

Appendix

Appendix A Air Quality, GHG, and Energy Background and Modeling Data

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Air Quality, Greenhouse Gas, and Energy Appendix

Air Quality and Greenhouse Gas Background and Modeling Data

AIR QUALITY

Air Quality Regulatory Setting

The proposed project has the potential to release gaseous emissions of criteria pollutants and dust into the ambient air; therefore, it falls under the ambient air quality standards promulgated at the local, state, and federal levels. The project site is in the SoCAB and is subject to the rules and regulations imposed by the South Coast Air Quality Management District (South Coast AQMD). However, South Coast AQMD reports to California Air Resources board (CARB), and all criteria emissions are also governed by the California and national Ambient Air Quality Standards (AAQS). Federal, state, regional, and local laws, regulations, plans, or guidelines that are potentially applicable to the proposed project are summarized below.

AMBIENT AIR QUALITY STANDARDS

The Clean Air Act (CAA) was passed in 1963 by the US Congress and has been amended several times. The 1970 Clean Air Act amendments strengthened previous legislation and laid the foundation for the regulatory scheme of the 1970s and 1980s. In 1977, Congress again added several provisions, including nonattainment requirements for areas not meeting National AAQS and the Prevention of Significant Deterioration program. The 1990 amendments represent the latest in a series of federal efforts to regulate the protection of air quality in the United States. The CAA allows states to adopt more stringent standards or to include other pollution species. The California Clean Air Act (CCAA), signed into law in 1988, requires all areas of the state to achieve and maintain the California AAQS by the earliest practical date. The California AAQS tend to be more restrictive than the National AAQS, based on even greater health and welfare concerns.

These National AAQS and California AAQS are the levels of air quality considered to provide a margin of safety in the protection of the public health and welfare. They are designed to protect “sensitive receptors” most susceptible to further respiratory distress, such as asthmatics, the elderly, very young children, people already weakened by other disease or illness, and persons engaged in strenuous work or exercise. Healthy adults can tolerate occasional exposure to air pollutant concentrations considerably above these minimum standards before adverse effects are observed.

Both California and the federal government have established health-based AAQS for seven air pollutants. As shown in Table 1, *Ambient Air Quality Standards for Criteria Pollutants*, these pollutants include ozone (O₃), nitrogen dioxide (NO₂), carbon monoxide (CO), sulfur dioxide (SO₂), coarse inhalable particulate matter (PM₁₀), fine inhalable particulate matter (PM_{2.5}), and lead (Pb). In addition, the state has set standards for

sulfates, hydrogen sulfide, vinyl chloride, and visibility-reducing particles. These standards are designed to protect the health and welfare of the populace with a reasonable margin of safety.

Table 1 Ambient Air Quality Standards for Criteria Pollutants

Pollutant	Averaging Time	California Standard ¹	Federal Primary Standard ²	Major Pollutant Sources
Ozone (O ₃) ³	1 hour	0.09 ppm	*	Motor vehicles, paints, coatings, and solvents.
	8 hours	0.070 ppm	0.070 ppm	
Carbon Monoxide (CO)	1 hour	20 ppm	35 ppm	Internal combustion engines, primarily gasoline-powered motor vehicles.
	8 hours	9.0 ppm	9 ppm	
Nitrogen Dioxide (NO ₂)	Annual Arithmetic Mean	0.030 ppm	0.053 ppm	Motor vehicles, petroleum-refining operations, industrial sources, aircraft, ships, and railroads.
	1 hour	0.18 ppm	0.100 ppm	
Sulfur Dioxide (SO ₂)	Annual Arithmetic Mean	*	0.030 ppm	Fuel combustion, chemical plants, sulfur recovery plants, and metal processing.
	1 hour	0.25 ppm	0.075 ppm	
	24 hours	0.04 ppm	0.14 ppm	
Respirable Coarse Particulate Matter (PM ₁₀)	Annual Arithmetic Mean	20 µg/m ³	*	Dust and fume-producing construction, industrial, and agricultural operations, combustion, atmospheric photochemical reactions, and natural activities (e.g., wind-raised dust and ocean sprays).
	24 hours	50 µg/m ³	150 µg/m ³	
Respirable Fine Particulate Matter (PM _{2.5}) ⁴	Annual Arithmetic Mean	12 µg/m ³	12 µg/m ³	Dust and fume-producing construction, industrial, and agricultural operations, combustion, atmospheric photochemical reactions, and natural activities (e.g., wind-raised dust and ocean sprays).
	24 hours	*	35 µg/m ³	
Lead (Pb)	30-Day Average	1.5 µg/m ³	*	Present source: lead smelters, battery manufacturing & recycling facilities. Past source: combustion of leaded gasoline.
	Calendar Quarter	*	1.5 µg/m ³	
	Rolling 3-Month Average	*	0.15 µg/m ³	
Sulfates (SO ₄) ⁵	24 hours	25 µg/m ³	*	Industrial processes.
Visibility Reducing Particles	8 hours	ExCo = 0.23/km visibility of 10≥ miles	No Federal Standard	Visibility-reducing particles consist of suspended particulate matter, which is a complex mixture of tiny particles that consists of dry solid fragments, solid cores with liquid coatings, and small droplets of liquid. These particles vary greatly in shape, size and chemical composition, and can be made up of many different materials such as metals, soot, soil, dust, and salt.

