction: Dust From Material Movement	See assumptions file.
Construction: Trips and VMT	Included CalEEMod default vendor trips and calculated water truck trips as vendor trips; calculate onsite truck trip length; see assumptions file

### 8.3. Land Use

Model Parameter	Units	Default Value	New Value
Lot Area	acre	0.00000	95.0000
Landscape Area	sq. ft	—	0.00000
Special Landscape Area	sq. ft	—	0.00000

### 8.4. Construction

#### 8.4.1. Construction Phases

Phase Type	Phase Name	Model Parameter	Default Value	New Value
Demolition	Demolition	End Date	5/21/2027	7/1/2027
Demolition	Demolition	Work Days per Phase	100.0000	130.000
Site Preparation	Site Preparation	Start Date	5/22/2027	7/2/2027
Site Preparation	Site Preparation	End Date	8/14/2027	9/21/2027
Site Preparation	Site Preparation	Work Days per Phase	60.0000	58.0000
Trenching	Utility Trenching	Start Date	3/10/2031	9/22/2027
Trenching	Utility Trenching	End Date	3/31/2042	4/23/2028
Trenching	Utility Trenching	Work Days per Phase	2,886.00	153.000

#### 8.4.2. Off-Road Equipment

Phase Name	Equipment Type	Model Parameter	Default Value	New Value
Site Preparation	Rubber Tired Dozers	Number per Day	3.00000	9.00000
Site Preparation	Tractors/Loaders/Backhoes	Number per Day	4.00000	12.0000
Mass Grading	Graders	Number per Day	1.000000	3.00000
Mass Grading	Excavators	Number per Day	2.00000	6.00000
Mass Grading	Tractors/Loaders/Backhoes	Number per Day	2.00000	6.00000
Mass Grading	Scrapers	Number per Day	2.00000	6.00000

Mass Grading	Rubber Tired Dozers	Number per Day	1.000000	3.00000
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#### 8.4.4. Dust from Material Movement

Phase Name	Model Parameter	Units	Default Value	New Value
Site Preparation	Material Imported	Cubic Yards	—	0.00000
Site Preparation	Material Exported	Cubic Yards	—	0.00000
Site Preparation	Total Acres Graded	acres	435.000	7,207.50
Mass Grading	Material Imported	Cubic Yards	—	7,593.00
Mass Grading	Material Exported	Cubic Yards	—	7,593.00
Mass Grading	Total Acres Graded	acres	1,377.00	25,974.0

#### 8.4.6. Trips and VMT

Phase Name	Trip Type	Model Parameter	Default Value	New Value
Demolition	Hauling	One-Way Trips per Day	119.954	48.0000
Demolition	Hauling	Miles per Trip	20.0000	237.000
Mass Grading	Hauling	One-Way Trips per Day	12.4118	9.00000
Mass Grading	Hauling	Miles per Trip	20.0000	71.0000

### 8.6. Measure Input Overrides

#### 8.6.1. Construction Measure Inputs

Measure Number and Input Name	Construction Phase	Equipment Type	Model Parameter	Default Value	New Value
C-5 - Use Advanced Engine Tiers	Demolition	Excavators	Number Mitigated	2.00000	3.00000
C-5 - Use Advanced Engine Tiers	Site Preparation	Tractors/Loaders/Backhoes	Number Mitigated	1.000000	12.0000

# **CalEEMod Construction: Phase 3**

# FDCSP Construction, Phase 3 Custom Report

## Table of Contents

- 1. Basic Project Information
  - 1.1. Basic Project Information
  - 1.2. Land Use Types
  - 1.3. User-Selected Emission Reduction Measures by Emissions Sector
- 2. Emissions Summary
  - 2.1. Construction Emissions Compared Against Thresholds
  - 2.2. Construction Emissions by Year
    - 2.2.1. Total Construction Emissions by Year, Unmitigated
    - 2.2.2. Onsite Construction Emissions by Year, Unmitigated
    - 2.2.3. Offsite Construction Emissions by Year, Unmitigated
- 3. Construction Emissions Details
  - 3.1. Fine Grading (2028)
    - 3.1.1. Onsite - Unmitigated
    - 3.1.2. Offsite - Unmitigated
  - 3.2. Building Construction (2028)

3.2.1. Onsite - Unmitigated

3.2.2. Offsite - Unmitigated

3.3. Building Construction (2029)

3.3.1. Onsite - Unmitigated

3.3.2. Offsite - Unmitigated

3.4. Building Construction (2030)

3.4.1. Onsite - Unmitigated

3.4.2. Offsite - Unmitigated

3.5. Building Construction (2031)

3.5.1. Onsite - Unmitigated

3.5.2. Offsite - Unmitigated

3.6. Paving (2032)

3.6.1. Onsite - Unmitigated

3.6.2. Offsite - Unmitigated

3.7. Architectural Coating (2032)

3.7.1. Onsite - Unmitigated

3.7.2. Offsite - Unmitigated

5. Activity Data

5.1. Construction Schedule

5.2. Off-Road Equipment

5.2.1. Unmitigated

5.3. Construction Vehicles

5.3.1. Unmitigated

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

5.5. Architectural Coatings

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

5.6.2. Construction Earthmoving Control Strategies

5.7. Construction Paving

5.8. Construction Electricity Consumption and Emissions Factors

8. User Changes to Default Data

8.1. Justifications

8.3. Land Use

8.4. Construction

8.4.1. Construction Phases

8.4.2. Off-Road Equipment

8.4.4. Dust from Material Movement

8.4.6. Trips and VMT

8.4.8. Architectural Coatings

# 1. Basic Project Information

## 1.1. Basic Project Information

Data Field	Value
Project Name	FDCSP Construction, Phase 3
Construction Start Date	4/24/2028
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	2.50000
Precipitation (days)	19.2000
Location	33.664745347716845, -117.92830489231781
County	Orange
City	Costa Mesa
Air District	South Coast AQMD
Air Basin	South Coast
TAZ	5912
EDFZ	7
Electric Utility	Southern California Edison
Gas Utility	Southern California Gas
App Version	2022.1.1.41

## 1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
Apartments Mid Rise	947.000	Dwelling Unit	11.6700	371,131	137,214	0.00000	2,822.00	—

Other Asphalt Surfaces	57.9400	1000sqft	1.33012	0.00000	0.00000	0.00000	—	—
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### 1.3. User-Selected Emission Reduction Measures by Emissions Sector

Sector	#	Measure Title
Construction	C-5	Use Advanced Engine Tiers

## 2. Emissions Summary

### 2.1. Construction Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	44.2791	44.2589	55.5868	72.2172	0.16348	1.91826	14.0082	15.9265	1.76740	4.50439	6.27179	—	19,221.4	19,221.4	0.79138	0.72244	12.7037	19,469.2
Mit.	44.1876	44.1869	17.3517	86.0560	0.16345	0.37880	14.0082	14.3870	0.37136	4.50439	4.87576	—	19,217.8	19,217.8	0.79123	0.72241	12.7037	19,465.6
% Reduced	< 0.5%	< 0.5%	69%	-19%	—	80%	—	10%	79%	—	22%	—	< 0.5%	< 0.5%	—	—	—	< 0.5%
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	44.2791	44.2589	30.7238	43.3695	0.09750	0.92807	3.13026	4.05833	0.85601	0.61493	1.47094	—	11,658.8	11,658.8	0.49037	0.60094	0.27251	11,850.4
Mit.	44.1876	44.1869	12.3920	49.0296	0.09750	0.24970	3.13026	3.37996	0.24227	0.61493	0.85720	—	11,658.8	11,658.8	0.49037	0.60094	0.27251	11,850.4
% Reduced	< 0.5%	< 0.5%	60%	-13%	—	73%	—	17%	72%	—	42%	—	—	—	—	—	—	—
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	6.55005	6.52983	21.0783	30.8163	0.06964	0.61020	3.30382	3.78052	0.56295	1.05505	1.49429	—	8,254.48	8,254.48	0.34717	0.42923	2.88918	8,393.96
Mit.	6.45472	6.45416	8.71483	34.9306	0.06964	0.17766	3.30382	3.40048	0.17241	1.05505	1.14971	—	8,254.48	8,254.48	0.34717	0.42923	2.88918	8,393.96

% Reduced	1%	1%	59%	-13%	—	71%	—	10%	69%	—	23%	—	—	—	—	—	—	
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Unmit.	1.19538	1.19169	3.84679	5.62398	0.01271	0.11136	0.60295	0.68994	0.10274	0.19255	0.27271	—	1,366.62	1,366.62	0.05748	0.07106	0.47834	1,389.72
Mit.	1.17799	1.17788	1.59046	6.37483	0.01271	0.03242	0.60295	0.62059	0.03146	0.19255	0.20982	—	1,366.62	1,366.62	0.05748	0.07106	0.47834	1,389.72
% Reduced	1%	1%	59%	-13%	—	71%	—	10%	69%	—	23%	—	—	—	—	—	—	

## 2.2. Construction Emissions by Year

### 2.2.1. Total Construction Emissions by Year, Unmitigated

Includes both onsite and offsite emissions.

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2028	7.58497	6.18604	55.5868	72.2172	0.16348	1.91826	14.0082	15.9265	1.76740	4.50439	6.27179	—	19,221.4	19,221.4	0.79138	0.72244	12.7037	19,469.2
2029	3.94237	3.15345	29.3458	43.4231	0.09749	0.85428	3.13026	3.98454	0.78813	0.61493	1.40306	—	11,584.9	11,584.9	0.48606	0.57319	9.37006	11,777.3
2030	3.81331	3.07155	28.6221	43.1542	0.09749	0.80770	3.13026	3.93796	0.74528	0.61493	1.36021	—	11,466.4	11,466.4	0.45733	0.54591	8.25473	11,648.7
2031	3.69791	2.99671	27.6750	42.8153	0.09749	0.75705	3.13026	3.88731	0.69867	0.61493	1.31360	—	11,338.7	11,338.7	0.45457	0.54581	7.20606	11,519.9
2032	44.2791	44.2589	0.79335	1.62292	0.00173	0.00813	0.18299	0.19112	0.00748	0.04289	0.05037	—	298.838	298.838	0.00696	0.00201	0.30701	299.918
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2028	4.03738	3.23675	30.7238	43.3695	0.09750	0.92807	3.13026	4.05833	0.85601	0.61493	1.47094	—	11,658.8	11,658.8	0.49037	0.60094	0.27251	11,850.4
2029	3.93544	3.14770	29.5120	43.0365	0.09749	0.85428	3.13026	3.98454	0.78813	0.61493	1.40306	—	11,546.6	11,546.6	0.48604	0.60092	0.24277	11,738.0
2030	3.81322	3.06730	28.7861	42.7881	0.09749	0.80770	3.13026	3.93796	0.74528	0.61493	1.36021	—	11,428.7	11,428.7	0.45883	0.54591	0.21498	11,603.1
2031	3.69251	2.99245	27.8113	42.4751	0.09749	0.75705	3.13026	3.88731	0.69867	0.61493	1.31360	—	11,301.7	11,301.7	0.45607	0.54584	0.18719	11,476.0
2032	44.2791	44.2589	6.08180	10.3666	0.01440	0.19915	0.21318	0.41232	0.18325	0.05068	0.23394	—	1,732.29	1,732.29	0.06548	0.02075	0.01057	1,740.12

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2028	1.89829	1.54738	14.0114	18.1789	0.04132	0.47670	3.30382	3.78052	0.43924	1.05505	1.49429	—	4,857.83	4,857.83	0.20191	0.19733	1.43570	4,923.11
2029	2.81190	2.24922	21.0783	30.8163	0.06963	0.61020	2.17510	2.78530	0.56295	0.43084	0.99379	—	8,254.48	8,254.48	0.34717	0.42923	2.88918	8,393.96
2030	2.72269	2.19286	20.5793	30.6389	0.06964	0.57693	2.17510	2.75203	0.53234	0.43084	0.96318	—	8,170.14	8,170.14	0.32773	0.38993	2.55368	8,297.09
2031	2.63837	2.13940	19.8830	30.3966	0.06964	0.54075	2.17510	2.71585	0.49905	0.43084	0.92989	—	8,079.28	8,079.28	0.32576	0.38987	2.22670	8,205.84
2032	6.55005	6.52983	0.99922	1.73653	0.00234	0.03010	0.05682	0.08692	0.02769	0.01341	0.04111	—	294.418	294.418	0.01052	0.00331	0.04469	295.711
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2028	0.34644	0.28240	2.55708	3.31766	0.00754	0.08700	0.60295	0.68994	0.08016	0.19255	0.27271	—	804.268	804.268	0.03343	0.03267	0.23770	815.078
2029	0.51317	0.41048	3.84679	5.62398	0.01271	0.11136	0.39696	0.50832	0.10274	0.07863	0.18137	—	1,366.62	1,366.62	0.05748	0.07106	0.47834	1,389.72
2030	0.49689	0.40020	3.75572	5.59160	0.01271	0.10529	0.39696	0.50225	0.09715	0.07863	0.17578	—	1,352.66	1,352.66	0.05426	0.06456	0.42279	1,373.68
2031	0.48150	0.39044	3.62864	5.54738	0.01271	0.09869	0.39696	0.49564	0.09108	0.07863	0.16971	—	1,337.62	1,337.62	0.05393	0.06455	0.36866	1,358.57
2032	1.19538	1.19169	0.18236	0.31692	0.00043	0.00549	0.01037	0.01586	0.00505	0.00245	0.00750	—	48.7443	48.7443	0.00174	0.00055	0.00740	48.9583

2.2.2. Onsite Construction Emissions by Year, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2028	6.98389	5.85366	51.1508	66.0029	0.13132	1.88610	11.6345	13.5206	1.73524	3.89675	5.63199	—	13,814.7	13,814.7	0.56221	0.11573	0.03861	13,863.3
2029	3.46219	2.89608	25.7678	38.7177	0.07028	0.82707	1.20617	2.03324	0.76092	0.12057	0.88148	—	7,202.19	7,202.19	0.29300	0.06025	0.01752	7,227.49
2030	3.37318	2.82168	25.1981	38.6681	0.07028	0.78050	1.20617	1.98667	0.71807	0.12057	0.83864	—	7,201.91	7,201.91	0.29298	0.06018	0.01598	7,227.18
2031	3.29451	2.75583	24.3773	38.5498	0.07028	0.72984	1.20617	1.93601	0.67146	0.12057	0.79203	—	7,201.61	7,201.61	0.29288	0.06008	0.01445	7,226.86
2032	44.2456	44.2260	0.77005	1.10069	0.00173	0.00813	0.00000	0.00813	0.00748	0.00000	0.00748	—	133.504	133.504	0.00542	0.00108	0.00000	133.962
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2028	3.55655	2.97488	26.7993	38.8202	0.07030	0.90086	1.20617	2.10703	0.82880	0.12057	0.94937	—	7,204.37	7,204.37	0.29315	0.06026	0.00050	7,229.65
2029	3.46211	2.89599	25.7688	38.7179	0.07028	0.82707	1.20617	2.03324	0.76092	0.12057	0.88148	—	7,202.22	7,202.22	0.29298	0.06025	0.00045	7,227.49

2030	3.37309	2.82159	25.1991	38.6684	0.07028	0.78050	1.20617	1.98667	0.71807	0.12057	0.83864	—	7,201.93	7,201.93	0.29298	0.06018	0.00041	7,227.19
2031	3.29444	2.75574	24.3783	38.5500	0.07028	0.72984	1.20617	1.93601	0.67146	0.12057	0.79203	—	7,201.64	7,201.64	0.29288	0.06010	0.00037	7,226.88
2032	44.2456	44.2260	5.99778	9.85925	0.01395	0.19870	0.00000	0.19870	0.18280	0.00000	0.18280	—	1,510.63	1,510.63	0.06128	0.01226	0.00000	1,515.81
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2028	1.74227	1.46007	12.7895	16.6636	0.03289	0.46826	2.69150	3.15976	0.43081	0.89819	1.32900	—	3,452.80	3,452.80	0.14051	0.02892	0.00414	3,464.93
2029	2.47296	2.06860	18.4061	27.6555	0.05020	0.59076	0.81626	1.40702	0.54351	0.08160	0.62511	—	5,144.43	5,144.43	0.20927	0.04303	0.00540	5,162.49
2030	2.40938	2.01545	17.9992	27.6202	0.05020	0.55750	0.81626	1.37376	0.51291	0.08160	0.59451	—	5,144.23	5,144.23	0.20927	0.04298	0.00492	5,162.27
2031	2.35320	1.96842	17.4129	27.5356	0.05020	0.52131	0.81626	1.33757	0.47962	0.08160	0.56122	—	5,144.02	5,144.02	0.20920	0.04292	0.00445	5,162.04
2032	6.53951	6.51986	0.98273	1.59144	0.00228	0.03003	0.00000	0.03003	0.02763	0.00000	0.02763	—	238.737	238.737	0.00968	0.00194	0.00000	239.556
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2028	0.31796	0.26646	2.33408	3.04110	0.00600	0.08546	0.49120	0.57666	0.07862	0.16392	0.24254	—	571.650	571.650	0.02326	0.00479	0.00069	573.659
2029	0.45132	0.37752	3.35911	5.04714	0.00916	0.10781	0.14897	0.25678	0.09919	0.01489	0.11408	—	851.719	851.719	0.03465	0.00712	0.00089	854.709
2030	0.43971	0.36782	3.28486	5.04068	0.00916	0.10174	0.14897	0.25071	0.09361	0.01489	0.10850	—	851.686	851.686	0.03465	0.00712	0.00081	854.673
2031	0.42946	0.35924	3.17786	5.02525	0.00916	0.09514	0.14897	0.24411	0.08753	0.01489	0.10242	—	851.651	851.651	0.03464	0.00711	0.00074	854.635
2032	1.19346	1.18987	0.17935	0.29044	0.00042	0.00548	0.00000	0.00548	0.00504	0.00000	0.00504	—	39.5256	39.5256	0.00160	0.00032	0.00000	39.6613