Table 1 Ambient Air Quality Standards for Criteria Pollutants

Pollutant	Averaging Time	California Standard ¹	Federal Primary Standard ²	Major Pollutant Sources
Hydrogen Sulfide	1 hour	0.03 ppm	No Federal Standard	Hydrogen sulfide (H ₂ S) is a colorless gas with the odor of rotten eggs. It is formed during bacterial decomposition of sulfur-containing organic substances. Also, it can be present in sewer gas and some natural gas and can be emitted as the result of geothermal energy exploitation.
Vinyl Chloride	24 hours	0.01 ppm	No Federal Standard	Vinyl chloride (chloroethene), a chlorinated hydrocarbon, is a colorless gas with a mild, sweet odor. Most vinyl chloride is used to make polyvinyl chloride (PVC) plastic and vinyl products. Vinyl chloride has been detected near landfills, sewage plants, and hazardous waste sites, due to microbial breakdown of chlorinated solvents.

Source: CARB 2016.

Notes: ppm: parts per million; µg/m³: micrograms per cubic meter

* Standard has not been established for this pollutant/duration by this entity.

1 California standards for O₃, CO (except 8-hour Lake Tahoe), SO₂ (1 and 24 hour), NO₂, and particulate matter (PM₁₀, PM_{2.5}, and visibility reducing particles), are values that are not to be exceeded. All others are not to be equalled or exceeded. California ambient air quality standards are listed in the Table of Standards in Section 70200 of Title 17 of the California Code of Regulations.

2 National standards (other than O₃, PM, and those based on annual arithmetic mean) are not to be exceeded more than once a year. The O₃ standard is attained when the fourth highest 8-hour concentration measured at each site in a year, averaged over three years, is equal to or less than the standard. For PM₁₀, the 24-hour standard is attained when the expected number of days per calendar year with a 24-hour average concentration above 150 µg/m³ is equal to or less than one. For PM_{2.5}, the 24-hour standard is attained when 98 percent of the daily concentrations, averaged over three years, are equal to or less than the standard.

3 On October 1, 2015, the national 8-hour ozone primary and secondary standards were lowered from 0.075 to 0.070 ppm.

4 On December 14, 2012, the national annual PM_{2.5} primary standard was lowered from 15 µg/m³ to 12.0 µg/m³. The existing national 24-hour PM_{2.5} standards (primary and secondary) were retained at 35 µg/m³, as was the annual secondary standard of 15 µg/m³. The existing 24-hour PM₁₀ standards (primary and secondary) of 150 µg/m³ also were retained. The form of the annual primary and secondary standards is the annual mean, averaged over 3 years.

5 On June 2, 2010, a new 1-hour SO₂ standard was established and the existing 24-hour and annual primary standards were revoked. The 1-hour national standard is in units of parts per billion (ppb). California standards are in units of parts per million (ppm). To directly compare the 1-hour national standard to the California standard the units can be converted to ppm. In this case, the national standard of 75 ppb is identical to 0.075 ppm.

California has also adopted a host of other regulations that reduce criteria pollutant emissions, including:

- CARB Advanced Clean Fleets (ACF)
- CARB Advanced Clean Trucks (ACT)
- AB 1493: Pavley Fuel Efficiency Standards
- Title 20 California Code of Regulations (CCR): Appliance Energy Efficiency Standards
- Title 24, Part 6, CCR: Building and Energy Efficiency Standards
- Title 24, Part 11, CCR: Green Building Standards Code

AIR POLLUTANTS OF CONCERN

Criteria Air Pollutants

The air pollutants emitted into the ambient air by stationary and mobile sources are regulated by federal and state law. Air pollutants are categorized as primary or secondary pollutants. Primary air pollutants are those that are emitted directly from sources and include CO, VOC, NO₂, SO_x, PM₁₀, PM_{2.5}, and Pb. Of these, CO, SO₂, NO₂, PM₁₀, and PM_{2.5} are “criteria air pollutants,” which means that ambient air quality standards (AAQS) have been established for them. VOC and oxides of nitrogen (NO_x) are air pollutant precursors that form secondary criteria pollutants through chemical and photochemical reactions in the atmosphere. Ozone

(O₃) and NO₂ are the principal secondary pollutants. A description of each of the primary and secondary criteria air pollutants and their known health effects is presented below.