### 2.2.3. Offsite Construction Emissions by Year, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2028	0.60108	0.33238	4.43601	6.21428	0.03216	0.03216	2.37374	2.40589	0.03216	0.60765	0.63980	—	5,406.66	5,406.66	0.22917	0.60671	12.6651	5,605.86
2029	0.48017	0.25737	3.57807	4.70549	0.02721	0.02721	1.92409	1.95130	0.02721	0.49436	0.52157	—	4,382.76	4,382.76	0.19306	0.51294	9.35254	4,549.79
2030	0.44013	0.24988	3.42399	4.48608	0.02721	0.02721	1.92409	1.95130	0.02721	0.49436	0.52157	—	4,264.45	4,264.45	0.16435	0.48573	8.23874	4,421.54
2031	0.40340	0.24088	3.29765	4.26550	0.02721	0.02721	1.92409	1.95130	0.02721	0.49436	0.52157	—	4,137.05	4,137.05	0.16168	0.48573	7.19161	4,293.03
2032	0.03349	0.03287	0.02330	0.52223	0.00000	0.00000	0.18299	0.18299	0.00000	0.04289	0.04289	—	165.335	165.335	0.00154	0.00093	0.30701	165.956

Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2028	0.48083	0.26187	3.92454	4.54933	0.02721	0.02721	1.92409	1.95130	0.02721	0.49436	0.52157	—	4,454.42	4,454.42	0.19723	0.54067	0.27202	4,620.74
2029	0.47334	0.25171	3.74326	4.31858	0.02721	0.02721	1.92409	1.95130	0.02721	0.49436	0.52157	—	4,344.36	4,344.36	0.19306	0.54067	0.24231	4,510.55
2030	0.44013	0.24571	3.58704	4.11974	0.02721	0.02721	1.92409	1.95130	0.02721	0.49436	0.52157	—	4,226.79	4,226.79	0.16585	0.48573	0.21457	4,375.90
2031	0.39807	0.23671	3.43296	3.92506	0.02721	0.02721	1.92409	1.95130	0.02721	0.49436	0.52157	—	4,100.10	4,100.10	0.16318	0.48573	0.18682	4,249.12
2032	0.03967	0.03642	0.08402	0.50736	0.00045	0.00045	0.21318	0.21363	0.00045	0.05068	0.05113	—	221.657	221.657	0.00420	0.00850	0.01057	224.304
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2028	0.15602	0.08732	1.22186	1.51537	0.00843	0.00843	0.61232	0.62075	0.00843	0.15686	0.16529	—	1,405.03	1,405.03	0.06140	0.16841	1.43156	1,458.18
2029	0.33893	0.18062	2.67223	3.16078	0.01944	0.01944	1.35884	1.37828	0.01944	0.34924	0.36868	—	3,110.06	3,110.06	0.13790	0.38620	2.88378	3,231.47
2030	0.31331	0.17741	2.58008	3.01875	0.01944	0.01944	1.35884	1.37828	0.01944	0.34924	0.36868	—	3,025.92	3,025.92	0.11846	0.34695	2.54876	3,134.82
2031	0.28517	0.17099	2.47002	2.86095	0.01944	0.01944	1.35884	1.37828	0.01944	0.34924	0.36868	—	2,935.27	2,935.27	0.11656	0.34695	2.22225	3,043.79
2032	0.01054	0.00997	0.01650	0.14508	0.00007	0.00007	0.05682	0.05689	0.00007	0.01341	0.01348	—	55.6814	55.6814	0.00083	0.00137	0.04469	56.1547
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2028	0.02847	0.01594	0.22299	0.27656	0.00154	0.00154	0.11175	0.11329	0.00154	0.02863	0.03017	—	232.618	232.618	0.01017	0.02788	0.23701	241.419
2029	0.06186	0.03296	0.48768	0.57684	0.00355	0.00355	0.24799	0.25154	0.00355	0.06374	0.06728	—	514.905	514.905	0.02283	0.06394	0.47744	535.007
2030	0.05718	0.03238	0.47086	0.55092	0.00355	0.00355	0.24799	0.25154	0.00355	0.06374	0.06728	—	500.975	500.975	0.01961	0.05744	0.42198	519.005
2031	0.05204	0.03121	0.45078	0.52212	0.00355	0.00355	0.24799	0.25154	0.00355	0.06374	0.06728	—	485.967	485.967	0.01930	0.05744	0.36792	503.935
2032	0.00192	0.00182	0.00301	0.02648	0.00001	0.00001	0.01037	0.01038	0.00001	0.00245	0.00246	—	9.21869	9.21869	0.00014	0.00023	0.00740	9.29704

### 3. Construction Emissions Details

#### 3.1. Fine Grading (2028)

##### 3.1.1. Onsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
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Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.42509	2.87803	24.3289	27.1688	0.06093	0.98510	—	0.98510	0.90629	—	0.90629	—	6,598.26	6,598.26	0.26765	0.05353	—	6,620.90
Dust From Material Movement	—	—	—	—	—	—	9.20359	9.20359	—	3.65375	3.65375	—	—	—	—	—	—	—
Onsite truck	0.00219	0.00067	0.02359	0.01421	0.00009	0.00015	1.22473	1.22487	0.00015	0.12242	0.12257	—	12.1295	12.1295	0.00140	0.00194	0.01945	12.7616
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.78824	0.66234	5.59899	6.25256	0.01402	0.22671	—	0.22671	0.20857	—	0.20857	—	1,518.50	1,518.50	0.06160	0.01232	—	1,523.72
Dust From Material Movement	—	—	—	—	—	—	2.11809	2.11809	—	0.84086	0.84086	—	—	—	—	—	—	—
Onsite truck	0.00050	0.00014	0.00562	0.00330	0.00002	0.00003	0.26704	0.26707	0.00003	0.02670	0.02673	—	2.79397	2.79397	0.00032	0.00045	0.00193	2.93688
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.14385	0.12088	1.02182	1.14109	0.00256	0.04137	—	0.04137	0.03806	—	0.03806	—	251.406	251.406	0.01020	0.00204	—	252.268
Dust From Material Movement	—	—	—	—	—	—	0.38655	0.38655	—	0.15346	0.15346	—	—	—	—	—	—	—

Onsite truck	0.00009	0.00003	0.00103	0.00060	< 0.000005	0.00001	0.04873	0.04874	0.00001	0.00487	0.00488	—	0.46257	0.46257	0.00005	0.00007	0.00032	0.48623
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### 3.1.2. Offsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06482	0.05534	0.05137	0.93300	0.00000	0.00000	0.26142	0.26142	0.00000	0.06128	0.06128	—	251.480	251.480	0.00265	0.00132	0.72554	252.666
Vendor	0.04860	0.01368	0.64769	0.32448	0.00495	0.00495	0.18823	0.19318	0.00495	0.05200	0.05695	—	661.562	661.562	0.03347	0.09244	1.45734	691.404
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01492	0.01273	0.01390	0.19280	0.00000	0.00000	0.05942	0.05942	0.00000	0.01392	0.01392	—	55.8368	55.8368	0.00071	0.00218	0.07221	56.5769
Vendor	0.01107	0.00326	0.15564	0.07546	0.00114	0.00114	0.04287	0.04401	0.00114	0.01186	0.01299	—	152.286	152.286	0.00781	0.02127	0.14490	158.966
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00272	0.00232	0.00254	0.03519	0.00000	0.00000	0.01084	0.01084	0.00000	0.00254	0.00254	—	9.24441	9.24441	0.00012	0.00036	0.01196	9.36695
Vendor	0.00202	0.00059	0.02840	0.01377	0.00021	0.00021	0.00782	0.00803	0.00021	0.00216	0.00237	—	25.2126	25.2126	0.00129	0.00352	0.02399	26.3186
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

### 3.2. Building Construction (2028)

#### 3.2.1. Onsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
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Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.55444	2.97430	26.7749	38.8057	0.07020	0.90071	—	0.90071	0.82866	—	0.82866	—	7,192.37	7,192.37	0.29175	0.05835	—	7,217.05
Onsite truck	0.00218	0.00067	0.02343	0.01415	0.00009	0.00014	1.20617	1.20631	0.00014	0.12057	0.12071	—	11.9693	11.9693	0.00139	0.00191	0.01916	12.5932
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.55444	2.97430	26.7749	38.8057	0.07020	0.90071	—	0.90071	0.82866	—	0.82866	—	7,192.37	7,192.37	0.29175	0.05835	—	7,217.05
Onsite truck	0.00211	0.00058	0.02443	0.01446	0.00009	0.00014	1.20617	1.20631	0.00014	0.12057	0.12071	—	11.9953	11.9953	0.00139	0.00191	0.00050	12.6006
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.95295	0.79741	7.17839	10.4039	0.01882	0.24148	—	0.24148	0.22216	—	0.22216	—	1,928.29	1,928.29	0.07822	0.01564	—	1,934.90
Onsite truck	0.00058	0.00017	0.00651	0.00383	0.00003	0.00004	0.30638	0.30642	0.00004	0.03063	0.03067	—	3.21192	3.21192	0.00037	0.00051	0.00221	3.37627
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.17391	0.14553	1.31006	1.89871	0.00343	0.04407	—	0.04407	0.04055	—	0.04055	—	319.250	319.250	0.01295	0.00259	—	320.346
Onsite truck	0.00011	0.00003	0.00119	0.00070	< 0.000005	0.00001	0.05591	0.05592	0.00001	0.00559	0.00560	—	0.53177	0.53177	0.00006	0.00008	0.00037	0.55898

3.2.2. Offsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.22037	0.18814	0.17465	3.17219	0.00000	0.00000	0.88882	0.88882	0.00000	0.20834	0.20834	—	855.033	855.033	0.00899	0.00450	2.46684	859.065
Vendor	0.26729	0.07523	3.56230	1.78462	0.02721	0.02721	1.03527	1.06247	0.02721	0.28603	0.31324	—	3,638.59	3,638.59	0.18406	0.50844	8.01536	3,802.72
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.21887	0.18664	0.20538	2.72469	0.00000	0.00000	0.88882	0.88882	0.00000	0.20834	0.20834	—	813.798	813.798	0.01049	0.03223	0.06385	823.729
Vendor	0.26196	0.07523	3.71916	1.82463	0.02721	0.02721	1.03527	1.06247	0.02721	0.28603	0.31324	—	3,640.62	3,640.62	0.18673	0.50844	0.20817	3,797.01
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05908	0.05044	0.05506	0.76365	0.00000	0.00000	0.23536	0.23536	0.00000	0.05512	0.05512	—	221.163	221.163	0.00281	0.00864	0.28602	224.094
Vendor	0.07095	0.02088	0.99726	0.48347	0.00729	0.00729	0.27467	0.28197	0.00729	0.07596	0.08326	—	975.742	975.742	0.05006	0.13631	0.92842	1,018.54
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01078	0.00921	0.01005	0.13937	0.00000	0.00000	0.04295	0.04295	0.00000	0.01006	0.01006	—	36.6160	36.6160	0.00047	0.00143	0.04735	37.1014
Vendor	0.01295	0.00381	0.18200	0.08823	0.00133	0.00133	0.05013	0.05146	0.00133	0.01386	0.01519	—	161.545	161.545	0.00829	0.02257	0.15371	168.632
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

### 3.3. Building Construction (2029)

#### 3.3.1. Onsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	3.46009	2.89541	25.7450	38.7037	0.07019	0.82693	—	0.82693	0.76077	—	0.76077	—	7,190.50	7,190.50	0.29168	0.05834	—	7,215.17
Onsite truck	0.00211	0.00067	0.02280	0.01396	0.00009	0.00014	1.20617	1.20631	0.00014	0.12057	0.12071	—	11.6910	11.6910	0.00132	0.00191	0.01752	12.3115
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.46009	2.89541	25.7450	38.7037	0.07019	0.82693	—	0.82693	0.76077	—	0.76077	—	7,190.50	7,190.50	0.29168	0.05834	—	7,215.17
Onsite truck	0.00202	0.00058	0.02380	0.01424	0.00009	0.00014	1.20617	1.20631	0.00014	0.12057	0.12071	—	11.7176	11.7176	0.00130	0.00191	0.00045	12.3205
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.47149	2.06815	18.3893	27.6455	0.05013	0.59066	—	0.59066	0.54341	—	0.54341	—	5,136.07	5,136.07	0.20834	0.04167	—	5,153.70
Onsite truck	0.00147	0.00044	0.01683	0.01005	0.00007	0.00010	0.81626	0.81636	0.00010	0.08160	0.08170	—	8.35870	8.35870	0.00093	0.00137	0.00540	8.79442
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.45105	0.37744	3.35604	5.04530	0.00915	0.10780	—	0.10780	0.09917	—	0.09917	—	850.335	850.335	0.03449	0.00690	—	853.253
Onsite truck	0.00027	0.00008	0.00307	0.00183	0.00001	0.00002	0.14897	0.14899	0.00002	0.01489	0.01491	—	1.38388	1.38388	0.00015	0.00023	0.00089	1.45602

### 3.3.2. Offsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.21288	0.18215	0.17315	2.98330	0.00000	0.00000	0.88882	0.88882	0.00000	0.20834	0.20834	—	840.599	840.599	0.00899	0.00450	2.19319	844.357
Vendor	0.26729	0.07523	3.40492	1.72220	0.02721	0.02721	1.03527	1.06247	0.02721	0.28603	0.31324	—	3,542.16	3,542.16	0.18406	0.50844	7.15935	3,705.44
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.21138	0.17915	0.17615	2.55904	0.00000	0.00000	0.88882	0.88882	0.00000	0.20834	0.20834	—	800.105	800.105	0.00899	0.03223	0.05671	809.991
Vendor	0.26196	0.07256	3.56711	1.75954	0.02721	0.02721	1.03527	1.06247	0.02721	0.28603	0.31324	—	3,544.25	3,544.25	0.18406	0.50844	0.18560	3,700.56
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.14991	0.12689	0.12582	1.91730	0.00000	0.00000	0.62705	0.62705	0.00000	0.14686	0.14686	—	579.310	579.310	0.00642	0.02302	0.67705	587.009
Vendor	0.18902	0.05373	2.54641	1.24348	0.01944	0.01944	0.73180	0.75123	0.01944	0.20238	0.22182	—	2,530.75	2,530.75	0.13147	0.36317	2.20673	2,644.46
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02736	0.02316	0.02296	0.34991	0.00000	0.00000	0.11444	0.11444	0.00000	0.02680	0.02680	—	95.9114	95.9114	0.00106	0.00381	0.11209	97.1860
Vendor	0.03450	0.00981	0.46472	0.22694	0.00355	0.00355	0.13355	0.13710	0.00355	0.03694	0.04048	—	418.994	418.994	0.02177	0.06013	0.36535	437.821
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

### 3.4. Building Construction (2030)

#### 3.4.1. Onsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.37117	2.82101	25.1759	38.6543	0.07019	0.78035	—	0.78035	0.71792	—	0.71792	—	7,190.50	7,190.50	0.29168	0.05834	—	7,215.18

Onsite truck	0.00201	0.00067	0.02224	0.01381	0.00009	0.00014	1.20617	1.20631	0.00014	0.12057	0.12071	—	11.4077	11.4077	0.00130	0.00184	0.01598	12.0047
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.37117	2.82101	25.1759	38.6543	0.07019	0.78035	—	0.78035	0.71792	—	0.71792	—	7,190.50	7,190.50	0.29168	0.05834	—	7,215.18
Onsite truck	0.00192	0.00058	0.02319	0.01410	0.00009	0.00014	1.20617	1.20631	0.00014	0.12057	0.12071	—	11.4350	11.4350	0.00130	0.00184	0.00041	12.0165
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.40798	2.01501	17.9828	27.6102	0.05013	0.55739	—	0.55739	0.51280	—	0.51280	—	5,136.07	5,136.07	0.20834	0.04167	—	5,153.70
Onsite truck	0.00141	0.00044	0.01644	0.00996	0.00007	0.00010	0.81626	0.81636	0.00010	0.08160	0.08170	—	8.15652	8.15652	0.00093	0.00131	0.00492	8.57650
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.43946	0.36774	3.28186	5.03886	0.00915	0.10172	—	0.10172	0.09359	—	0.09359	—	850.335	850.335	0.03449	0.00690	—	853.253
Onsite truck	0.00026	0.00008	0.00300	0.00182	0.00001	0.00002	0.14897	0.14899	0.00002	0.01489	0.01491	—	1.35040	1.35040	0.00015	0.00022	0.00081	1.41994

### 3.4.2. Offsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.20538	0.17465	0.14392	2.82364	0.00000	0.00000	0.88882	0.88882	0.00000	0.20834	0.20834	—	827.146	827.146	0.00750	0.00450	1.93540	830.609
Vendor	0.23475	0.07523	3.28007	1.66244	0.02721	0.02721	1.03527	1.06247	0.02721	0.28603	0.31324	—	3,437.30	3,437.30	0.15685	0.48123	6.30334	3,590.93

Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.20538	0.17315	0.17465	2.42262	0.00000	0.00000	0.88882	0.88882	0.00000	0.20834	0.20834	—	787.336	787.336	0.00899	0.00450	0.05037	788.951	
Vendor	0.23475	0.07256	3.41239	1.69712	0.02721	0.02721	1.03527	1.06247	0.02721	0.28603	0.31324	—	3,439.45	3,439.45	0.15685	0.48123	0.16420	3,586.94	
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Worker	0.14563	0.12368	0.12475	1.81985	0.00000	0.00000	0.62705	0.62705	0.00000	0.14686	0.14686	—	570.053	570.053	0.00642	0.00321	0.59773	571.769	
Vendor	0.16768	0.05373	2.45533	1.19889	0.01944	0.01944	0.73180	0.75123	0.01944	0.20238	0.22182	—	2,455.86	2,455.86	0.11204	0.34374	1.95103	2,563.05	
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Worker	0.02658	0.02257	0.02277	0.33212	0.00000	0.00000	0.11444	0.11444	0.00000	0.02680	0.02680	—	94.3788	94.3788	0.00106	0.00053	0.09896	94.6628	
Vendor	0.03060	0.00981	0.44810	0.21880	0.00355	0.00355	0.13355	0.13710	0.00355	0.03694	0.04048	—	406.596	406.596	0.01855	0.05691	0.32302	424.342	
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	

### 3.5. Building Construction (2031)

#### 3.5.1. Onsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.29252	2.75516	24.3557	38.5361	0.07019	0.72969	—	0.72969	0.67132	—	0.67132	—	7,190.49	7,190.49	0.29168	0.05834	—	7,215.17
Onsite truck	0.00199	0.00067	0.02164	0.01362	0.00009	0.00014	1.20617	1.20631	0.00014	0.12057	0.12071	—	11.1195	11.1195	0.00121	0.00175	0.01445	11.6848

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.29252	2.75516	24.3557	38.5361	0.07019	0.72969	—	0.72969	0.67132	—	0.67132	—	7,190.49	7,190.49	0.29168	0.05834	—	7,215.17
Onsite truck	0.00192	0.00058	0.02266	0.01391	0.00009	0.00014	1.20617	1.20631	0.00014	0.12057	0.12071	—	11.1475	11.1475	0.00121	0.00177	0.00037	11.7052
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.35180	1.96797	17.3969	27.5258	0.05013	0.52121	—	0.52121	0.47951	—	0.47951	—	5,136.07	5,136.07	0.20834	0.04167	—	5,153.69
Onsite truck	0.00141	0.00044	0.01602	0.00982	0.00007	0.00010	0.81626	0.81636	0.00010	0.08160	0.08170	—	7.95089	7.95089	0.00086	0.00125	0.00445	8.34879
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.42920	0.35915	3.17494	5.02346	0.00915	0.09512	—	0.09512	0.08751	—	0.08751	—	850.335	850.335	0.03449	0.00690	—	853.253
Onsite truck	0.00026	0.00008	0.00292	0.00179	0.00001	0.00002	0.14897	0.14899	0.00002	0.01489	0.01491	—	1.31636	1.31636	0.00014	0.00021	0.00074	1.38224

3.5.2. Offsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.16865	0.16566	0.14242	2.66548	0.00000	0.00000	0.88882	0.88882	0.00000	0.20834	0.20834	—	814.843	814.843	0.00750	0.00450	1.70537	818.076
Vendor	0.23475	0.07523	3.15523	1.60002	0.02721	0.02721	1.03527	1.06247	0.02721	0.28603	0.31324	—	3,322.20	3,322.20	0.15419	0.48123	5.48624	3,474.95
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.16865	0.16416	0.14542	2.28769	0.00000	0.00000	0.88882	0.88882	0.00000	0.20834	0.20834	—	775.691	775.691	0.00899	0.00450	0.04402	777.300
Vendor	0.22941	0.07256	3.28754	1.63737	0.02721	0.02721	1.03527	1.06247	0.02721	0.28603	0.31324	—	3,324.41	3,324.41	0.15419	0.48123	0.14280	3,471.82
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.11940	0.11725	0.10387	1.70474	0.00000	0.00000	0.62705	0.62705	0.00000	0.14686	0.14686	—	561.598	561.598	0.00642	0.00321	0.52691	563.243
Vendor	0.16577	0.05373	2.36616	1.15621	0.01944	0.01944	0.73180	0.75123	0.01944	0.20238	0.22182	—	2,373.67	2,373.67	0.11013	0.34374	1.69534	2,480.55
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02179	0.02140	0.01896	0.31112	0.00000	0.00000	0.11444	0.11444	0.00000	0.02680	0.02680	—	92.9789	92.9789	0.00106	0.00053	0.08724	93.2513
Vendor	0.03025	0.00981	0.43182	0.21101	0.00355	0.00355	0.13355	0.13710	0.00355	0.03694	0.04048	—	392.988	392.988	0.01823	0.05691	0.28068	410.683
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

### 3.6. Paving (2032)

#### 3.6.1. Onsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.72492	0.60914	5.99778	9.85925	0.01395	0.19870	—	0.19870	0.18280	—	0.18280	—	1,510.63	1,510.63	0.06128	0.01226	—	1,515.81
Paving	0.06575	0.06575	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.10526	0.08845	0.87091	1.43162	0.00203	0.02885	—	0.02885	0.02654	—	0.02654	—	219.352	219.352	0.00890	0.00178	—	220.104	
Paving	0.00955	0.00955	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Off-Road Equipment	0.01921	0.01614	0.15894	0.26127	0.00037	0.00527	—	0.00527	0.00484	—	0.00484	—	36.3162	36.3162	0.00147	0.00029	—	36.4408	
Paving	0.00174	0.00174	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	

3.6.2. Offsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03588	0.03522	0.03175	0.48132	0.00000	0.00000	0.19606	0.19606	0.00000	0.04596	0.04596	—	168.635	168.635	0.00165	0.00099	0.00854	168.981
Vendor	0.00379	0.00120	0.05228	0.02603	0.00045	0.00045	0.01711	0.01756	0.00045	0.00473	0.00518	—	53.0215	53.0215	0.00255	0.00750	0.00203	55.3236
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.00516	0.00507	0.00461	0.07311	0.00000	0.00000	0.02812	0.02812	0.00000	0.00659	0.00659	—	24.8201	24.8201	0.00024	0.00014	0.02058	24.8896
Vendor	0.00056	0.00018	0.00759	0.00374	0.00007	0.00007	0.00246	0.00252	0.00007	0.00068	0.00075	—	7.69588	7.69588	0.00037	0.00109	0.00490	8.03477
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00094	0.00092	0.00084	0.01334	0.00000	0.00000	0.00513	0.00513	0.00000	0.00120	0.00120	—	4.10925	4.10925	0.00004	0.00002	0.00341	4.12076
Vendor	0.00010	0.00003	0.00138	0.00068	0.00001	0.00001	0.00045	0.00046	0.00001	0.00012	0.00014	—	1.27414	1.27414	0.00006	0.00018	0.00081	1.33025
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

### 3.7. Architectural Coating (2032)

#### 3.7.1. Onsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.11264	0.09309	0.77005	1.10069	0.00173	0.00813	—	0.00813	0.00748	—	0.00748	—	133.504	133.504	0.00542	0.00108	—	133.962
Architectural Coatings	44.1329	44.1329	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.11264	0.09309	0.77005	1.10069	0.00173	0.00813	—	0.00813	0.00748	—	0.00748	—	133.504	133.504	0.00542	0.00108	—	133.962

Architectural	44.1329	44.1329	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01636	0.01352	0.11181	0.15983	0.00025	0.00118	—	0.00118	0.00109	—	0.00109	—	19.3855	19.3855	0.00079	0.00016	—	19.4520
Architectural Coatings	6.40834	6.40834	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.00298	0.00247	0.02041	0.02917	0.00005	0.00022	—	0.00022	0.00020	—	0.00020	—	3.20948	3.20948	0.00013	0.00003	—	3.22050
Architectural Coatings	1.16952	1.16952	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

### 3.7.2. Offsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03349	0.03287	0.02330	0.52223	0.00000	0.00000	0.18299	0.18299	0.00000	0.04289	0.04289	—	165.335	165.335	0.00154	0.00093	0.30701	165.956

Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03349	0.03287	0.02963	0.44924	0.00000	0.00000	0.18299	0.18299	0.00000	0.04289	0.04289	—	157.393	157.393	0.00154	0.00093	0.00797	157.715	
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00482	0.00473	0.00430	0.06823	0.00000	0.00000	0.02624	0.02624	0.00000	0.00615	0.00615	—	23.1654	23.1654	0.00022	0.00013	0.01921	23.2303	
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00088	0.00086	0.00079	0.01245	0.00000	0.00000	0.00479	0.00479	0.00000	0.00112	0.00112	—	3.83530	3.83530	0.00004	0.00002	0.00318	3.84604	
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

## 5. Activity Data

### 5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
Fine Grading	Grading	4/24/2028	8/17/2028	5.00000	84.0000	—
Building Construction	Building Construction	8/17/2028	12/31/2031	5.00000	880.000	—
Paving	Paving	1/1/2032	3/15/2032	5.00000	53.0000	—
Architectural Coating	Architectural Coating	3/16/2032	5/27/2032	5.00000	53.0000	—

### 5.2. Off-Road Equipment

### 5.2.1. Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Fine Grading	Graders	Diesel	Average	1.000000	8.00000	148.000	0.41000
Fine Grading	Excavators	Diesel	Average	2.00000	8.00000	36.0000	0.38000
Fine Grading	Tractors/Loaders/Back hoes	Diesel	Average	2.00000	8.00000	84.0000	0.37000
Fine Grading	Scrapers	Diesel	Average	2.00000	8.00000	423.000	0.48000
Fine Grading	Rubber Tired Dozers	Diesel	Average	1.000000	8.00000	367.000	0.40000
Building Construction	Forklifts	Diesel	Average	9.00000	8.00000	82.0000	0.20000
Building Construction	Generator Sets	Diesel	Average	3.00000	8.00000	14.0000	0.74000
Building Construction	Cranes	Diesel	Average	3.00000	7.00000	367.000	0.29000
Building Construction	Welders	Diesel	Average	3.00000	8.00000	46.0000	0.45000
Building Construction	Tractors/Loaders/Back hoes	Diesel	Average	9.00000	7.00000	84.0000	0.37000
Paving	Pavers	Diesel	Average	2.00000	8.00000	81.0000	0.42000
Paving	Paving Equipment	Diesel	Average	2.00000	8.00000	89.0000	0.36000
Paving	Rollers	Diesel	Average	2.00000	8.00000	36.0000	0.38000
Architectural Coating	Air Compressors	Diesel	Average	1.000000	6.00000	37.0000	0.48000

### 5.3. Construction Vehicles

#### 5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Fine Grading	Worker	20.0000	18.5000	LDA,LDT1,LDT2
Fine Grading	Vendor	22.0000	10.2000	HHDT,MHDT
Fine Grading	Hauling	0.00000	20.0000	HHDT
Fine Grading	Onsite truck	1.000000	3.30000	HHDT
Building Construction	Worker	68.0000	18.5000	LDA,LDT1,LDT2

Building Construction	Vendor	121.000	10.2000	HHDT,MHDT
Building Construction	Hauling	0.00000	20.0000	HHDT
Building Construction	Onsite truck	1.000000	3.25000	HHDT
Paving	Worker	15.0000	18.5000	LDA,LDT1,LDT2
Paving	Vendor	2.00000	10.2000	HHDT,MHDT
Paving	Hauling	0.00000	20.0000	HHDT
Paving	Onsite truck	0.00000	—	HHDT
Architectural Coating	Worker	14.0000	18.5000	LDA,LDT1,LDT2
Architectural Coating	Vendor	0.00000	10.2000	HHDT,MHDT
Architectural Coating	Hauling	0.00000	20.0000	HHDT
Architectural Coating	Onsite truck	0.00000	—	HHDT

## 5.4. Vehicles

### 5.4.1. Construction Vehicle Control Strategies

Control Strategies Applied	PM10 Reduction	PM2.5 Reduction
Water unpaved roads twice daily	55%	55%
Limit vehicle speeds on unpaved roads to 25 mph	44%	44%
Sweep paved roads once per month	9%	9%

## 5.5. Architectural Coatings

Phase Name	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
Architectural Coating	751,540	250,513	0.00000	0.00000	3,476.40

## 5.6. Dust Mitigation

### 5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (Cubic Yards)	Material Exported (Cubic Yards)	Acres Graded (acres)	Material Demolished (sq. ft.)	Acres Paved (acres)
Fine Grading	0.00000	0.00000	243.000	0.00000	0.00000
Paving	0.00000	0.00000	0.00000	0.00000	1.33012

### 5.6.2. Construction Earthmoving Control Strategies

Non-applicable. No control strategies activated by user.

### 5.7. Construction Paving

Phase Name	Land Use	Area Paved (acres)	% Asphalt
Paving	Apartments Mid Rise	—	0%
Paving	Other Asphalt Surfaces	1.33012	100%

### 5.8. Construction Electricity Consumption and Emissions Factors

#### kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2028	0.00000	531.983	0.03300	0.00400
2029	0.00000	531.983	0.03300	0.00400
2030	0.00000	531.983	0.03300	0.00400
2031	0.00000	531.983	0.03300	0.00400
2032	0.00000	531.983	0.03300	0.00400

## 8. User Changes to Default Data

### 8.1. Justifications

Screen	Justification
Land Use	Total acreage disturbed and square footages based on Google Earth estimates based on preferred land use plan and conceptual land use plan for phase 3.

Construction: Construction Phases	Since the Specific Plan is a broad-based policy document, the timing and sequencing of individual land use development are unknown. For purposes of estimating construction emissions, CalEEMod default construction durations were normalized based on 50-month schedule following the completion of the anticipated site-wide mass grading.
Construction: Off-Road Equipment	To conservatively account for potential overlap of up to three building construction phases, the equipment mix for building construction phase was increased by a factor of three; see assumptions file.
Construction: Dust From Material Movement	Fine grading assumed to not need import or export materials.
Construction: Trips and VMT	Included CalEEMod default vendor trips and calculated water truck trips as vendor trips; calculate onsite truck trip length; see assumptions file
Construction: Architectural Coatings	SCAQMD Rule 1113

### 8.3. Land Use

Model Parameter	Units	Default Value	New Value
Lot Area	acre	24.9211	11.6700
Building Area	sq. ft	909,120	371,131
Landscape Area	sq. ft	—	137,214
Special Landscape Area	sq. ft	—	0.00000

### 8.4. Construction

#### 8.4.1. Construction Phases

Phase Type	Phase Name	Model Parameter	Default Value	New Value
Building Construction	Building Construction	Start Date	7/20/2028	8/17/2028
Building Construction	Building Construction	End Date	9/13/2029	12/31/2031
Building Construction	Building Construction	Work Days per Phase	300.000	880.000
Paving	Paving	Start Date	9/14/2029	1/1/2032
Paving	Paving	End Date	10/12/2029	3/15/2032
Paving	Paving	Work Days per Phase	20.0000	53.0000
Architectural Coating	Architectural Coating	Start Date	10/13/2029	3/16/2032

Architectural Coating	Architectural Coating	End Date	11/10/2029	5/27/2032
Architectural Coating	Architectural Coating	Work Days per Phase	20.0000	53.0000

#### 8.4.2. Off-Road Equipment

Phase Name	Equipment Type	Model Parameter	Default Value	New Value
Building Construction	Forklifts	Number per Day	3.00000	9.00000
Building Construction	Generator Sets	Number per Day	1.000000	3.00000
Building Construction	Cranes	Number per Day	1.000000	3.00000
Building Construction	Welders	Number per Day	1.000000	3.00000
Building Construction	Tractors/Loaders/Backhoes	Number per Day	3.00000	9.00000

#### 8.4.4. Dust from Material Movement

Phase Name	Model Parameter	Units	Default Value	New Value
Fine Grading	Material Imported	Cubic Yards	—	0.00000
Fine Grading	Material Exported	Cubic Yards	—	0.00000
Fine Grading	Total Acres Graded	acres	252.000	243.000

#### 8.4.6. Trips and VMT

Phase Name	Trip Type	Model Parameter	Default Value	New Value
Building Construction	Worker	One-Way Trips per Day	681.840	68.0000
Building Construction	Vendor	One-Way Trips per Day	101.234	121.000
Architectural Coating	Worker	One-Way Trips per Day	136.368	14.0000

#### 8.4.8. Architectural Coatings

Phase Name	Model Parameter	Units	Default Value	New Value
Architectural Coating	Non-Residential Interior VOC	g/L	100.0000	50.0000
Architectural Coating	Non-Residential Exterior VOC	g/L	100.0000	50.0000

**CalEEMod Construction:  
Secondary Access Roadway**

# FDCSP Construction, Secondary Access Roadway Custom Report

## Table of Contents

1. Basic Project Information
  - 1.1. Basic Project Information
  - 1.2. Land Use Types
  - 1.3. User-Selected Emission Reduction Measures by Emissions Sector
2. Emissions Summary
  - 2.1. Construction Emissions Compared Against Thresholds
  - 2.2. Construction Emissions by Year
    - 2.2.1. Total Construction Emissions by Year, Unmitigated
    - 2.2.2. Onsite Construction Emissions by Year, Unmitigated
    - 2.2.3. Offsite Construction Emissions by Year, Unmitigated
3. Construction Emissions Details
  - 3.1. Linear, Grubbing & Land Clearing (2028)
    - 3.1.1. Onsite - Unmitigated
    - 3.1.2. Offsite - Unmitigated
  - 3.2. Linear, Grading & Excavation (2028)

3.2.1. Onsite - Unmitigated

3.2.2. Offsite - Unmitigated

3.3. Linear, Drainage, Utilities, & Sub-Grade (2028)

3.3.1. Onsite - Unmitigated

3.3.2. Offsite - Unmitigated

3.4. Linear, Paving (2028)

3.4.1. Onsite - Unmitigated

3.4.2. Offsite - Unmitigated

5. Activity Data

5.1. Construction Schedule

5.2. Off-Road Equipment

5.2.1. Unmitigated

5.3. Construction Vehicles

5.3.1. Unmitigated

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

5.5. Architectural Coatings

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

5.6.2. Construction Earthmoving Control Strategies

5.7. Construction Paving

5.8. Construction Electricity Consumption and Emissions Factors

8. User Changes to Default Data

8.1. Justifications

8.4. Construction

8.4.6. Trips and VMT

# 1. Basic Project Information

## 1.1. Basic Project Information

Data Field	Value
Project Name	FDCSP Construction, Secondary Access Roadway
Construction Start Date	4/24/2028
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	2.50000
Precipitation (days)	19.2000
Location	33.65978913129787, -117.92306170579121
County	Orange
City	Costa Mesa
Air District	South Coast AQMD
Air Basin	South Coast
TAZ	5912
EDFZ	7
Electric Utility	Southern California Edison
Gas Utility	Southern California Gas
App Version	2022.1.1.41

## 1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
Road Construction	0.20000	Mile	1.02000	0.00000	0.00000	—	—	—

### 1.3. User-Selected Emission Reduction Measures by Emissions Sector

Sector	#	Measure Title
Construction	C-5	Use Advanced Engine Tiers

## 2. Emissions Summary

### 2.1. Construction Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	3.35524	2.87970	22.2374	30.3146	0.06097	0.89749	2.89186	3.78935	0.82577	0.35777	1.18354	—	7,004.10	7,004.10	0.27490	0.07342	1.37274	7,034.23
Mit.	3.03826	2.87970	7.02880	39.0214	0.06096	0.24443	2.89186	3.01438	0.22491	0.35777	0.48028	—	7,002.39	7,002.39	0.27483	0.07340	1.37274	7,032.51
% Reduced	9%	—	68%	-29%	—	73%	—	20%	73%	—	59%	—	< 0.5%	< 0.5%	—	—	—	< 0.5%
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.31044	0.26580	1.86043	2.51027	0.00510	0.07302	0.22416	0.29718	0.06718	0.02812	0.09529	—	579.324	579.324	0.02276	0.00675	0.04872	581.953
Mit.	0.11691	0.11130	0.61192	3.21993	0.00510	0.01570	0.22416	0.23986	0.01521	0.02812	0.04332	—	579.121	579.121	0.02275	0.00675	0.04872	581.749
% Reduced	62%	58%	67%	-28%	—	78%	—	19%	77%	—	55%	—	< 0.5%	< 0.5%	—	—	—	< 0.5%
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.05665	0.04851	0.33953	0.45812	0.00093	0.01333	0.04091	0.05423	0.01226	0.00513	0.01739	—	95.9137	95.9137	0.00377	0.00112	0.00807	96.3489
Mit.	0.02134	0.02031	0.11168	0.58764	0.00093	0.00287	0.04091	0.04377	0.00278	0.00513	0.00791	—	95.8801	95.8801	0.00377	0.00112	0.00807	96.3152
% Reduced	62%	58%	67%	-28%	—	78%	—	19%	77%	—	55%	—	< 0.5%	< 0.5%	< 0.5%	—	—	< 0.5%

## 2.2. Construction Emissions by Year

### 2.2.1. Total Construction Emissions by Year, Unmitigated

Includes both onsite and offsite emissions.