Carbon Monoxide (CO) is a colorless, odorless, toxic gas produced by incomplete combustion of carbon substances, such as gasoline or diesel fuel. CO is a primary criteria air pollutant. CO concentrations tend to be the highest during winter mornings with little to no wind, when surface-based inversions trap the pollutant at ground levels. Because CO is emitted directly from internal combustion, engines and motor vehicles operating at slow speeds are the primary source of CO in the SoCAB. The highest ambient CO concentrations are generally found near traffic-congested corridors and intersections. The primary adverse health effect associated with CO is interference with normal oxygen transfer to the blood, which may result in tissue oxygen deprivation (South Coast AQMD 2005; US EPA 2024a). The SoCAB is designated as being in attainment under the California AAQS and attainment (serious maintenance) under the National AAQS (CARB 2024a).

Volatile Organic Compounds (VOC) are composed primarily of hydrogen and carbon atoms. Internal combustion associated with motor vehicle usage is the major source of VOCs. Other sources include evaporative emissions from paints and solvents, asphalt paving, and household consumer products such as aerosols (South Coast AQMD 2005). There are no AAQS for VOCs. However, because they contribute to the formation of O₃, South Coast AQMD has established a significance threshold (South Coast AQMD 2023a). The health effects for ozone are described later in this section.

Nitrogen Oxides (NO_x) are a by-product of fuel combustion and contribute to the formation of ground-level O₃, PM₁₀, and PM_{2.5}. The two major forms of NO_x are nitric oxide (NO) and nitrogen dioxide (NO₂). NO is a colorless, odorless gas formed from atmospheric nitrogen and oxygen when combustion takes place under high temperature and/or high pressure. The principal form of NO_x produced by combustion is NO, but NO reacts quickly with oxygen to form NO₂, creating the mixture of NO and NO₂ commonly called NO_x. NO₂ is an acute irritant and more injurious than NO in equal concentrations. At atmospheric concentrations, however, NO₂ is only potentially irritating. NO₂ absorbs blue light; the result is a brownish-red cast to the atmosphere and reduced visibility. NO₂ exposure concentrations near roadways are of particular concern for susceptible individuals, including asthmatics, children, and the elderly. Current scientific evidence links short-term NO₂ exposures, ranging from 30 minutes to 24 hours, with adverse respiratory effects, including airway inflammation in healthy people and increased respiratory symptoms in people with asthma. Also, studies show a connection between elevated short-term NO₂ concentrations and increased visits to emergency departments and hospital admissions for respiratory issues, especially asthma (South Coast AQMD 2005; USEPA 2024a). The SoCAB is designated as unclassified/attainment (maintenance) under the National AAQS and attainment under the California AAQS (CARB 2024a).

Sulfur Dioxide (SO₂) is a colorless, pungent, irritating gas formed by the combustion of sulfurous fossil fuels. It enters the atmosphere as a result of burning high-sulfur-content fuel oils and coal and chemical processes at plants and refineries. Gasoline and natural gas have very low sulfur content and do not release significant quantities of SO₂. When sulfur dioxide forms sulfates (SO₄) in the atmosphere, together these pollutants are referred to as sulfur oxides (SO_x). Thus, SO₂ is both a primary and secondary criteria air pollutant. At sufficiently high concentrations, SO₂ may irritate the upper respiratory tract. Current scientific

evidence links short-term exposures to SO₂, ranging from 5 minutes to 24 hours, with an array of adverse respiratory effects, including bronchoconstriction and increased asthma symptoms. These effects are particularly adverse for asthmatics at elevated ventilation rates (e.g., while exercising or playing) at lower concentrations and when combined with particulates, SO₂ may do greater harm by injuring lung tissue. Studies also show a connection between short-term exposure and increased visits to emergency facilities and hospital admissions for respiratory illnesses, particularly in at-risk populations such as children, the elderly, and asthmatics (South Coast AQMD 2005; US EPA 2024a). The SoCAB is designated as attainment under the California and National AAQS (CARB 2024a).

Suspended Particulate Matter (PM₁₀ and PM_{2.5}) consists of finely divided solids or liquids such as soot, dust, aerosols, fumes, and mists. Two forms of fine particulates are now recognized and regulated. Inhalable coarse particles, or PM₁₀, include particulate matter with an aerodynamic diameter of 10 microns or less (i.e., ≤0.01 millimeter). Inhalable fine particles, or PM_{2.5}, have an aerodynamic diameter of 2.5 microns or less (i.e., ≤0.0025 millimeter). Particulate discharge into the atmosphere results primarily from industrial, agricultural, construction, and transportation activities. Both PM₁₀ and PM_{2.5} may adversely affect the human respiratory system, especially in people who are naturally sensitive or susceptible to breathing problems. The EPA's scientific review concluded that PM_{2.5}, which penetrates deeply into the lungs, is more likely than PM₁₀ to contribute to health effects and at far lower concentrations. These health effects include premature death in people with heart or lung disease, nonfatal heart attacks, irregular heartbeat, aggravated asthma, decreased lung function, and increased respiratory symptoms (e.g., irritation of the airways, coughing, or difficulty breathing) (South Coast AQMD 2005). There has been emerging evidence that ultrafine particulates, which are even smaller particulates with an aerodynamic diameter of <0.1 microns or less (i.e., ≤0.0001 millimeter) have human health implications because their toxic components may initiate or facilitate biological processes that may lead to adverse effects to the heart, lungs, and other organs (South Coast AQMD 2022). However, the EPA and the California Air Resources Board (CARB) have not adopted AAQS to regulate these particulates. Diesel particulate matter is classified by CARB as a carcinogen in 1998 (CARB 1998). Particulate matter can also cause environmental effects such as visibility impairment,¹ environmental damage,² and aesthetic damage³ (South Coast AQMD 2005; US EPA 2024a). The SoCAB is a nonattainment area for PM_{2.5} under California and National AAQS and a nonattainment area for PM₁₀ under the California AAQS (CARB 2024a).⁴

Ozone (O₃) is a key ingredient of “smog” and is a gas that is formed when VOCs and NO_x, both by-products of internal combustion engine exhaust, undergo photochemical reactions in sunlight. O₃ is a secondary criteria air pollutant. O₃ concentrations are generally highest during the summer months when

¹ PM_{2.5} is the main cause of reduced visibility (haze) in parts of the United States.

² Particulate matter can be carried over long distances by wind and then settle on ground or water, making lakes and streams acidic; changing the nutrient balance in coastal waters and large river basins; depleting the nutrients in soil; damaging sensitive forests and farm crops; and affecting the diversity of ecosystems.

³ Particulate matter can stain and damage stone and other materials, including culturally important objects such as statues and monuments.

⁴ CARB approved the South Coast AQMD's request to redesignate the SoCAB from serious nonattainment for PM₁₀ to attainment for PM₁₀ under the National AAQS on March 25, 2010, because the SoCAB did not violate federal 24-hour PM₁₀ standards from 2004 to 2007. The EPA approved the State of California's request to redesignate the South Coast PM₁₀ nonattainment area to attainment of the PM₁₀ National AAQS, effective on July 26, 2013.

direct sunlight, light winds, and warm temperatures create favorable conditions for its formation. O₃ poses a health threat to those who already suffer from respiratory diseases as well as to healthy people. Breathing O₃ can trigger a variety of health problems, including chest pain, coughing, throat irritation, and congestion. It can worsen bronchitis, emphysema, and asthma. Ground-level O₃ also can reduce lung function and inflame the linings of the lungs. Repeated exposure may permanently scar lung tissue. O₃ also affects sensitive vegetation and ecosystems, including forests, parks, wildlife refuges, and wilderness areas. In particular, O₃ harms sensitive vegetation during the growing season (South Coast AQMD 2005; US EPA 2024a). The SoCAB is designated extreme nonattainment under the California AAQS (1-hour and 8-hour) and National AAQS (8-hour) (CARB 2024a).

Lead (Pb) is a metal found naturally in the environment as well as in manufactured products. Once taken into the body, lead distributes throughout the body in the blood and accumulates in the bones. Depending on the level of exposure, lead can adversely affect the nervous system, kidney function, immune system, reproductive and developmental systems, and the cardiovascular system. Lead exposure also affects the oxygen-carrying capacity of the blood. The effects of lead most commonly encountered in current populations are neurological effects in children and cardiovascular effects in adults (e.g., high blood pressure and heart disease). Infants and young children are especially sensitive to even low levels of lead, which may contribute to behavioral problems, learning deficits, and lowered IQ (South Coast AQMD 2005; USEPA 2018). The major sources of lead emissions have historically been mobile and industrial sources. As a result of the EPA's regulatory efforts to remove lead from gasoline, emissions of lead from the transportation sector dramatically declined by 95 percent between 1980 and 1999, and levels of lead in the air decreased by 94 percent between 1980 and 1999. Today, the highest levels of lead in air are usually found near lead smelters. The major sources of lead emissions today are ore and metals processing and piston-engine aircraft operating on leaded aviation gasoline. However, in 2008 the EPA and CARB adopted more strict lead standards, and special monitoring sites immediately downwind of lead sources recorded very localized violations of the new state and federal standards.⁵ As a result of these violations, the Los Angeles County portion of the SoCAB is designated as nonattainment under the National AAQS for lead (South Coast AQMD 2012; CARB 2024a). However, lead concentrations in this nonattainment area have been below the level of the federal standard since December 2011 (South Coast AQMD 2012). CARB's State Implementation Plan (SIP) revision was submitted to the EPA for approval. Because emissions of lead are found only in projects that are permitted by South Coast AQMD, lead is not a pollutant of concern for the proposed project.

Table 2, *Criteria Air Pollutant Health Effects Summary*, summarizes the potential health effects associated with the criteria air pollutants.