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2028	3.35524	2.87970	22.2374	30.3146	0.06097	0.89749	2.89186	3.78935	0.82577	0.35777	1.18354	—	7,004.10	7,004.10	0.27490	0.07342	1.37274	7,034.23
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2028	0.31044	0.26580	1.86043	2.51027	0.00510	0.07302	0.22416	0.29718	0.06718	0.02812	0.09529	—	579.324	579.324	0.02276	0.00675	0.04872	581.953
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2028	0.05665	0.04851	0.33953	0.45812	0.00093	0.01333	0.04091	0.05423	0.01226	0.00513	0.01739	—	95.9137	95.9137	0.00377	0.00112	0.00807	96.3489

### 2.2.2. Onsite Construction Emissions by Year, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2028	3.24918	2.83004	22.0426	28.8561	0.06007	0.89659	2.46551	3.36210	0.82487	0.25640	1.08127	—	6,506.60	6,506.60	0.26485	0.05463	0.01945	6,529.52
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2028	0.30137	0.25834	1.84537	2.39610	0.00505	0.07296	0.18808	0.26104	0.06713	0.01958	0.08671	—	540.329	540.329	0.02199	0.00453	0.00065	542.229

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2028	0.05500	0.04715	0.33678	0.43729	0.00092	0.01332	0.03432	0.04764	0.01225	0.00357	0.01582	—	89.4576	89.4576	0.00364	0.00075	0.00011	89.7722

### 2.2.3. Offsite Construction Emissions by Year, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2028	0.10606	0.08549	0.19481	1.45849	0.00090	0.00090	0.42635	0.42725	0.00090	0.10137	0.10227	—	497.505	497.505	0.01005	0.01879	1.35328	504.709
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2028	0.00907	0.00746	0.01506	0.11417	0.00005	0.00005	0.03608	0.03613	0.00005	0.00853	0.00858	—	38.9950	38.9950	0.00076	0.00222	0.04807	39.7237
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2028	0.00166	0.00136	0.00275	0.02084	0.00001	0.00001	0.00658	0.00659	0.00001	0.00156	0.00157	—	6.45606	6.45606	0.00013	0.00037	0.00796	6.57672

## 3. Construction Emissions Details

### 3.1. Linear, Grubbing & Land Clearing (2028)

#### 3.1.1. Onsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipm	0.37242	0.31294	2.82409	3.43958	0.00453	0.14206	—	0.14206	0.13070	—	0.13070	—	490.511	490.511	0.01990	0.00398	—	492.195
Dust From Material Movement	—	—	—	—	—	—	0.20680	0.20680	—	0.02233	0.02233	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.00408	0.00343	0.03095	0.03769	0.00005	0.00156	—	0.00156	0.00143	—	0.00143	—	5.37547	5.37547	0.00022	0.00004	—	5.39391
Dust From Material Movement	—	—	—	—	—	—	0.00227	0.00227	—	0.00024	0.00024	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.00074	0.00063	0.00565	0.00688	0.00001	0.00028	—	0.00028	0.00026	—	0.00026	—	0.88997	0.88997	0.00004	0.00001	—	0.89302
Dust From Material Movement	—	—	—	—	—	—	0.00041	0.00041	—	0.00004	0.00004	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.1.2. Offsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01620	0.01383	0.01284	0.23325	0.00000	0.00000	0.06535	0.06535	0.00000	0.01532	0.01532	—	62.8701	62.8701	0.00066	0.00033	0.18139	63.1666
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00018	0.00015	0.00017	0.00230	0.00000	0.00000	0.00071	0.00071	0.00000	0.00017	0.00017	—	0.66472	0.66472	0.00001	0.00003	0.00086	0.67353
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00003	0.00003	0.00003	0.00042	0.00000	0.00000	0.00013	0.00013	0.00000	0.00003	0.00003	—	0.11005	0.11005	< 0.000005	< 0.000005	0.00014	0.11151
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.2. Linear, Grading & Excavation (2028)

3.2.1. Onsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipm	3.24699	2.72837	22.0190	28.8419	0.05998	0.89644	—	0.89644	0.82473	—	0.82473	—	6,494.47	6,494.47	0.26344	0.05269	—	6,516.76
Dust From Material Movement	—	—	—	—	—	—	1.24079	1.24079	—	0.13398	0.13398	—	—	—	—	—	—	—
Onsite truck	0.00219	0.00067	0.02359	0.01421	0.00009	0.00015	1.22473	1.22487	0.00015	0.12242	0.12257	—	12.1295	12.1295	0.00140	0.00194	0.01945	12.7616
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.16013	0.13455	1.08587	1.42234	0.00296	0.04421	—	0.04421	0.04067	—	0.04067	—	320.275	320.275	0.01299	0.00260	—	321.374
Dust From Material Movement	—	—	—	—	—	—	0.06119	0.06119	—	0.00661	0.00661	—	—	—	—	—	—	—
Onsite truck	0.00011	0.00003	0.00120	0.00071	< 0.000005	0.00001	0.05722	0.05723	0.00001	0.00572	0.00573	—	0.59871	0.59871	0.00007	0.00010	0.00041	0.62933
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02922	0.02456	0.19817	0.25958	0.00054	0.00807	—	0.00807	0.00742	—	0.00742	—	53.0252	53.0252	0.00215	0.00043	—	53.2072
Dust From Material Movement	—	—	—	—	—	—	0.01117	0.01117	—	0.00121	0.00121	—	—	—	—	—	—	—
Onsite truck	0.00002	0.00001	0.00022	0.00013	< 0.000005	< 0.000005	0.01044	0.01044	< 0.000005	0.00104	0.00105	—	0.09912	0.09912	0.00001	0.00002	0.00007	0.10419

3.2.2. Offsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.09722	0.08300	0.07705	1.39949	0.00000	0.00000	0.39213	0.39213	0.00000	0.09191	0.09191	—	377.221	377.221	0.00397	0.00198	1.08831	378.999
Vendor	0.00884	0.00249	0.11776	0.05900	0.00090	0.00090	0.03422	0.03512	0.00090	0.00946	0.01035	—	120.284	120.284	0.00608	0.01681	0.26497	125.710
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00479	0.00409	0.00447	0.06197	0.00000	0.00000	0.01910	0.01910	0.00000	0.00447	0.00447	—	17.9475	17.9475	0.00023	0.00070	0.02321	18.1854
Vendor	0.00043	0.00013	0.00606	0.00294	0.00004	0.00004	0.00167	0.00171	0.00004	0.00046	0.00051	—	5.93321	5.93321	0.00030	0.00083	0.00565	6.19348
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00088	0.00075	0.00082	0.01131	0.00000	0.00000	0.00349	0.00349	0.00000	0.00082	0.00082	—	2.97142	2.97142	0.00004	0.00012	0.00384	3.01080
Vendor	0.00008	0.00002	0.00111	0.00054	0.00001	0.00001	0.00030	0.00031	0.00001	0.00008	0.00009	—	0.98231	0.98231	0.00005	0.00014	0.00093	1.02540
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.3. Linear, Drainage, Utilities, & Sub-Grade (2028)

3.3.1. Onsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

FDCSP Construction, Secondary Access Roadway Custom Report, 4/1/2026

Off-Road Equipment	2.67803	2.24435	18.6379	23.0575	0.05434	0.70496	—	0.70496	0.64856	—	0.64856	—	5,691.06	5,691.06	0.23085	0.04617	—	5,710.59
Dust From Material Movement	—	—	—	—	—	—	1.03399	1.03399	—	0.11165	0.11165	—	—	—	—	—	—	—
Onsite truck	0.00209	0.00066	0.02229	0.01371	0.00009	0.00013	1.07256	1.07269	0.00013	0.10721	0.10734	—	10.8155	10.8155	0.00132	0.00173	0.01704	11.3812
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.08804	0.07379	0.61275	0.75806	0.00179	0.02318	—	0.02318	0.02132	—	0.02132	—	187.103	187.103	0.00759	0.00152	—	187.745
Dust From Material Movement	—	—	—	—	—	—	0.03399	0.03399	—	0.00367	0.00367	—	—	—	—	—	—	—
Onsite truck	0.00007	0.00002	0.00076	0.00046	< 0.000005	< 0.000005	0.03341	0.03341	< 0.000005	0.00334	0.00334	—	0.35594	0.35594	0.00004	0.00006	0.00024	0.37422
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01607	0.01347	0.11183	0.13835	0.00033	0.00423	—	0.00423	0.00389	—	0.00389	—	30.9771	30.9771	0.00126	0.00025	—	31.0834
Dust From Material Movement	—	—	—	—	—	—	0.00620	0.00620	—	0.00067	0.00067	—	—	—	—	—	—	—
Onsite truck	0.00001	< 0.000005	0.00014	0.00008	< 0.000005	< 0.000005	0.00610	0.00610	< 0.000005	0.00061	0.00061	—	0.05893	0.05893	0.00001	0.00001	0.00004	0.06196

### 3.3.2. Offsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08102	0.06917	0.06421	1.16625	0.00000	0.00000	0.32677	0.32677	0.00000	0.07660	0.07660	—	314.351	314.351	0.00331	0.00165	0.90693	315.833
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00266	0.00227	0.00248	0.03443	0.00000	0.00000	0.01061	0.01061	0.00000	0.00249	0.00249	—	9.97085	9.97085	0.00013	0.00039	0.01290	10.1030
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00049	0.00042	0.00045	0.00628	0.00000	0.00000	0.00194	0.00194	0.00000	0.00045	0.00045	—	1.65079	1.65079	0.00002	0.00006	0.00213	1.67267
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

### 3.4. Linear, Paving (2028)

#### 3.4.1. Onsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.92091	0.77382	6.92497	10.7580	0.01495	0.24398	—	0.24398	0.22446	—	0.22446	—	1,619.40	1,619.40	0.06569	0.01314	—	1,624.95
Architectural Coatings	2.05621	2.05621	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01514	0.01272	0.11384	0.17684	0.00025	0.00401	—	0.00401	0.00369	—	0.00369	—	26.6202	26.6202	0.00108	0.00022	—	26.7116
Architectural Coatings	0.03380	0.03380	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.00276	0.00232	0.02077	0.03227	0.00004	0.00073	—	0.00073	0.00067	—	0.00067	—	4.40728	4.40728	0.00018	0.00004	—	4.42241
Architectural Coatings	0.00617	0.00617	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.4.2. Offsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05671	0.04842	0.04495	0.81637	0.00000	0.00000	0.22874	0.22874	0.00000	0.05362	0.05362	—	220.045	220.045	0.00231	0.00116	0.63485	221.083
Vendor	0.00442	0.00124	0.05888	0.02950	0.00045	0.00045	0.01711	0.01756	0.00045	0.00473	0.00518	—	60.1420	60.1420	0.00304	0.00840	0.13249	62.8549
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00093	0.00080	0.00087	0.01205	0.00000	0.00000	0.00371	0.00371	0.00000	0.00087	0.00087	—	3.48980	3.48980	0.00004	0.00014	0.00451	3.53605
Vendor	0.00007	0.00002	0.00101	0.00049	0.00001	0.00001	0.00028	0.00029	0.00001	0.00008	0.00008	—	0.98887	0.98887	0.00005	0.00014	0.00094	1.03225
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00017	0.00015	0.00016	0.00220	0.00000	0.00000	0.00068	0.00068	0.00000	0.00016	0.00016	—	0.57778	0.57778	0.00001	0.00002	0.00075	0.58543
Vendor	0.00001	< 0.000005	0.00018	0.00009	< 0.000005	< 0.000005	0.00005	0.00005	< 0.000005	0.00001	0.00002	—	0.16372	0.16372	0.00001	0.00002	0.00016	0.17090
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

## 5. Activity Data

### 5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
Linear, Grubbing & Land Clearing	Linear, Grubbing & Land Clearing	4/24/2028	4/29/2028	5.00000	4.00000	—
Linear, Grading & Excavation	Linear, Grading & Excavation	4/30/2028	5/25/2028	5.00000	18.0000	—

Linear, Drainage, Utilities, & Sub-Grade	Linear, Drainage, Utilities, & Sub-Grade	5/26/2028	6/11/2028	5.00000	12.0000	—
Linear, Paving	Linear, Paving	6/12/2028	6/20/2028	5.00000	6.00000	—

## 5.2. Off-Road Equipment

### 5.2.1. Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Linear, Grubbing & Land Clearing	Signal Boards	Electric	Average	0.00000	8.00000	6.00000	0.82000
Linear, Grubbing & Land Clearing	Crawler Tractors	Diesel	Average	1.000000	8.00000	87.0000	0.43000
Linear, Grubbing & Land Clearing	Excavators	Diesel	Average	1.000000	8.00000	36.0000	0.38000
Linear, Grading & Excavation	Excavators	Diesel	Average	3.00000	8.00000	36.0000	0.38000
Linear, Grading & Excavation	Crawler Tractors	Diesel	Average	1.000000	8.00000	87.0000	0.43000
Linear, Grading & Excavation	Graders	Diesel	Average	1.000000	8.00000	148.000	0.41000
Linear, Grading & Excavation	Rollers	Diesel	Average	2.00000	8.00000	36.0000	0.38000
Linear, Grading & Excavation	Signal Boards	Electric	Average	0.00000	8.00000	6.00000	0.82000
Linear, Grading & Excavation	Scrapers	Diesel	Average	2.00000	8.00000	423.000	0.48000
Linear, Grading & Excavation	Rubber Tired Loaders	Diesel	Average	1.000000	8.00000	150.000	0.36000
Linear, Grading & Excavation	Tractors/Loaders/Back hoes	Diesel	Average	2.00000	8.00000	84.0000	0.37000
Linear, Drainage, Utilities, & Sub-Grade	Tractors/Loaders/Back hoes	Diesel	Average	2.00000	8.00000	84.0000	0.37000

Linear, Drainage, Utilities, & Sub-Grade	Scrapers	Diesel	Average	2.00000	8.00000	423.000	0.48000
Linear, Drainage, Utilities, & Sub-Grade	Signal Boards	Electric	Average	0.00000	8.00000	6.00000	0.82000
Linear, Drainage, Utilities, & Sub-Grade	Rough Terrain Forklifts	Diesel	Average	1.000000	8.00000	96.0000	0.40000
Linear, Drainage, Utilities, & Sub-Grade	Graders	Diesel	Average	1.000000	8.00000	148.000	0.41000
Linear, Drainage, Utilities, & Sub-Grade	Plate Compactors	Diesel	Average	1.000000	8.00000	8.00000	0.43000
Linear, Drainage, Utilities, & Sub-Grade	Pumps	Diesel	Average	1.000000	8.00000	11.0000	0.74000
Linear, Drainage, Utilities, & Sub-Grade	Air Compressors	Diesel	Average	1.000000	8.00000	37.0000	0.48000
Linear, Drainage, Utilities, & Sub-Grade	Generator Sets	Diesel	Average	1.000000	8.00000	14.0000	0.74000
Linear, Paving	Rollers	Diesel	Average	3.00000	8.00000	36.0000	0.38000
Linear, Paving	Paving Equipment	Diesel	Average	1.000000	8.00000	89.0000	0.36000
Linear, Paving	Pavers	Diesel	Average	1.000000	8.00000	81.0000	0.42000
Linear, Paving	Signal Boards	Electric	Average	0.00000	8.00000	6.00000	0.82000
Linear, Paving	Tractors/Loaders/Back hoes	Diesel	Average	2.00000	8.00000	84.0000	0.37000