⁵ Source-oriented monitors record concentrations of lead at lead-related industrial facilities in the SoCAB, which include Exide Technologies in the City of Commerce; Quemetco, Inc., in the City of Industry; Trojan Battery Company in Santa Fe Springs; and Exide Technologies in Vernon. Monitoring conducted between 2004 through 2007 showed that the Trojan Battery Company and Exide Technologies exceed the federal standards (South Coast AQMD 2012).

Table 2 Criteria Air Pollutant Health Effects Summary

Pollutant	Health Effects	Examples of Sources
Carbon Monoxide (CO)	• Chest pain in heart patients • Headaches, nausea • Reduced mental alertness • Death at very high levels	Any source that burns fuel such as cars, trucks, construction and farming equipment, and residential heaters and stoves
Ozone (O ₃)	• Cough, chest tightness • Difficulty taking a deep breath • Worsened asthma symptoms • Lung inflammation	Atmospheric reaction of organic gases with nitrogen oxides in sunlight
Nitrogen Dioxide (NO ₂)	• Increased response to allergens • Aggravation of respiratory illness	Same as carbon monoxide sources
Particulate Matter (PM ₁₀ and PM _{2.5})	• Hospitalizations for worsened heart diseases • Emergency room visits for asthma • Premature death	Cars and trucks (particularly diesels) Fireplaces and woodstoves Windblown dust from overlays, agriculture, and construction
Sulfur Dioxide (SO ₂)	• Aggravation of respiratory disease (e.g., asthma and emphysema) • Reduced lung function	Combustion of sulfur-containing fossil fuels, smelting of sulfur-bearing metal ores, and industrial processes
Lead (Pb)	• Behavioral and learning disabilities in children • Nervous system impairment	Contaminated soil

Source: CARB 2024b.

Toxic Air Contaminants

CARB has identified other air pollutants as toxic air contaminants (TACs), which are pollutants that may cause serious, long-term effects. People exposed to TACs at sufficient concentrations and durations may have an increased chance of getting cancer or experiencing other serious health effects. These health effects can include damage to the immune system as well as neurological, reproductive (e.g., reduced fertility), developmental, respiratory, and other health problems (US EPA 2024b). By the last update to the TAC list in December 1999, CARB had designated 244 compounds as TACs (CARB 1999). Additionally, CARB has implemented control measures for a number of compounds that pose high risks and show potential for effective control. There are no air quality standards for TACs. Instead, TAC impacts are evaluated by calculating the health risks associated with a given exposure. The majority of the estimated health risks from TACs can be attributed to relatively few compounds, the most relevant to the proposed project being particulate matter from diesel-fueled engines.

Diesel Particulate Matter

In 1998, CARB identified particulate emissions from diesel-fueled engines (diesel PM) as a TAC (US EPA 1998). Previously, the individual chemical compounds in diesel exhaust were considered TACs. Almost all diesel exhaust particles are 10 microns or less in diameter. Because of their extremely small size, these particles can be inhaled and eventually trapped in the bronchial and alveolar regions of the lungs. Long-term

(chronic) inhalation of DPM is likely a lung cancer risk. Short-term (i.e., acute) exposure can cause irritation and inflammatory systems and may exacerbate existing allergies and asthma systems (US EPA 2002).

CARB has promulgated the following specific rules to limit TAC emissions:

- 13 CCR Chapter 10, Section 2485, Airborne Toxic Control Measure to Limit Diesel-Fueled Commercial Motor Vehicle Idling
- 13 CCR Chapter 10, Section 2480, Airborne Toxic Control Measure to Limit School Bus Idling and Idling at Schools
- 13 CCR Section 2477 and Article 8, Airborne Toxic Control Measure for In-Use Diesel-Fueled Transport Refrigeration Units (TRU) and TRU Generator Sets and Facilities Where TRUs Operate

Community Risk

In addition, to reduce exposure to TACs, CARB developed and approved the *Air Quality and Land Use Handbook: A Community Health Perspective* (2005) to provide guidance regarding the siting of sensitive land uses in the vicinity of freeways, distribution centers, rail yards, ports, refineries, chrome-plating facilities, dry cleaners, and gasoline-dispensing facilities. This guidance document was developed to assess compatibility and associated health risks when placing sensitive receptors near existing pollution sources. CARB's recommendations on the siting of new sensitive land uses were based on a compilation of recent studies that evaluated data on the adverse health effects from proximity to air pollution sources. The key observation in these studies is that proximity to air pollution sources substantially increases exposure and the potential for adverse health effects. There are three carcinogenic toxic air contaminants that constitute the majority of the known health risks from motor vehicle traffic, DPM from trucks, and benzene and 1,3-butadiene from passenger vehicles. CARB recommendations are based on data that show that localized air pollution exposures can be reduced by as much as 80 percent by following CARB minimum distance separations.

AIR QUALITY MANAGEMENT PLANNING

The South Coast AQMD is the agency responsible for improving air quality in the SoCAB and ensuring that the National and California AAQS are attained and maintained. South Coast AQMD is responsible for preparing the air quality management plan (AQMP) for the SoCAB in coordination with the Southern California Association of Governments (SCAG). Since 1979, a number of AQMPs have been prepared.

2022 AQMP

South Coast AQMD adopted the 2022 AQMP on December 2, 2022, which serves as an update to the 2017 AQMP. On October 1, 2015, the EPA strengthened the National AAQS for ground-level ozone, lowering the primary and secondary ozone standard levels to 70 parts per billion (ppb) (2015 Ozone National AAQS). The SoCAB is currently classified as an “extreme” nonattainment for the 2015 Ozone National AAQS. Meeting the 2015 federal ozone standard requires reducing NO_x emissions, the key pollutant that creates ozone, by 67 percent more than is required by adopted rules and regulations in 2037. The only way to achieve the required NO_x reductions is through extensive use of zero emission (ZE) technologies across all stationary

and mobile sources. South Coast AQMD's primary authority is over stationary sources which account for approximately 20 percent of NO_x emissions. The overwhelming majority of NO_x emissions are from heavy-duty trucks, ships and other State and federally regulated mobile sources that are mostly beyond the South Coast AQMD's control. The region will not meet the standard absent significant federal action. In addition to federal action, the 2022 AQMP requires substantial reliance on future deployment of advanced technologies to meet the standard. The control strategy for the 2022 AQMP includes aggressive new regulations and the development of incentive programs to support early deployment of advanced technologies. The two key areas for incentive programs are (1) promoting widespread deployment of available ZE and low-NO_x technologies and (2) developing new ZE and ultra-low NO_x technologies for use in cases where the technology is not currently available. South Coast AQMD is prioritizing distribution of incentive funding in Environmental Justice areas and seeking opportunities to focus benefits on the most disadvantaged communities (South Coast AQMD 2022).

Lead State Implementation Plan

In 2008, EPA designated the Los Angeles County portion of the SoCAB nonattainment under the federal lead (Pb) classification due to the addition of source-specific monitoring under the new federal regulation. This designation was based on two source-specific monitors in Vernon and the City of Industry exceeding the new standard. The rest of the SoCAB, outside the Los Angeles County nonattainment area remains in attainment of the new standard. On May 24, 2012, CARB approved the SIP revision for the federal lead standard, which the EPA revised in 2008. Lead concentrations in this nonattainment area have been below the level of the federal standard since December 2011. The SIP revision was submitted to EPA for approval.

South Coast AQMD PM_{2.5} Redesignation Request and Maintenance Plan

In 1997, the EPA adopted the 24-hour fine PM_{2.5} standard of 65 micrograms per cubic meter (µg/m³). In 2006, this standard was lowered to a more health-protective level of 35 µg/m³. The SoCAB is designated nonattainment for both the 65 and 35 µg/m³ 24-hour PM_{2.5} standards (24-hour PM_{2.5} standards). In 2020, monitored data demonstrated that the SoCAB attained both 24-hour PM_{2.5} standards. The South Coast AQMD has developed the 2021 Redesignation Request and Maintenance Plan for the 1997 and 2006 24-hour PM_{2.5} Standards demonstrating that the SoCAB has met the requirements to be redesignated to attainment for the 24-hour PM_{2.5} standards (South Coast AQMD 2021b).

AB 617, Community Air Protection Program

Assembly Bill (AB) 617 (C. Garcia, Chapter 136, Statutes of 2017) requires local air districts to monitor and implement air pollution control strategies that reduce localized air pollution in communities that bear the greatest burdens. In response to AB 617, CARB has established the Community Air Protection Program.

Air districts are required to host workshops to help identify disadvantaged communities disproportionately affected by poor air quality. Once the criteria for identifying the highest priority locations have been identified and the communities have been selected, new community monitoring systems would be installed to track and monitor community-specific air pollution goals. In 2018 CARB prepared an air monitoring plan (Community Air Protection Blueprint), that evaluates the availability and effectiveness of air monitoring technologies and

existing community air monitoring networks. Under AB 617, the Blueprint is required to be updated every five years.

Under AB 617, CARB is also required to prepare a statewide strategy to reduce TACs and criteria pollutants in impacted communities; provide a statewide clearinghouse for best available retrofit control technology; adopt new rules requiring the latest best available retrofit control technology for all criteria pollutants for which an area has not achieved attainment of California AAQS; and provide uniform, statewide reporting of emissions inventories. Air districts are required to adopt a community emissions reduction program to achieve reductions for the communities impacted by air pollution that CARB identifies.

Existing Conditions

CLIMATE/METEOROLOGY

South Coast Air Basin

The project site lies in the South Coast Air Basin (SoCAB), which includes all of Orange County and the non-desert portions of Los Angeles, Riverside, and San Bernardino Counties. The SoCAB is in a coastal plain with connecting broad valleys and low hills and is bounded by the Pacific Ocean in the southwest quadrant, with high mountains forming the remainder of the perimeter. The general region lies in the semi-permanent high-pressure zone of the eastern Pacific. As a result, the climate is mild, tempered by cool sea breezes. This usually mild weather pattern is interrupted infrequently by periods of extremely hot weather, winter storms, and Santa Ana winds (South Coast AQMD 2005).