### 5.3. Construction Vehicles

#### 5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Linear, Grubbing & Land Clearing	Worker	5.00000	18.5000	LDA,LDT1,LDT2
Linear, Grubbing & Land Clearing	Vendor	0.00000	10.2000	HHDT,MHDT
Linear, Grubbing & Land Clearing	Hauling	0.00000	20.0000	HHDT
Linear, Grubbing & Land Clearing	Onsite truck	0.00000	—	HHDT
Linear, Grading & Excavation	Worker	30.0000	18.5000	LDA,LDT1,LDT2

Linear, Grading & Excavation	Vendor	4.00000	10.2000	HHDT,MHDT
Linear, Grading & Excavation	Hauling	0.00000	20.0000	HHDT
Linear, Grading & Excavation	Onsite truck	1.000000	3.30000	HHDT
Linear, Drainage, Utilities, & Sub-Grade	Worker	25.0000	18.5000	LDA,LDT1,LDT2
Linear, Drainage, Utilities, & Sub-Grade	Vendor	0.00000	10.2000	HHDT,MHDT
Linear, Drainage, Utilities, & Sub-Grade	Hauling	0.00000	20.0000	HHDT
Linear, Drainage, Utilities, & Sub-Grade	Onsite truck	1.000000	2.89000	HHDT
Linear, Paving	Worker	17.5000	18.5000	LDA,LDT1,LDT2
Linear, Paving	Vendor	2.00000	10.2000	HHDT,MHDT
Linear, Paving	Hauling	0.00000	20.0000	HHDT
Linear, Paving	Onsite truck	0.00000	—	HHDT

## 5.4. Vehicles

### 5.4.1. Construction Vehicle Control Strategies

Control Strategies Applied	PM10 Reduction	PM2.5 Reduction
Water unpaved roads twice daily	55%	55%
Limit vehicle speeds on unpaved roads to 25 mph	44%	44%
Sweep paved roads once per month	9%	9%

## 5.5. Architectural Coatings

Phase Name	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
Linear, Paving	0.00000	0.00000	0.00000	0.00000	2,661.00

## 5.6. Dust Mitigation

### 5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (Cubic Yards)	Material Exported (Cubic Yards)	Acres Graded (acres)	Material Demolished (sq. ft.)	Acres Paved (acres)
Linear, Grubbing & Land Clearing	0.00000	0.00000	1.02000	0.00000	0.00000
Linear, Grading & Excavation	0.00000	0.00000	1.02000	0.00000	0.00000
Linear, Drainage, Utilities, & Sub-Grade	0.00000	0.00000	1.02000	0.00000	0.00000

### 5.6.2. Construction Earthmoving Control Strategies

Control Strategies Applied	Frequency (per day)	PM10 Reduction	PM2.5 Reduction
Water Exposed Area	2	61%	61%

## 5.7. Construction Paving

## 5.8. Construction Electricity Consumption and Emissions Factors

### kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2028	0.00000	531.983	0.03300	0.00400

## 8. User Changes to Default Data

### 8.1. Justifications

Screen	Justification
Construction: Trips and VMT	Included CalEEMod default vendor trips; calculated onsite truck trip length; see assumptions file

Construction: Architectural Coatings	Assumed 6 percent of total area would be striped.
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## 8.4. Construction

### 8.4.6. Trips and VMT

Phase Name	Trip Type	Model Parameter	Default Value	New Value
Linear, Grading & Excavation	Vendor	One-Way Trips per Day	1.000000	4.00000
Linear, Paving	Vendor	One-Way Trips per Day	0.00000	2.00000

# **CalEEMod Operations Model**

# FDCSP, Operation Custom Report

## Table of Contents

- 1. Basic Project Information
  - 1.1. Basic Project Information
  - 1.2. Land Use Types
  - 1.3. User-Selected Emission Reduction Measures by Emissions Sector
- 2. Emissions Summary
  - 2.3. Operations Emissions Compared Against Thresholds
  - 2.4. Operations Emissions by Sector, Unmitigated
- 4. Operations Emissions Details
  - 4.1. Mobile Emissions by Land Use
    - 4.1.1. Unmitigated
  - 4.2. Energy
    - 4.2.1. Electricity Emissions By Land Use - Unmitigated
    - 4.2.3. Natural Gas Emissions By Land Use - Unmitigated
  - 4.3. Area Emissions by Source
    - 4.3.1. Unmitigated

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

5. Activity Data

5.9. Operational Mobile Sources

5.9.1. Unmitigated

5.10. Operational Area Sources

5.10.1. Hearths

5.10.2. Architectural Coatings

5.10.3. Landscape Equipment

5.11. Operational Energy Consumption

5.11.1. Unmitigated

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

5.13. Operational Waste Generation

5.13.1. Unmitigated

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

5.16.2. Process Boilers

5.17. User Defined

8. User Changes to Default Data

8.1. Justifications

8.3. Land Use

## 8.5. Operations

### 8.5.1. Mobile Sources

#### 8.5.1.1. Vehicle Data

### 8.5.2. Area Sources

#### 8.5.2.1. Hearths

#### 8.5.2.3. Architectural Coatings

### 8.5.4. Water and Waste Water

### 8.5.5. Solid Waste

# 1. Basic Project Information

## 1.1. Basic Project Information

Data Field	Value
Project Name	FDCSP, Operation
Operational Year	2045
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	2.50000
Precipitation (days)	19.2000
Location	2501 Harbor Blvd, Costa Mesa, CA 92626, USA
County	Orange
City	Costa Mesa
Air District	South Coast AQMD
Air Basin	South Coast
TAZ	5912
EDFZ	7
Electric Utility	Southern California Edison
Gas Utility	Southern California Gas
App Version	2022.1.1.39

## 1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
Apartments Mid Rise	4,000.00	Dwelling Unit	59.2000	4,143,330	0.00000	0.00000	9,926.00	—
City Park	14.0000	Acre	14.0000	0.00000	0.00000	0.00000	—	—

High Turnover (Sit Down Restaurant)	35.0000	1000sqft	0.80349	35,000.0	0.00000	0.00000	—	—
Other Asphalt Surfaces	22.0200	Acre	22.0200	0.00000	0.00000	0.00000	—	—

### 1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

## 2. Emissions Summary

### 2.3. Operations Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	125.831	120.691	70.8073	259.285	0.44803	5.65332	0.00000	5.65332	5.62804	0.00000	5.62804	7,759.88	100,418	108,178	725.573	1.59401	84.3884	126,877
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	104.746	100.730	68.6996	29.6825	0.43809	5.54918	0.00000	5.54918	5.54918	0.00000	5.54918	7,759.88	99,805.1	107,565	725.548	1.58892	84.3884	126,262
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	113.040	111.328	17.6063	164.588	0.10956	1.37284	0.00000	1.37284	1.35552	0.00000	1.35552	7,759.88	33,538.4	41,298.3	724.310	1.46683	84.3884	59,927.5
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	20.6298	20.3173	3.21314	30.0373	0.01999	0.25054	0.00000	0.25054	0.24738	0.00000	0.24738	1,284.74	5,552.67	6,837.40	119.918	0.24285	13.9715	9,921.69

### 2.4. Operations Emissions by Sector, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
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Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Area	124.399	119.975	58.5078	253.602	0.36993	4.66414	—	4.66414	4.63886	—	4.63886	0.00000	72,203.0	72,203.0	1.37364	0.13989	—	72,279.0	
Energy	1.43171	0.71586	12.2996	5.68247	0.07809	0.98918	—	0.98918	0.98918	—	0.98918	—	26,872.5	26,872.5	2.80969	0.20322	—	27,003.3	
Water	—	—	—	—	—	—	—	—	—	—	—	563.167	1,342.60	1,905.76	2.10488	1.25090	—	2,331.15	
Waste	—	—	—	—	—	—	—	—	—	—	—	7,196.71	0.00000	7,196.71	719.285	0.00000	—	25,178.8	
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	84.3884	84.3884	
Total	125.831	120.691	70.8073	259.285	0.44803	5.65332	0.00000	5.65332	5.62804	0.00000	5.62804	7,759.88	100,418	108,178	725.573	1.59401	84.3884	126,877	
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Area	103.314	100.014	56.4000	24.0000	0.36000	4.56000	—	4.56000	4.56000	—	4.56000	0.00000	71,590.0	71,590.0	1.34802	0.13480	—	71,663.9	
Energy	1.43171	0.71586	12.2996	5.68247	0.07809	0.98918	—	0.98918	0.98918	—	0.98918	—	26,872.5	26,872.5	2.80969	0.20322	—	27,003.3	
Water	—	—	—	—	—	—	—	—	—	—	—	563.167	1,342.60	1,905.76	2.10488	1.25090	—	2,331.15	
Waste	—	—	—	—	—	—	—	—	—	—	—	7,196.71	0.00000	7,196.71	719.285	0.00000	—	25,178.8	
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	84.3884	84.3884	
Total	104.746	100.730	68.6996	29.6825	0.43809	5.54918	0.00000	5.54918	5.54918	0.00000	5.54918	7,759.88	99,805.1	107,565	725.548	1.58892	84.3884	126,262	
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Area	111.608	110.612	5.30669	158.906	0.03146	0.38366	—	0.38366	0.36634	—	0.36634	0.00000	5,323.29	5,323.29	0.10988	0.01272	—	5,329.83	
Energy	1.43171	0.71586	12.2996	5.68247	0.07809	0.98918	—	0.98918	0.98918	—	0.98918	—	26,872.5	26,872.5	2.80969	0.20322	—	27,003.3	
Water	—	—	—	—	—	—	—	—	—	—	—	563.167	1,342.60	1,905.76	2.10488	1.25090	—	2,331.15	
Waste	—	—	—	—	—	—	—	—	—	—	—	7,196.71	0.00000	7,196.71	719.285	0.00000	—	25,178.8	
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	84.3884	84.3884	
Total	113.040	111.328	17.6063	164.588	0.10956	1.37284	0.00000	1.37284	1.35552	0.00000	1.35552	7,759.88	33,538.4	41,298.3	724.310	1.46683	84.3884	59,927.5	
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Mobile	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Area	20.3685	20.1867	0.96847	29.0003	0.00574	0.07002	—	0.07002	0.06686	—	0.06686	0.00000	881.332	881.332	0.01819	0.00211	—	882.414	
Energy	0.26129	0.13064	2.24467	1.03705	0.01425	0.18053	—	0.18053	0.18053	—	0.18053	—	4,449.05	4,449.05	0.46518	0.03365	—	4,470.71	
Water	—	—	—	—	—	—	—	—	—	—	—	93.2387	222.282	315.521	0.34849	0.20710	—	385.949	
Waste	—	—	—	—	—	—	—	—	—	—	—	1,191.50	0.00000	1,191.50	119.086	0.00000	—	4,168.64	
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	13.9715	13.9715	
Total	20.6298	20.3173	3.21314	30.0373	0.01999	0.25054	0.00000	0.25054	0.24738	0.00000	0.24738	1,284.74	5,552.67	6,837.40	119.918	0.24285	13.9715	9,921.69	

## 4. Operations Emissions Details

### 4.1. Mobile Emissions by Land Use

#### 4.1.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
City Park	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
High Turnover (Sit Down Restaurant)	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Other Asphalt Surfaces	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Total	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
City Park	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
High Turnover (Sit Down Restaurant)	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Other Asphalt Surfaces	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Total	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
City Park	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
High Turnover (Sit Down Restaurant)	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Other Asphalt Surfaces	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Total	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

## 4.2. Energy

### 4.2.1. Electricity Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	10,476.8	10,476.8	1.32573	0.16069	—	10,557.8
City Park	—	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	—	0.00000
High Turnover (Sit Down Restaurant)	—	—	—	—	—	—	—	—	—	—	—	—	866.003	866.003	0.10958	0.01328	—	872.701
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	—	0.00000
Total	—	—	—	—	—	—	—	—	—	—	—	—	11,342.8	11,342.8	1.43531	0.17398	—	11,430.5
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	10,476.8	10,476.8	1.32573	0.16069	—	10,557.8
City Park	—	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	—	0.00000
High Turnover (Sit Down Restaurant)	—	—	—	—	—	—	—	—	—	—	—	—	866.003	866.003	0.10958	0.01328	—	872.701
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	—	0.00000
Total	—	—	—	—	—	—	—	—	—	—	—	—	11,342.8	11,342.8	1.43531	0.17398	—	11,430.5

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	1,734.55	1,734.55	0.21949	0.02660	—	1,747.97
City Park	—	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	—	0.00000
High Turnover (Sit Down Restaurant)	—	—	—	—	—	—	—	—	—	—	—	—	143.377	143.377	0.01814	0.00220	—	144.486
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	—	0.00000
Total	—	—	—	—	—	—	—	—	—	—	—	—	1,877.93	1,877.93	0.23763	0.02880	—	1,892.45

#### 4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	1.31265	0.65633	11.2172	4.77329	0.07160	0.90692	—	0.90692	0.90692	—	0.90692	—	14,238.3	14,238.3	1.26008	0.02681	—	14,277.8
City Park	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	—	0.00000	—	0.00000	0.00000	0.00000	0.00000	—	0.00000
High Turnover (Sit Down Restaurant)	0.11906	0.05953	1.08235	0.90918	0.00649	0.08226	—	0.08226	0.08226	—	0.08226	—	1,291.43	1,291.43	0.11429	0.00243	—	1,295.01
Other Asphalt Surfaces	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	—	0.00000	—	0.00000	0.00000	0.00000	0.00000	—	0.00000

Total	1.43171	0.71586	12.2996	5.68247	0.07809	0.98918	—	0.98918	0.98918	—	0.98918	—	15,529.7	15,529.7	1.37438	0.02924	—	15,572.8
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	1.31265	0.65633	11.2172	4.77329	0.07160	0.90692	—	0.90692	0.90692	—	0.90692	—	14,238.3	14,238.3	1.26008	0.02681	—	14,277.8
City Park	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	—	0.00000	—	0.00000	0.00000	0.00000	0.00000	—	0.00000
High Turnover (Sit Down Restaurant)	0.11906	0.05953	1.08235	0.90918	0.00649	0.08226	—	0.08226	0.08226	—	0.08226	—	1,291.43	1,291.43	0.11429	0.00243	—	1,295.01
Other Asphalt Surfaces	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	—	0.00000	—	0.00000	0.00000	0.00000	0.00000	—	0.00000
Total	1.43171	0.71586	12.2996	5.68247	0.07809	0.98918	—	0.98918	0.98918	—	0.98918	—	15,529.7	15,529.7	1.37438	0.02924	—	15,572.8
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	0.23956	0.11978	2.04714	0.87112	0.01307	0.16551	—	0.16551	0.16551	—	0.16551	—	2,357.32	2,357.32	0.20862	0.00444	—	2,363.85
City Park	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	—	0.00000	—	0.00000	0.00000	0.00000	0.00000	—	0.00000
High Turnover (Sit Down Restaurant)	0.02173	0.01086	0.19753	0.16592	0.00119	0.01501	—	0.01501	0.01501	—	0.01501	—	213.811	213.811	0.01892	0.00040	—	214.404
Other Asphalt Surfaces	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	—	0.00000	—	0.00000	0.00000	0.00000	0.00000	—	0.00000
Total	0.26129	0.13064	2.24467	1.03705	0.01425	0.18053	—	0.18053	0.18053	—	0.18053	—	2,571.13	2,571.13	0.22754	0.00484	—	2,578.26

### 4.3. Area Emissions by Source

4.3.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	6.60000	3.30000	56.4000	24.0000	0.36000	4.56000	—	4.56000	4.56000	—	4.56000	0.00000	71,590.0	71,590.0	1.34802	0.13480	—	71,663.9
Consumer Products	89.4917	89.4917	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	7.22258	7.22258	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	21.0851	19.9604	2.10776	229.602	0.00993	0.10414	—	0.10414	0.07886	—	0.07886	—	613.009	613.009	0.02562	0.00509	—	615.166
Total	124.399	119.975	58.5078	253.602	0.36993	4.66414	—	4.66414	4.63886	—	4.63886	0.00000	72,203.0	72,203.0	1.37364	0.13989	—	72,279.0
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	6.60000	3.30000	56.4000	24.0000	0.36000	4.56000	—	4.56000	4.56000	—	4.56000	0.00000	71,590.0	71,590.0	1.34802	0.13480	—	71,663.9
Consumer Products	89.4917	89.4917	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	7.22258	7.22258	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	103.314	100.014	56.4000	24.0000	0.36000	4.56000	—	4.56000	4.56000	—	4.56000	0.00000	71,590.0	71,590.0	1.34802	0.13480	—	71,663.9
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	0.08250	0.04125	0.70500	0.30000	0.00450	0.05700	—	0.05700	0.05700	—	0.05700	0.00000	811.818	811.818	0.01529	0.00153	—	812.656

Consum Products	16.3322	16.3322	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architect ural Coatings	1.31812	1.31812	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipm ent	2.63564	2.49506	0.26347	28.7003	0.00124	0.01302	—	0.01302	0.00986	—	0.00986	—	69.5141	69.5141	0.00291	0.00058	—	69.7587
Total	20.3685	20.1867	0.96847	29.0003	0.00574	0.07002	—	0.07002	0.06686	—	0.06686	0.00000	881.332	881.332	0.01819	0.00211	—	882.414

#### 4.4. Water Emissions by Land Use

##### 4.4.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartme nts Mid Rise	—	—	—	—	—	—	—	—	—	—	—	561.600	1,278.19	1,839.79	2.09134	1.24649	—	2,263.53
City Park	—	—	—	—	—	—	—	—	—	—	—	0.00000	60.8367	60.8367	0.00770	0.00093	—	61.3073
High Turnover (Sit Down Restaurant)	—	—	—	—	—	—	—	—	—	—	—	1.56702	3.56652	5.13354	0.00584	0.00348	—	6.31588
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000
Total	—	—	—	—	—	—	—	—	—	—	—	563.167	1,342.60	1,905.76	2.10488	1.25090	—	2,331.15

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	561.600	1,278.19	1,839.79	2.09134	1.24649	—	2,263.53
City Park	—	—	—	—	—	—	—	—	—	—	—	0.00000	60.8367	60.8367	0.00770	0.00093	—	61.3073
High Turnover (Sit Down Restaurant)	—	—	—	—	—	—	—	—	—	—	—	1.56702	3.56652	5.13354	0.00584	0.00348	—	6.31588
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000
Total	—	—	—	—	—	—	—	—	—	—	—	563.167	1,342.60	1,905.76	2.10488	1.25090	—	2,331.15
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	92.9793	211.620	304.599	0.34625	0.20637	—	374.753
City Park	—	—	—	—	—	—	—	—	—	—	—	0.00000	10.0722	10.0722	0.00127	0.00015	—	10.1501
High Turnover (Sit Down Restaurant)	—	—	—	—	—	—	—	—	—	—	—	0.25944	0.59048	0.84992	0.00097	0.00058	—	1.04567
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000
Total	—	—	—	—	—	—	—	—	—	—	—	93.2387	222.282	315.521	0.34849	0.20710	—	385.949

## 4.5. Waste Emissions by Land Use

### 4.5.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	7,114.84	0.00000	7,114.84	711.103	0.00000	—	24,892.4
City Park	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000
High Turnover (Sit Down Restaurant)	—	—	—	—	—	—	—	—	—	—	—	81.8648	0.00000	81.8648	8.18209	0.00000	—	286.417
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000
Total	—	—	—	—	—	—	—	—	—	—	—	7,196.71	0.00000	7,196.71	719.285	0.00000	—	25,178.8
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	7,114.84	0.00000	7,114.84	711.103	0.00000	—	24,892.4
City Park	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000
High Turnover (Sit Down Restaurant)	—	—	—	—	—	—	—	—	—	—	—	81.8648	0.00000	81.8648	8.18209	0.00000	—	286.417
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000
Total	—	—	—	—	—	—	—	—	—	—	—	7,196.71	0.00000	7,196.71	719.285	0.00000	—	25,178.8

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	1,177.94	0.00000	1,177.94	117.731	0.00000	—	4,121.22
City Park	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000
High Turnover (Sit Down Restaurant)	—	—	—	—	—	—	—	—	—	—	—	13.5537	0.00000	13.5537	1.35464	0.00000	—	47.4196
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000
Total	—	—	—	—	—	—	—	—	—	—	—	1,191.50	0.00000	1,191.50	119.086	0.00000	—	4,168.64

## 4.6. Refrigerant Emissions by Land Use

### 4.6.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	29.6745	29.6745
City Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000
High Turnover (Sit Down Restaurant)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	54.7139	54.7139

Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	84.3884	84.3884
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	29.6745	29.6745
City Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000
High Turnover (Sit Down Restaurant)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	54.7139	54.7139
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	84.3884	84.3884
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	4.91296	4.91296
City Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000
High Turnover (Sit Down Restaurant)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	9.05851	9.05851
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	13.9715	13.9715

## 4.7. Offroad Emissions By Equipment Type

### 4.7.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipm ent Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
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Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

### 4.8. Stationary Emissions By Equipment Type

#### 4.8.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipm ent Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

### 4.9. User Defined Emissions By Equipment Type

#### 4.9.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipm ent Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

## 5. Activity Data

### 5.9. Operational Mobile Sources

#### 5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Apartments Mid Rise	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
City Park	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
High Turnover (Sit Down Restaurant)	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Other Asphalt Surfaces	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

### 5.10. Operational Area Sources

#### 5.10.1. Hearths

Land Use	Hearth Type	Unmitigated (number)	Mitigated (number)
Apartments Mid Rise	Wood Fireplaces	0	0
Apartments Mid Rise	Gas Fireplaces	3,400	3,400
Apartments Mid Rise	Propane Fireplaces	0	0
Apartments Mid Rise	Electric Fireplaces	0	0
Apartments Mid Rise	No Fireplaces	400	400
Apartments Mid Rise	Conventional Wood Stoves	0	0
Apartments Mid Rise	Catalytic Wood Stoves	0	0
Apartments Mid Rise	Non-Catalytic Wood Stoves	0	0
Apartments Mid Rise	Pellet Wood Stoves	0	0
City Park	Wood Fireplaces	0	0
City Park	Gas Fireplaces	0	0
City Park	Propane Fireplaces	0	0
City Park	Electric Fireplaces	0	0
City Park	No Fireplaces	0	0
City Park	Conventional Wood Stoves	0	0
City Park	Catalytic Wood Stoves	0	0
City Park	Non-Catalytic Wood Stoves	0	0
City Park	Pellet Wood Stoves	0	0
High Turnover (Sit Down Restaurant)	Wood Fireplaces	0	0
High Turnover (Sit Down Restaurant)	Gas Fireplaces	0	0
High Turnover (Sit Down Restaurant)	Propane Fireplaces	0	0
High Turnover (Sit Down Restaurant)	Electric Fireplaces	0	0
High Turnover (Sit Down Restaurant)	No Fireplaces	0	0
High Turnover (Sit Down Restaurant)	Conventional Wood Stoves	0	0
High Turnover (Sit Down Restaurant)	Catalytic Wood Stoves	0	0
High Turnover (Sit Down Restaurant)	Non-Catalytic Wood Stoves	0	0
High Turnover (Sit Down Restaurant)	Pellet Wood Stoves	0	0

Other Asphalt Surfaces	Wood Fireplaces	0	0
Other Asphalt Surfaces	Gas Fireplaces	0	0
Other Asphalt Surfaces	Propane Fireplaces	0	0
Other Asphalt Surfaces	Electric Fireplaces	0	0
Other Asphalt Surfaces	No Fireplaces	0	0
Other Asphalt Surfaces	Conventional Wood Stoves	0	0
Other Asphalt Surfaces	Catalytic Wood Stoves	0	0
Other Asphalt Surfaces	Non-Catalytic Wood Stoves	0	0
Other Asphalt Surfaces	Pellet Wood Stoves	0	0

### 5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
8,390,243	2,796,748	52,500.0	17,500.0	57,551.5

### 5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0.00000
Summer Days	day/yr	250.000

## 5.11. Operational Energy Consumption

### 5.11.1. Unmitigated

#### Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBtu/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBtu/yr)
Apartments Mid Rise	14,663,336	260.788	0.0330	0.0040	44,427,372
City Park	0.00000	260.788	0.0330	0.0040	0.00000

High Turnover (Sit Down Restaurant)	1,212,061	260.788	0.0330	0.0040	4,029,606
Other Asphalt Surfaces	0.00000	260.788	0.0330	0.0040	0.00000

## 5.12. Operational Water and Wastewater Consumption

### 5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Apartments Mid Rise	262,800,000	0.00000
City Park	0.00000	16,045,035
High Turnover (Sit Down Restaurant)	733,285	0.00000
Other Asphalt Surfaces	0.00000	0.00000

## 5.13. Operational Waste Generation

### 5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Apartments Mid Rise	13,201.6	0.00000
City Park	0.00000	0.00000
High Turnover (Sit Down Restaurant)	151.900	0.00000
Other Asphalt Surfaces	0.00000	0.00000

## 5.14. Operational Refrigeration and Air Conditioning Equipment

### 5.14.1. Unmitigated

Land Use	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
Apartments Mid Rise	Average room A/C & Other residential A/C and heat pumps	R-410A	2,088.00	0.00225	2.50000	2.50000	10.00000

Apartments Mid Rise	Household refrigerators and/or freezers	R-134a	1,430.00	0.11538	0.60000	0.00000	1.000000
City Park	Other commercial A/C and heat pumps	R-410A	2,088.00	0.00180	4.00000	4.00000	18.0000
City Park	Stand-alone retail refrigerators and freezers	R-134a	1,430.00	0.03750	1.000000	0.00000	1.000000
High Turnover (Sit Down Restaurant)	Household refrigerators and/or freezers	R-134a	1,430.00	0.00000	0.60000	0.00000	1.000000
High Turnover (Sit Down Restaurant)	Other commercial A/C and heat pumps	R-410A	2,088.00	1.80000	4.00000	4.00000	18.0000
High Turnover (Sit Down Restaurant)	Walk-in refrigerators and freezers	R-404A	3,922.00	0.00040	7.50000	7.50000	20.0000

## 5.15. Operational Off-Road Equipment

### 5.15.1. Unmitigated

## 5.16. Stationary Sources

### 5.16.1. Emergency Generators and Fire Pumps

### 5.16.2. Process Boilers

## 5.17. User Defined

# 8. User Changes to Default Data

## 8.1. Justifications

Screen	Justification
Land Use	Information based on preferred land use plan; Other asphalt surfaces accounts for ROM Infrastructure/ROW and secondary access roadway; see assumptions file

Operations: Vehicle Data	Mobile emissions calculated off-model
Operations: Hearths	No wood burning fireplaces or stoves per South Coast AQMD Rule 445.
Operations: Architectural Coatings	SCAQMD Rule 1113
Operations: Water and Waste Water	Fuscoe, WSA, March 2026. Based on average day water demand. Assume 100% aerobic treatment.
Operations: Solid Waste	CalRecycle, 2026, Jurisdiction Diversion/Disposal Rate Detail. Based on per capita waste generation rate (PPD) of 7.3 for residents and 9.5 for employees. Refer to Section 3.17, Utilities and Service Systems.

### 8.3. Land Use

Model Parameter	Units	Default Value	New Value
Lot Area	acre	105.263	59.2000
Building Area	sq. ft	3,840,000	4,143,330
Landscape Area	sq. ft	—	0.00000
Special Landscape Area	sq. ft	—	0.00000
Population	people	11,920.0	9,926.00

### 8.5. Operations

#### 8.5.1. Mobile Sources

##### 8.5.1.1. Vehicle Data

Land Use	Model Parameter	Units	Default Value	New Value
Apartments Mid Rise	Weekday Trip Rate	size/day	5.44000	0.00000
Apartments Mid Rise	Saturday Trip Rate	size/day	4.91000	0.00000
Apartments Mid Rise	Sunday Trip Rate	size/day	4.09000	0.00000
City Park	Weekday Trip Rate	size/day	0.78000	0.00000
City Park	Saturday Trip Rate	size/day	1.96000	0.00000
City Park	Sunday Trip Rate	size/day	2.19000	0.00000

High Turnover (Sit Down Restaurant)	Weekday Trip Rate	size/day	112.180	0.00000
High Turnover (Sit Down Restaurant)	Saturday Trip Rate	size/day	122.400	0.00000
High Turnover (Sit Down Restaurant)	Sunday Trip Rate	size/day	142.640	0.00000

## 8.5.2. Area Sources

### 8.5.2.1. Hearths

Land Use	Model Parameter	Default Value	New Value
Apartments Mid Rise	Wood Fireplaces	200	0
Apartments Mid Rise	Catalytic Wood Stoves	200	0
Apartments Mid Rise	Non-Catalytic Wood Stoves	200	0

### 8.5.2.3. Architectural Coatings

Model Parameter	Units	Default Value	New Value
Non-Residential Interior VOC	g/L	100.0000	50.0000
Non-Residential Exterior VOC	g/L	100.0000	50.0000

## 8.5.4. Water and Waste Water

Land Use	Model Parameter	Units	Default Value	New Value
Apartments Mid Rise	Indoor Water	gal/year	150,102,600	262,800,000
Apartments Mid Rise	Treated by Septic Tank	%	10.3300	0.00000
Apartments Mid Rise	Treated by Aerobic Processes	%	87.4600	100.0000
Apartments Mid Rise	Treated by Facultative Lagoons	%	2.21000	0.00000
City Park	Outdoor Water	gal/year	0.00000	16,045,035
City Park	Treated by Septic Tank	%	10.3300	0.00000
City Park	Treated by Aerobic Processes	%	87.4600	100.0000
City Park	Treated by Facultative Lagoons	%	2.21000	0.00000
High Turnover (Sit Down Restaurant)	Indoor Water	gal/year	10,623,680	733,285

High Turnover (Sit Down Restaurant)	Treated by Septic Tank	%	10.3300	0.00000
High Turnover (Sit Down Restaurant)	Treated by Aerobic Processes	%	87.4600	100.0000
High Turnover (Sit Down Restaurant)	Treated by Facultative Lagoons	%	2.21000	0.00000

### 8.5.5. Solid Waste

Land Use	Model Parameter	Units	Default Value	New Value
Apartments Mid Rise	Solid Waste Generation Rate	ton/resident/yr	0.24814	1.33000
City Park	Solid Waste Generation Rate	ton/acre/yr	0.08600	0.00000
High Turnover (Sit Down Restaurant)	Solid Waste Generation Rate	ton/1000sqft/yr	11.9000	4.34000

# Energy Calculations

**Operation-Related Annual Vehicle Fuel/Energy Usage Summary**

**Existing Conditions (2025)**

Year	Gas			Diesel			CNG			Electricity		
	VMT	Gallons	Miles/Gal	VMT	Gallons	Miles/Gal	VMT	Gallons	Miles/Gal	VMT	kWh	Miles/kWh
Existing Conditions (2025)	40,607,194	1,862,838	21.80	2,743,358	298,162	9.20	112,954	20,509	5.51	4,464,102	1,689,762	2.64

**Existing Conditions (2045) - No Project**

Year	Gas			Diesel			CNG			Electricity		
	VMT	Gallons	Miles/Gal	VMT	Gallons	Miles/Gal	VMT	Gallons	Miles/Gal	VMT	kWh	Miles/kWh
Existing Conditions (2045) - No Project	25,354,750	1,007,725	25.16	4,230,076	390,487	10.83	96,563	13,093	7.37	18,246,218	7,547,061	2.42

**Proposed Project (2045)**

Year	Gas			Diesel			CNG			Electricity		
	VMT	Gallons	Miles/Gal	VMT	Gallons	Miles/Gal	VMT	Gallons	Miles/Gal	VMT	kWh	Miles/kWh
Proposed Project (2045)	25,548,107	1,015,410	25.16	4,262,335	393,465	10.83	97,299	13,193	7.37	18,385,365	7,604,615	2.42

**Net Change**

Year	Gas			Diesel			CNG			Electricity		
	VMT	Gallons	Miles/Gal	VMT	Gallons	Miles/Gal	VMT	Gallons	Miles/Gal	VMT	kWh	Miles/kWh
Net Change from Existing (2025)	-15,059,087	-847,428	3.36	1,518,977	95,303	1.63	-15,654	-7,316	1.87	13,921,263	5,914,853	-0.22
Net Change from Existing Conditions (2045) - No Project	193,357	7,685	0.00	32,259	2,978	0.00	736	100	0.00	139,147	57,554	0.00

**Notes**

\* VMT based on VMT data provided by Fehr&Peers, 2026.

\*\* Fuel consumption rates based on data obtained from EMFAC2025Web Database, Version 2.1.0. Orange (SC) Sub-Area.

\*\*\*VMT per year based on a conversion of VMT x 347 days per year to account for less travel on weekend, consistent with CARB statewide GHG emissions inventory methodology. California Air Resources Board. 2008, October. Climate Change Proposed Scoping Plan: A Framework for Change.

**Operation Vehicle Fuel Usage: Existing Conditions (Year 2025)**

Vehicle type	Fleet percent	Annual VMT
LDA	44.62%	21,387,361
LDT1	3.77%	1,806,969
LDT2	26.24%	12,575,087
MDV	16.54%	7,925,181
LHD1	2.70%	1,292,328
LHD2	1.16%	554,750
MHD	1.71%	821,742
HHD	2.44%	1,168,047
OBUS	0.07%	32,574
UBUS	0.11%	54,822
MCY	0.39%	184,968
SBUS	0.07%	32,736
MH	0.13%	60,439
All Other Buses	0.00%	0
Motor Coach	0.01%	4,934
PTO	0.05%	25,670
<b>100.00%</b>	<b>47,927,607</b>	

Vehicle type	Gas percent	Diesel percent	CNG percent	Electricity percent
LDA	84.00%	0.20%	0.00%	15.80%
LDT1	89.59%	0.03%	0.00%	10.38%
LDT2	95.70%	0.20%	0.00%	4.10%
MDV	92.90%	2.60%	0.00%	4.50%
LHD1	68.14%	31.56%	0.00%	0.30%
LHD2	34.26%	65.19%	0.00%	0.55%
MHD	34.55%	64.14%	0.55%	0.76%
HHD	0.07%	94.27%	5.42%	0.24%
OBUS	50.47%	36.98%	7.33%	5.22%
UBUS	30.61%	0.00%	55.76%	13.64%
MCY	100.00%	0.00%	0.00%	0.00%
SBUS	35.58%	25.60%	37.26%	1.56%
MH	65.59%	34.41%	0.00%	0.00%
All Other Buses	0.00%	0.00%	0.00%	0.00%
Motor Coach	0.00%	100.00%	0.00%	0.00%
PTO	0.00%	100.00%	0.00%	0.00%

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Vehicle type	VMT	Gasoline		VMT	Diesel		VMT	CNG		VMT	Electricity	
		mpg	Gallons		mpg	Gallons		mpg	Gallons		m/kWh	kWh
LDA	17,966,105	26.18	686,304	42,366	36.03	1,176	0	0.00	0	3,378,890	2.95	1,145,294
LDT1	1,618,785	21.96	73,732	577	21.33	27	0	0.00	0	187,607	2.59	72,417
LDT2	12,034,509	22.06	545,488	25,065	28.52	879	0	0.00	0	515,513	2.08	247,503
MDV	7,362,871	18.09	407,078	205,871	23.64	8,710	0	0.00	0	356,439	1.88	189,152
LHD1	880,597	14.19	62,061	407,836	20.72	19,686	0	0.00	0	3,895	1.78	2,193
LHD2	190,070	13.15	14,454	361,645	18.42	19,628	0	0.00	0	3,035	1.78	1,709
MHD	283,932	5.26	53,939	527,046	8.89	59,270	4,500	8.37	538	6,263	0.80	7,810
HHD	852	3.85	221	1,101,122	6.17	178,334	63,299	6.15	10,300	2,774	0.56	4,965
OBUS	16,441	5.08	3,234	12,045	9.00	1,338	2,388	319.59	7	1,700	0.81	2,109
UBUS	16,779	7.40	2,269	0	0.00	0	30,568	4.49	6,804	7,475	0.47	15,908
MCY	184,968	39.79	4,649	0	0.00	0	0	4.49	0	0	0.00	0
SBUS	11,646	8.96	1,299	8,381	7.37	1,137	12,198	4.26	2,860	510	0.73	702
MH	39,640	4.89	8,111	20,799	10.14	2,051	0	0.00	0	0	0.00	0
All Other Buses	0	0	0	0	0.00	0	0	0.00	0	0	0.00	0
Motor Coach	0	0	0	4,934	5.63	876	0	0.00	0	0	0.00	0
PTO	0	0	0	25,670	5.08	5,050	0	0.00	0	0	0.00	0
<b>TOTAL</b>	<b>40,607,194</b>		<b>1,862,838</b>	<b>2,743,358</b>		<b>298,162</b>	<b>112,954</b>		<b>20,509</b>	<b>4,464,102</b>		<b>1,689,762</b>