Temperature and Precipitation

The annual average temperature varies little throughout the SoCAB, ranging from the low to middle 60s, measured in degrees Fahrenheit (°F). With a more pronounced oceanic influence, coastal areas show less variability in annual minimum and maximum temperatures than inland areas. The lowest average temperature is reported at 44.7°F in December, and the highest average temperature is 87.6°F in August (USA.Com 2024).

In contrast to a very steady pattern of temperature, rainfall is seasonally and annually highly variable. Almost all rain falls from October through April. Summer rainfall is normally restricted to widely scattered thundershowers near the coast, with slightly heavier shower activity in the east and over the mountains. Rainfall averages 20.25 inches per year in the vicinity of the area (USA.Com 2024).

Humidity

Although the SoCAB has a semiarid climate, the air near the earth's surface is typically moist because of the presence of a shallow marine layer. Except for infrequent periods when dry, continental air is brought into the SoCAB by offshore winds, the "ocean effect" is dominant. Periods of heavy fog, especially along the coast, are frequent. Low clouds, often referred to as high fog, are a characteristic climatic feature. Annual average humidity is 70 percent at the coast and 57 percent in the eastern portions of the (South Coast AQMD 2005).

Wind

Wind patterns across the south coastal region are characterized by westerly or southwesterly onshore winds during the day and by easterly or northeasterly breezes at night. Wind speed is somewhat greater during the dry summer months than during the rainy winter season.

Between periods of wind, periods of air stagnation may occur, both in the morning and evening hours. Air stagnation is one of the critical determinants of air quality conditions on any given day. During the winter and fall months, surface high-pressure systems over the SoCAB, combined with other meteorological conditions, can result in very strong, downslope Santa Ana winds. These winds normally continue a few days before predominant meteorological conditions are reestablished.

The mountain ranges to the east affect the transport and diffusion of pollutants by inhibiting their eastward transport. Air quality in the SoCAB generally ranges from fair to poor and is similar to air quality in most of coastal southern California. The entire region experiences heavy concentrations of air pollutants during prolonged periods of stable atmospheric conditions (South Coast AQMD 2005).

Inversions

In conjunction with the two characteristic wind patterns that affect the rate and orientation of horizontal pollutant transport, there are two similarly distinct types of temperature inversions that control the vertical depth through which pollutants are mixed. These are the marine/subsidence inversion and the radiation inversion. The combination of winds and inversions are critical determinants in leading to the highly degraded air quality in summer and the generally good air quality in the winter in the project area (South Coast AQMD 2005).

AREA DESIGNATIONS

The AQMP provides the framework for air quality basins to achieve attainment of the state and federal ambient air quality standards through the State Implementation Plan (SIP). Areas are classified as attainment or nonattainment areas for particular pollutants, depending on whether they meet ambient air quality standards. Severity classifications for ozone nonattainment range in magnitude from marginal, moderate, and serious to severe and extreme.

- **Unclassified:** a pollutant is designated unclassified if the data are incomplete and do not support a designation of attainment or nonattainment.
- **Attainment:** a pollutant is in attainment if the CAAQS for that pollutant was not violated at any site in the area during a three-year period.
- **Nonattainment:** a pollutant is in nonattainment if there was at least one violation of a state AAQS for that pollutant in the area.

- **Nonattainment/Transitional:** a subcategory of the nonattainment designation. An area is designated nonattainment/transitional to signify that the area is close to attaining the AAQS for that pollutant.

The attainment status for the SoCAB is shown in Table 3, *Attainment Status of Criteria Pollutants in the South Coast Air Basin*.

Table 3 Attainment Status of Criteria Pollutants in the South Coast Air Basin

Pollutant	State	Federal
Ozone – 1-hour	Extreme Nonattainment	No Federal Standard
Ozone – 8-hour	Extreme Nonattainment	Extreme Nonattainment
PM ₁₀	Serious Nonattainment	Attainment
PM _{2.5}	Nonattainment	Nonattainment ¹
CO	Attainment	Attainment
NO ₂	Attainment	Attainment/Maintenance
SO ₂	Attainment	Attainment
Lead	Attainment	Nonattainment (Los Angeles County only) ²
All others	Attainment/Unclassified	Attainment/Unclassified

Source: CARB 2024a.

1 The SoCAB is pending a resignation request from nonattainment to attainment for the 24-hour federal PM_{2.5} standards. The 2021 PM_{2.5} Redesignation Request and Maintenance Plan demonstrates that the South Coast meets the requirements of the CAA to allow US EPA to redesignate the SoCAB to attainment for the 65 µg/m³ and 35 µg/m³ 24-hour PM_{2.5} standards. CARB will submit the 2021 PM_{2.5} Redesignation Request to the US EPA as a revision to the California SIP (CARB 2021).