**Operation Vehicle Fuel Usage: Existing Conditions (Year 2045 No Project)**

Vehicle type	Fleet percent	Annual VMT
LDA	38.66%	18,529,704
LDT1	3.37%	1,617,548
LDT2	28.46%	13,641,308
MDV	17.86%	8,560,564
LHD1	2.75%	1,317,366
LHD2	2.32%	1,112,950
MHD	1.83%	876,639
HHD	3.83%	1,836,897
OBUS	0.04%	18,685
UBUS	0.13%	61,497
MCY	0.47%	225,220
SBUS	0.07%	32,982
MH	0.11%	54,816
All Other Buses	0.00%	0
Motor Coach	0.01%	6,996
PTO	0.07%	34,434
<b>TOTAL</b>	<b>100.00%</b>	<b>47,927,607</b>

Vehicle type	Gas percent	Diesel percent	CNG percent	Electricity percent
LDA	46.47%	0.01%	0.00%	53.52%
LDT1	42.00%	0.00%	0.00%	58.00%
LDT2	73.75%	0.12%	0.00%	26.13%
MDV	53.77%	4.68%	0.00%	41.55%
LHD1	60.98%	35.44%	0.00%	3.58%
LHD2	21.62%	75.29%	0.00%	3.09%
MHD	7.93%	78.33%	0.71%	13.03%
HHD	0.01%	95.15%	4.08%	0.76%
OBUS	9.92%	54.27%	8.52%	27.29%
UBUS	22.61%	0.00%	3.36%	74.02%
MCY	100.00%	0.00%	0.00%	0.00%
SBUS	23.66%	12.99%	35.71%	27.64%
MH	70.61%	29.39%	0.00%	0.00%
All Other Buses	0.00%	0.00%	0.00%	0.00%
Motor Coach	0.00%	100.00%	0.00%	0.00%
PTO	0.00%	100.00%	0.00%	0.00%

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Vehicle type	VMT	Gasoline		VMT	Diesel		VMT	CNG		Electricity		
		mpg	Gallons		mpg	Gallons		mpg	Gallons	m/kWh	kWh	
LDA	8,610,568	30.19	285,173	1,532	39.83	38	0	0.00	0	9,917,604	2.93	3,384,793
LDT1	679,341	25.52	26,615	2	17.17	0	0	0.00	0	938,204	2.59	362,476
LDT2	10,060,424	25.78	390,241	16,592	33.69	493	0	0.00	0	3,564,293	2.15	1,656,911
MDV	4,603,287	21.04	218,814	400,649	26.44	15,155	0	0.00	0	3,556,627	1.96	1,813,447
LHD1	803,379	17.94	44,789	466,867	23.20	20,120	0	0.00	0	47,120	1.77	26,576
LHD2	240,629	16.14	14,907	837,896	20.10	41,690	0	0.00	0	34,424	1.77	19,416
MHD	69,492	5.86	11,855	686,706	10.33	66,504	6,204	9.52	652	114,237	0.80	142,748
HHD	138	3.99	35	1,747,867	7.39	236,556	74,920	7.61	9,847	13,972	0.56	25,003
OBUS	1,854	5.58	332	10,140	9.55	1,061	1,592	302.43	5	5,099	0.81	6,317
UBUS	13,906	16.89	824	0	0.00	0	2,069	15.21	136	45,523	0.47	96,849
MCY	225,220	40.85	5,513	0	0.00	0	0	15.21	0	0	0.00	0
SBUS	7,804	10.44	748	4,286	8.42	509	11,778	4.80	2,454	9,115	0.73	12,527
MH	38,707	4.91	7,880	16,109	10.17	1,584	0	0.00	0	0	0.00	0
All Other Buses	0	0	0	0	0.00	0	0	0.00	0	0	0.00	0
Motor Coach	0	0	0	6,996	6.28	1,115	0	0.00	0	0	0.00	0
PTO	0	0	0	34,434	6.08	5,662	0	0.00	0	0	0.00	0
<b>TOTAL</b>	<b>25,354,750</b>		<b>1,007,725</b>	<b>4,230,076</b>		<b>390,487</b>	<b>96,563</b>		<b>13,093</b>	<b>18,246,218</b>		<b>7,547,061</b>

**Operation Vehicle Fuel Usage: Full Buildout (Year 2045)**

Vehicle type	Fleet percent	Annual VMT
LDA	38.66%	18,671,012
LDT1	3.37%	1,629,883
LDT2	28.46%	13,745,338
MDV	17.86%	8,625,847
LHD1	2.75%	1,327,412
LHD2	2.32%	1,121,438
MHD	1.83%	883,324
HHD	3.83%	1,850,905
OBUS	0.04%	18,828
UBUS	0.13%	61,966
MCY	0.47%	226,938
SBUS	0.07%	33,234
MH	0.11%	55,234
All Other Buses	0.00%	0
Motor Coach	0.01%	7,049
PTO	0.07%	34,697
<b>TOTAL</b>	<b>100.00%</b>	<b>48,293,106</b>

Vehicle type	Gas percent	Diesel percent	CNG percent	Electricity percent
LDA	46.47%	0.01%	0.00%	53.52%
LDT1	42.00%	0.00%	0.00%	58.00%
LDT2	73.75%	0.12%	0.00%	26.13%
MDV	53.77%	4.68%	0.00%	41.55%
LHD1	60.98%	35.44%	0.00%	3.58%
LHD2	21.62%	75.29%	0.00%	3.09%
MHD	7.93%	78.33%	0.71%	13.03%
HHD	0.01%	95.15%	4.08%	0.76%
OBUS	9.92%	54.27%	8.52%	27.29%
UBUS	22.61%	0.00%	3.36%	74.02%
MCY	100.00%	0.00%	0.00%	0.00%
SBUS	23.66%	12.99%	35.71%	27.64%
MH	70.61%	29.39%	0.00%	0.00%
All Other Buses	0.00%	0.00%	0.00%	0.00%
Motor Coach	0.00%	100.00%	0.00%	0.00%
PTO	0.00%	100.00%	0.00%	0.00%

<< Equal to T6 (<https://www.arb.ca.gov/msei/downloads/emfac2014/emfac2014-vol3-technical-documentation-052015.pdf>)  
 << Equal to T7 (<https://www.arb.ca.gov/msei/downloads/emfac2014/emfac2014-vol3-technical-documentation-052015.pdf>)  
 << OBUS (<https://www.arb.ca.gov/msei/downloads/emfac2014/emfac2014-vol3-technical-documentation-052015.pdf>)

Vehicle type	VMT	Gasoline		Diesel		CNG		Electricity		
		mpg	Gallons	mpg	Gallons	mpg	Gallons	m/kWh	kWh	
LDA	8,676,232	30.19	287,347	1,544	39	0	0	9,993,236	2.93	3,410,605
LDT1	684,522	25.52	26,818	2	0	0	0	945,359	2.59	365,240
LDT2	10,137,146	25.78	393,217	16,718	496	0	0	3,591,474	2.15	1,669,546
MDV	4,638,392	21.04	220,483	403,705	26.44	15,270	0	3,583,750	1.96	1,827,276
LHD1	809,506	17.94	45,131	470,427	23.20	20,273	0	47,479	1.77	26,779
LHD2	242,464	16.14	15,020	844,286	20.10	42,008	0	34,687	1.77	19,564
MHD	70,022	5.86	11,945	691,943	10.33	67,011	6,251	115,108	0.80	143,836
HHD	139	3.99	35	1,761,196	7.39	238,360	75,491	14,079	0.56	25,194
OBUS	1,868	5.58	335	10,217	9.55	1,069	1,605	5,138	0.81	6,365
UBUS	14,012	16.89	830	0	0.00	0	2,084	45,870	0.47	97,588
MCY	226,938	40.85	5,555	0	0.00	0	15.21	0	0.00	0
SBUS	7,863	10.44	753	4,318	8.42	513	11,868	9,185	0.73	12,622
MH	39,002	4.91	7,940	16,232	10.17	1,596	0	0	0.00	0
All Other Buses	0	0	0	0	0.00	0	0	0	0.00	0
Motor Coach	0	0	0	7,049	6.28	1,123	0	0	0.00	0
PTO	0	0	0	34,697	6.08	5,705	0	0	0.00	0
<b>TOTAL</b>	<b>25,548,107</b>		<b>1,015,410</b>	<b>4,262,335</b>		<b>393,465</b>	<b>97,299</b>	<b>13,193</b>	<b>18,385,365</b>	<b>7,604,615</b>

Vehicle type	VMT/day	GAS			DSL			NO			ELCC		
		Gallons/day	Miles/gallon	CO2/day	Gallons/day	Miles/gallon	CO2/day	Gallons/day	Miles/gallon	CO2/day	kWh/day	Miles/kWh	
All other buses	0	0	0.00	0	0	0.00	0	0	0.00	0	0	0	0.00
LD1	28,228,634	1,078,332	26.18	66,566	1,847	36.03	0	0	0.00	5,308,967	1,799,505	2.95	0
LD17	2,543,461	113,849	21.96	907	43	21.33	0	0	0.00	294,771	113,782	2.59	0
LD17	18,920,815	857,080	22.06	39,383	1,281	28.92	0	0	0.00	809,992	368,880	2.98	0
LHD1	1,353,608	97,911	14.19	640,799	30,931	20.72	0	0	0.00	6,120	3,445	1.78	0
LHD2	298,640	22,710	13.15	548,222	30,841	18.42	0	0	0.00	4,769	2,685	1.78	0
MCY	292,034	2,904	0.79	0	0	0.00	0	0	0.00	0	0	0.00	0
MDV	11,568,663	639,608	18.09	323,467	13,885	23.64	0	0	0.00	560,242	297,199	1.88	0
MH	67,282	12,744	4.89	32,680	3,223	10.14	0	0	0.00	0	0	0.00	0
Motor Coach	0	0	0.00	2,253	1,276	5.63	0	0	0.00	0	0	0.00	0
OBUS	29,746	5,851	5.08	14,040	1,560	9.00	4,320	14	319.59	3,075	3,816	0.81	0
PTO	0	0	0.00	40,334	7,934	5.08	0	0	0.00	0	0	0.00	0
SBUS	18,398	2,042	9.06	13,168	1,787	7.37	19,166	4,454	4.26	802	1,102	0.73	0
T6	446,103	84,746	5.26	828,075	93,123	8.89	7,071	845	8.37	9,841	12,271	0.80	0
TP	1,339	348	3.85	1,730,034	280,190	6.17	39,453	16,182	6.15	4,338	2,801	0.56	0
UBUS	26,362	3,665	7.40	0	0	0.00	10,900	4,491	11.745	0	24,976	0.67	0
<b>Total</b>	<b>83,806,577</b>	<b>3,927,688</b>	<b>21.29</b>	<b>4,305,426</b>	<b>467,920</b>	<b>9.20</b>	<b>178,091</b>	<b>32,225</b>	<b>5.52</b>	<b>7,014,473</b>	<b>2,655,482</b>	<b>2.64</b>	<b>0</b>

Source: EMFAC2025 (v2.1.0) Emissions Inventory  
 Region Type: Sub-Area  
 Region: Orange (C)  
 Calendar Year: 2025, 2045  
 Season: Annual  
 Vehicle Classification: EMFAC202X Categories  
 Units: miles/day for Combustion VMT and Electric VMT, trips/day for Trips, tons/day for Emissions, 1000 gallons/day for Gasoline and Diesel Fuel Consumption, 1000 diesel equivalent gallons/day for Natural Gas Fuel Consumption, kWh/day for Energy Consumption, kg/day for Hydrogen Consumption

Region	Calendar Year	Vehicle Category	Model Year	Speed	Fuel	Population	Total VMT	CVWT	EVMT	Trips	Fuel Consumption	Energy Consumption
Orange (C)	2025	IDA	Aggregate	Gasoline	92391.1432	2729018.9	2729018.9	0	0	405913.787	1944.2832	0
Orange (C)	2025	IDA	Aggregate	Diesel	2667.020211	66566.04683	66566.04683	0	0	10911.9343	1.84778102	0
Orange (C)	2025	IDA	Aggregate	Electricity	108094.3823	480241.589	0	430215.589	53791.074	0	1430037.221	0
Orange (C)	2025	IDA	Aggregate	Plug-in Hybrid	48135.77222	194266.817	937715.545	1000651.272	197664.6152	0	369467.9879	0
Orange (C)	2025	LD1	Aggregate	Gasoline	85302.53037	247824.441	247824.441	0	350137.3371	0	113.5206517	0
Orange (C)	2025	LD1	Aggregate	Diesel	39.76603733	98.964222	0	0	108.5917399	0	0.04256082	0
Orange (C)	2025	LD1	Aggregate	Electricity	4772.170562	229100.5445	906.95472	229100.5445	23919.30649	0	0	85034.96487
Orange (C)	2025	LD1	Aggregate	Plug-in Hybrid	2695.456594	139707.1612	65036.74211	66670.41909	10989.63853	0	2.38213173	28147.19579
Orange (C)	2025	LD17	Aggregate	Gasoline	252128.9329	1310403.97	0	0	0	0	811.2036	0
Orange (C)	2025	LD17	Aggregate	Diesel	1161.754233	39382.84785	39382.84785	0	0	0	5.669544224	1.380680384
Orange (C)	2025	LD17	Aggregate	Electricity	2153.143954	97995.11985	0	97995.11985	11408.6413	0	40687.11491	0
Orange (C)	2025	LD17	Aggregate	Plug-in Hybrid	23039.51226	129781.3634	718811.3634	711986.7677	127941.1126	0	25.82971118	349192.9339
Orange (C)	2025	LHD1	Aggregate	Gasoline	39807.66857	1383608.248	1383608.248	0	572396.558	0	97.51107332	0
Orange (C)	2025	LHD1	Aggregate	Diesel	17948.78272	640798.5234	640798.5234	0	217901.2109	0	30.93061206	0
Orange (C)	2025	LHD1	Aggregate	Electricity	107.3978325	4429.2651	0	6120.312951	1423.907621	0	3445.215449	0
Orange (C)	2025	LHD2	Aggregate	Gasoline	7828.72394	298640.4054	298640.4054	0	127534.414	0	22.71007263	0
Orange (C)	2025	LHD2	Aggregate	Diesel	12384.29803	568221.7892	568221.7892	0	170334.361	0	30.64050799	0
Orange (C)	2025	LHD2	Aggregate	Electricity	4769.606837	4769.606837	0	4769.606837	1152.34888	0	2684.649929	0
Orange (C)	2025	MCY	Aggregate	Gasoline	48997.40519	290624.2921	290624.2921	0	93826.27378	0	7.30384978	0
Orange (C)	2025	MDV	Aggregate	Gasoline	326720.0341	11390799.86	11390799.86	0	1508012.396	0	631.1535589	0
Orange (C)	2025	MDV	Aggregate	Diesel	8043.335878	324697.3071	324697.3071	0	39176.93996	0	13.8866434	0
Orange (C)	2025	MDV	Aggregate	Electricity	8331.791079	390454.844	0	390454.844	42566.8573	0	193575.7064	0
Orange (C)	2025	MDV	Aggregate	Plug-in Hybrid	7542.982518	347452.1228	177862.6649	10589.4579	31246.76368	0	6.454365869	103823.459
Orange (C)	2025	MH	Aggregate	Gasoline	6759.011329	62382.26124	62382.26124	0	719.627558	0	12.74997519	0
Orange (C)	2025	MH	Aggregate	Diesel	3469.680234	32979.69385	32979.69385	0	369.2670211	0	3.222760664	0
Orange (C)	2025	Motor Coach	Aggregate	Diesel	65.6886773	7752.661032	7752.661032	0	1509.525804	0	1.3758993	0
Orange (C)	2025	OBUS	Aggregate	Gasoline	925.2251945	29745.65726	29745.65726	0	8237.798032	0	5.851104485	0
Orange (C)	2025	OBUS	Aggregate	Diesel	318.4848796	14039.91819	14039.91819	0	284.5219329	0	1.859552989	0
Orange (C)	2025	OBUS	Aggregate	Electricity	45.76100116	3074.837296	0	3074.837296	407.2778809	0	3816.488164	0
Orange (C)	2025	OBUS	Aggregate	Natural Gas	89.2362848	4320.010244	4320.010244	0	794.113435	0	0.031557459	0
Orange (C)	2025	PTO	Aggregate	Diesel	4033.53204	4033.53204	0	0	0	0	7.934164358	0
Orange (C)	2025	SBUS	Aggregate	Gasoline	465.8809518	18297.8903	18297.8903	0	1863.523807	0	2.041539617	0
Orange (C)	2025	SBUS	Aggregate	Diesel	677.007572	13168.2885	13168.2885	0	9803.009646	0	1.781445447	0
Orange (C)	2025	SBUS	Aggregate	Electricity	24.8548717	802.06478	0	802.06478	118.5143494	0	1102.34733	0
Orange (C)	2025	SBUS	Aggregate	Natural Gas	811.1999479	19166.40425	19166.40425	0	11746.17525	0	4.48430292	0
Orange (C)	2025	T6 CARP Class 4	Aggregate	Diesel	14.87292961	838.187077	838.187077	0	340.743245	0	0.08976219	0
Orange (C)	2025	T6 CARP Class 5	Aggregate	Diesel	151.65682433	151.650922	151.650922	0	151.6515182	0	15.06839854	0
Orange (C)	2025	T6 CARP Class 6	Aggregate	Diesel	65.03495721	3650.789854	3650.789854	0	1494.503317	0	0.38889333	0
Orange (C)	2025	T6 CARP Class 7	Aggregate	Diesel	101.9999136	18376.34905	18376.34905	0	2343.958015	0	1.835260046	0
Orange (C)	2025	T6 CARP Class 7	Aggregate	Natural Gas	12.03240209	17.20231729	17.20231729	0	12.03240209	0	0.03124952	0
Orange (C)	2025	T6 Instate Delivery Class 4	Aggregate	Diesel	1584.135845	46504.66529	46504.66529	0	22605.61851	0	5.32619652	0
Orange (C)	2025	T6 Instate Delivery Class 4	Aggregate	Natural Gas	2.636879909	80.9214052	80.9214052	0	37.628763	0	0.009432066	0
Orange (C)	2025	T6 Instate Delivery Class 5	Aggregate	Diesel	1433.340024	42577.28846	42577.28846	0	396.478358	0	4.78749442	0
Orange (C)	2025	T6 Instate Delivery Class 5	Aggregate	Electricity	2.820699866	109.2743243	0	109.2743243	40.25138452	0	136.1235973	0
Orange (C)	2025	T6 Instate Delivery Class 5	Aggregate	Natural Gas	3.179939185	99.70261989	99.70261989	0	45.37772316	0	0.01166193	0
Orange (C)	2025	T6 Instate Delivery Class 6	Aggregate	Diesel	4466.889445	132825.5265	132825.5265	0	155.393579	0	15.06839854	0
Orange (C)	2025	T6 Instate Delivery Class 6	Aggregate	Natural Gas	16.7196286	540.6458938	540.6458938	0	238.5891002	0	0.065799863	0
Orange (C)	2025	T6 Instate Delivery Class 7	Aggregate	Diesel	637.9895066	3049.90237	3049.90237	0	9104.110259	0	3.318399966	0
Orange (C)	2025	T6 Instate Delivery Class 7	Aggregate	Electricity	458.11208088	0	0	4580.102092	0	0	576.844572	0
Orange (C)	2025	T6 Instate Delivery Class 7	Aggregate	Natural Gas	17.05823616	809.5365782	809.5365782	0	243.4210301	0	0.094180859	0
Orange (C)	2025	T6 Instate Other Class 4	Aggregate	Diesel	1639.123842	58143.20959	58143.20959	0	18948.13867	0	6.779424883	0
Orange (C)	2025	T6 Instate Other Class 4	Aggregate	Natural Gas	36.465910317	3.416521385	0	0	0.025944699	0	0.003619212	0
Orange (C)	2025	T6 Instate Other Class 5	Aggregate	Diesel	5618.736689	208420.3174	208420.3174	0	64952.59497	0	23.7907198	0
Orange (C)	2025	T6 Instate Other Class 5	Aggregate	Natural Gas	7.309093755	263.9038439	263.9038439	0	84.49254881	0	0.031458157	0
Orange (C)	2025	T6 Instate Other Class 6	Aggregate	Diesel	13.671617149	137465.6066	137465.6066	0	15.61003884	0	15.61003884	0
Orange (C)	2025	T6 Instate Other Class 6	Aggregate	Natural Gas	6.928283211	251.4698741	251.4698741	0	80.09095519	0	0.029924703	0
Orange (C)	2025	T6 Instate Other Class 7	Aggregate	Diesel	1428.880705	60711.15816	60711.15816	0	16518.0459	0	6.80307541	0
Orange (C)	2025	T6 Instate Other Class 7	Aggregate	Electricity	315.87838485	0	0	319.882086	0	0	398.3849058	0
Orange (C)	2025	T6 Instate Tractor Class 6	Aggregate	Natural Gas	32.00507412	1375.29766	1375.29766	0	369.9785688	0	0.163382773	0
Orange (C)	2025	T6 Instate Tractor Class 6	Aggregate	Diesel	21.24727273	964.4269335						

EMFAC Fuel Usage Year 2045

Vehicle Type	GAS			DIESEL			NATURAL GAS			ELECTRICITY		
	MMBtu/day	MMBtu/year	MMBtu/yr	MMBtu/day	MMBtu/year	MMBtu/yr	MMBtu/day	MMBtu/year	MMBtu/yr	kWh/day	kWh/yr	
All other buses	0	0	0	0	0	0	0	0	0	0	0	
LDA	14,286,439	473,131	30,19	2,542	81	39,83	0	0	0	16,455,040	5,615,993	
LD1	1,128,841	44,020	3	0	0	17,17	0	0	0	1,655,080	559,648	
LD2	16,677,459	646,915	25,78	29,505	816	33,69	0	0	0	5,908,432	2,746,709	
LD11	1,310,873	74,197	5	0	0	23,11	0	0	0	773,409	23,311	
LD12	398,851	25,707	17,14	1,388,785	49,997	22,70	0	0	0	57,037	32,181	
MCY	37,541	9,188	40,81	0	0	0	0	0	0	0	0	
MDOV	7,171,017	362,869	21,04	624,133	23,068	26,44	0	0	0	5,840,521	2,824,970	
MH	64,549	13,105	4,91	26,290	2,635	10,17	0	0	0	0	0	
Motor Coach	0	0	0	0	0	0	0	0	0	0	0	
ORUS	4,125	739	5,58	10,923	1,143	9,55	3,543	13	305,43	11,343	14,052	
PTD	0	0	0	0	0	0	0	0	0	0	0	
SBUS	12,608	1,208	10,44	6,924	8,42	19,078	0	0	0	1,473	20,23	
T6	113,894	19,430	5,86	1,129,497	108,998	10,33	10,148	1,048	9,52	187,232	233,660	
T7	230	58	3,99	2,950,011	392,894	7,39	124,433	16,354	7,81	23,206	41,537	
UBUS	21,368	1,266	16,89	0	0	0	3,179	209	15,21	69,931	148,820	
<b>Total</b>	<b>41,579,599</b>	<b>1,648,842</b>	<b>25,22</b>	<b>6,938,618</b>	<b>644,680</b>	<b>10,79</b>	<b>160,151</b>	<b>21,607</b>	<b>7,42</b>	<b>79,897,852</b>	<b>12,272,117</b>	

Source: EMFAC2025 (v2.1.0) Emissions Inventory  
 Region Type: Sub-Area  
 Region: Orange (SC)  
 Calendar Year: 2025, 2045  
 Season: Annual  
 Vehicle Classification: EMFAC2025 Categories  
 Units: miles/day for Combustion VMT and Electric VMT, trips/day for Trips, ton/day for Emissions, 1000 gallons/day for Gasoline and Diesel Fuel Consumption, 1000 diesel equivalent gallon/day for Natural Gas Fuel Consumption, kWh/day for Energy Consumption, kg/day for Hydrogen Consumption

Region	Calendar Year	Vehicle Category	Model Year	Speed	Fuel	Population	Total VMT	CVMT	EVMT	Trips	Fuel Consumption	Energy Consumption
Orange (SC)	2045	LDA	Aggregate	Aggregate	Diesel	457170603	13031539.34	13031539.34	0	2012563.298	4722552313	0
Orange (SC)	2045	LDA	Aggregate	Aggregate	Diesel	132729682	2541292785	2541292785	0	475400832	0.00818776	0
Orange (SC)	2045	LDA	Aggregate	Aggregate	Electricity	305824882	12272144.62	12272144.62	0	173296432	0.00818776	404662.613
Orange (SC)	2045	LDA	Aggregate	Aggregate	Plug-in Hybrid	148313284	5482814.958	1254899198	4272915.76	430316.651	458959821	1551930.848
Orange (SC)	2045	LDA	Aggregate	Aggregate	Fuel Cell Electric Vehicle	1028302680	7027979.79	0	0	100249932	0	0
Orange (SC)	2045	LD1	Aggregate	Aggregate	Gasoline	356134543	981912.4356	981912.4356	0	149287.481	38.8463043	0
Orange (SC)	2045	LD1	Aggregate	Aggregate	Diesel	113861962	112410076	112410076	0	241326035	0.00218089	0
Orange (SC)	2045	LD1	Aggregate	Aggregate	Electricity	326212003	119621.132	119621.132	0	16355656036	0	44707.4992
Orange (SC)	2045	LD1	Aggregate	Aggregate	Plug-in Hybrid	148724505	497873.3386	141928.1515	351669.1471	40739.7882	1.518310856	152400.145
Orange (SC)	2045	LD1	Aggregate	Aggregate	Fuel Cell Electric Vehicle	172432852	14027268.98	0	0	14027268.98	0	0
Orange (SC)	2045	LD2	Aggregate	Aggregate	Gasoline	458284958	15194074.65	15194074.65	0	211107.266	592.8319703	0
Orange (SC)	2045	LD2	Aggregate	Aggregate	Diesel	813242378	27504.6212	27504.6212	0	378156072	0.81654491	0
Orange (SC)	2045	LD2	Aggregate	Aggregate	Electricity	503936293	1946602.311	1946602.311	0	2484312022	0	803261.9022
Orange (SC)	2045	LD2	Aggregate	Aggregate	Plug-in Hybrid	152045.7144	5457356.436	1483884.643	3973971.793	394386.627	1.518310856	193487.402
Orange (SC)	2045	LD2	Aggregate	Aggregate	Fuel Cell Electric Vehicle	188238085	14027268.98	0	0	14027268.98	0	0
Orange (SC)	2045	LD11	Aggregate	Aggregate	Gasoline	395840255	1330872.075	1330872.075	0	58576.2379	74.19716127	0
Orange (SC)	2045	LD11	Aggregate	Aggregate	Diesel	226478869	73407.5058	73407.5058	0	282378.7869	33.3306068	0
Orange (SC)	2045	LD11	Aggregate	Aggregate	Electricity	298508867	67808.50843	67808.50843	0	285650948	44025.51735	0
Orange (SC)	2045	LD11	Aggregate	Aggregate	Fuel Cell Electric Vehicle	2207455707	8440378809	0	8440378809	3003057159	0	0
Orange (SC)	2045	LD12	Aggregate	Aggregate	Gasoline	1129624434	39884.8236	39884.8236	0	1442920202	24.70728119	0
Orange (SC)	2045	LD12	Aggregate	Aggregate	Diesel	3802213344	1389784.82	1389784.82	0	6079949284	69.09948294	0
Orange (SC)	2045	LD12	Aggregate	Aggregate	Electricity	149136121	57097.12025	57097.12025	0	1998486836	0	32180.57482
Orange (SC)	2045	LD12	Aggregate	Aggregate	Fuel Cell Electric Vehicle	1574079212	6128316583	0	0	6128316583	212.70884	0
Orange (SC)	2045	MCY	Aggregate	Aggregate	Gasoline	6734889229	374541.1559	374541.1559	0	125700.1097	9.168467022	0
Orange (SC)	2045	MCY	Aggregate	Aggregate	Diesel	218383323	690588.02	690588.02	0	95446.6867	331.01091	0
Orange (SC)	2045	MCY	Aggregate	Aggregate	Electricity	1779519217	624131.313	624131.313	0	8260173186	23.60803384	0
Orange (SC)	2045	MDOV	Aggregate	Aggregate	Electricity	1295112949	4862414.189	4862414.189	0	620208.063	0	2410500.289
Orange (SC)	2045	MDOV	Aggregate	Aggregate	Plug-in Hybrid	209643875	945393787	2664882898	6705111489	728749067	9.858288236	418483.3066
Orange (SC)	2045	MDOV	Aggregate	Aggregate	Fuel Cell Electric Vehicle	234724217	9003952005	0	0	11779.3024	0	0
Orange (SC)	2045	MH	Aggregate	Aggregate	Gasoline	688376307	64388.9843	64388.9843	0	773166511	13.10457573	0
Orange (SC)	2045	MH	Aggregate	Aggregate	Diesel	299478585	36789.89963	36789.89963	0	31475951	2.616450053	0
Orange (SC)	2045	MH	Aggregate	Aggregate	Electricity	104788842	11634.1996	11634.1996	0	2408.04793	1.854038474	0
Orange (SC)	2045	Motor Coach	Aggregate	Aggregate	Gasoline	296355569	4125.22697	4125.22697	0	2635.94933	0.43878781	0
Orange (SC)	2045	ORUS	Aggregate	Aggregate	Diesel	245323951	10222.87844	10222.87844	0	1185.156437	1.184249194	0
Orange (SC)	2045	ORUS	Aggregate	Aggregate	Electricity	219339300	11341.1201	11341.1201	0	1872.37028	0	14052.21925
Orange (SC)	2045	ORUS	Aggregate	Aggregate	Gasoline	418233881	3542.67933	3542.67933	0	692.613666	0.01171999	0
Orange (SC)	2045	ORUS	Aggregate	Aggregate	Fuel Cell Electric Vehicle	204608035	1139.865888	0	0	1139.865888	182.190414	0
Orange (SC)	2045	PTD	Aggregate	Aggregate	Diesel	0	57264.18162	57264.18162	0	0	941523487	0
Orange (SC)	2045	SBUS	Aggregate	Aggregate	Gasoline	324643404	12607.6107	12607.6107	0	1298.57722	1.28811469	0
Orange (SC)	2045	SBUS	Aggregate	Aggregate	Diesel	350381259	6923.866106	6923.866106	0	5082.206703	0.82240399	0
Orange (SC)	2045	SBUS	Aggregate	Aggregate	Electricity	388329042	1476.12562	1476.12562	0	1779.41884	0	20237.89667
Orange (SC)	2045	SBUS	Aggregate	Aggregate	Gasoline	360210288	19028.06778	19028.06778	0	13902.29256	3.96261527	0
Orange (SC)	2045	SBUS	Aggregate	Aggregate	Fuel Cell Electric Vehicle	403789975	1564.02351	1564.02351	0	184.556485	0	0
Orange (SC)	2045	TE CARP Class 4	Aggregate	Aggregate	Diesel	119862811	119862811	0	0	119862811	0	0
Orange (SC)	2045	TE CARP Class 5	Aggregate	Aggregate	Diesel	384075111	2170.27233	2170.27233	0	891.8067165	0.204669766	0
Orange (SC)	2045	TE CARP Class 6	Aggregate	Aggregate	Diesel	343332753	5220.70294	5220.70294	0	2187.75229	0.492399796	0
Orange (SC)	2045	TE CARP Class 7	Aggregate	Aggregate	Diesel	141572901	20507.67111	20507.67111	0	1912.508476	2.202270153	0
Orange (SC)	2045	TE CARP Class 7	Aggregate	Aggregate	Natural Gas	0.07436619	13.68252866	13.68252866	0	1.73313496	0.001209544	0
Orange (SC)	2045	TE Instant Delivery Class 4	Aggregate	Aggregate	Diesel	21748925	8472.92151	8472.92151	0	3164.58882	6.52784848	0
Orange (SC)	2045	TE Instant Delivery Class 4	Aggregate	Aggregate	Gasoline	144680625	429.9206618	429.9206618	0	209.056728	0.60564666	0
Orange (SC)	2045	TE Instant Delivery Class 5	Aggregate	Aggregate	Diesel	205738234	6925.53289	6925.53289	0	2938.84662	5.94610199	0
Orange (SC)	2045	TE Instant Delivery Class 5	Aggregate	Aggregate	Gasoline	0.21482811	0	0	0	7.11703678	0	8.777230029
Orange (SC)	2045	TE Instant Delivery Class 5	Aggregate	Aggregate	Natural Gas	13.69932142	403.4504798	403.4504798	0	194.2050167	0.805687419	0
Orange (SC)	2045	TE Instant Delivery Class 6	Aggregate	Aggregate	Diesel	61034819	179170.088	179170.088	0	8706.77648	17.8441404	0
Orange (SC)	2045	TE Instant Delivery Class 6	Aggregate	Aggregate	Natural Gas	46.63152167	1202.238137	1202.238137	0	580.330294	0.13089794	0
Orange (SC)	2045	TE Instant Delivery Class 7	Aggregate	Aggregate	Diesel	913.137874	41789.70885	41789.70885	0	13930.47746	0.42885008	0
Orange (SC)	2045	TE Instant Delivery Class 7	Aggregate	Aggregate	Electricity	41.8202664	7556.04622	7556.04622	0	593.551489	3200.375443	0
Orange (SC)	2045	TE Instant Delivery Class 7	Aggregate	Aggregate	Natural Gas	20.8698739	958.62061	958.62061	0	299.23158	0.00850012	0
Orange (SC)	2045	TE Instant Delivery Class 7	Aggregate	Aggregate	Fuel Cell Electric Vehicle	399428931	251.145853	0	251.145853	56.9992285	0	0
Orange (SC)	2045	TE Instant Other Class 4	Aggregate	Aggregate	Diesel	8102810496	8207832896	0	0	271513028	8.02664433	0
Orange (SC)	2045	TE Instant Other Class 4	Aggregate	Aggregate	Natural Gas	14.83808311	534.5795129	534.5795129	0	171.5282411	0.05643574	0
Orange (SC)	2045	TE Instant Other Class 5	Aggregate	Aggregate	Diesel	851312058	29603.4936	29603.4936	0	9841.63416	29.1292749	0
Orange (SC)	2045	TE Instant Other Class 5	Aggregate	Aggregate	Natural Gas	53.21341919	1919.27537	1919.27537	0	615.1785112	0.297962889	0
Orange (SC)	2045	TE Instant Other Class 6	Aggregate	Aggregate	Diesel	5644.90217	195601.9809	195601.9809	0	62525.10		