2 In 2010, the Los Angeles portion of the SoCAB was designated nonattainment for lead under the new 2008 federal AAQS as a result of large industrial emitters. Remaining areas for lead in the SoCAB are unclassified. However, lead concentrations in this nonattainment area have been below the level of the federal standard since December 2011 (South Coast AQMD 2012). CARB's SIP revision was submitted to the EPA for approval.

EXISTING AMBIENT AIR QUALITY

Existing levels of ambient air quality and historical trends and projections in the vicinity of the project site are best documented by measurements taken by the South Coast AQMD. The project site is located within Source Receptor Area (SRA) 11: South San Gabriel Valley. The air quality monitoring station closest to the proposed project is the Pico Rivera-4144 San Gabriel Monitoring Station, which is one of 31 monitoring stations South Coast AQMD operates and maintains within the SoCAB.⁶ Data from this station includes O₃, NO₂, and PM_{2.5}; data for PM₁₀ is supplemented based on Azusa Monitoring Station. As summarized in Table 4, *Ambient Air Quality Monitoring Summary*, the data show regular violations of the state and federal O₃, state PM₁₀, and federal PM_{2.5} standards in the last five years.

⁶ Locations of the SRAs and monitoring stations are shown here: <http://www.aqmd.gov/docs/default-source/default-document-library/map-of-monitoring-areas.pdf>.

Table 4 Ambient Air Quality Monitoring Summary

Pollutant/Standard	Number of Days Threshold Were Exceeded and Maximum Levels during Such Violations ^{1,2}				
	2018	2019	2020	2021	2022
Ozone (O₃)					
State 1-Hour $\geq$ 0.09 ppm (days exceed threshold)	3	5	20	2	3
State & Federal 8-hour $\geq$ 0.070 ppm (days exceed threshold)	5	7	23	3	2
Max. 1-Hour Conc. (ppm)	0.115	0.108	0.169	0.104	0.123
Max. 8-Hour Conc. (ppm)	0.082	0.091	0.114	0.074	0.091
Nitrogen Dioxide (NO₂)					
State 1-Hour $\geq$ 0.18 ppm (days exceed threshold)	0	0	0	0	0
Max. 1-Hour Conc. (ppb)	0.0768	0.0618	0.0692	0.0722	0.0645
Coarse Particulates (PM₁₀)					
State 24-Hour $>$ 50 $\mu\text{g}/\text{m}^3$ (days exceed threshold)	10	4	9	11	7
Federal 24-Hour $>$ 150 $\mu\text{g}/\text{m}^3$ (days exceed threshold)	0	0	0	0	0
Max. 24-Hour Conc. ($\mu\text{g}/\text{m}^3$)	78.3	82.0	152.3	79.4	98.2
Fine Particulates (PM_{2.5})					
Federal 24-Hour $>$ 35 $\mu\text{g}/\text{m}^3$ (days exceed threshold)	2	1	5	3	1
Max. 24-Hour Conc. ($\mu\text{g}/\text{m}^3$)	56.3	50.2	82.9	66.0	53.8

Source: CARB 2024c.

Notes: ppm = parts per million; ppb = parts per billion; $\mu\text{g}/\text{m}^3$ = micrograms per cubic meter; * = Data not available¹ Data obtained from the Pico Rivera-4144 San Gabriel Monitoring Station O₃, NO₂, and PM_{2.5}; data for PM₁₀ is supplemented based on Azusa Monitoring Station.² Most recent data available as of February 2024.

MULTIPLE AIR TOXICS EXPOSURE STUDY V

The Multiple Air Toxics Exposure Study (MATES) is a monitoring and evaluation study on existing ambient concentrations of TACs and the potential health risks from air toxics in the SoCAB. In April 2021, South Coast AQMD released the latest update to the MATES study, MATES V. The first MATES analysis, MATES I, began in 1986 but was limited because of the technology available at the time. Conducted in 1998, MATES II was the first MATES iteration to include a comprehensive monitoring program, an air toxics emissions inventory, and a modeling component. MATES III was conducted in 2004 to 2006, with MATES IV following in 2012 to 2013.

MATES V uses measurements taken during 2018 and 2019, with a comprehensive modeling analysis and emissions inventory based on 2018 data. The previous MATES studies quantified the cancer risks based on the inhalation pathway only. MATES V includes information on the chronic noncancer risks from inhalation and non-inhalation pathways for the first time. Cancer risks and chronic noncancer risks from MATES II through IV measurements have been re-examined using current Office of Environmental Health Hazards Assessment (OEHHA) and CalEPA risk assessment methodologies and modern statistical methods to examine the trends over time.

The MATES V study showed that cancer risk in the SoCAB decreased to 454 in a million from 997 in a million in the MATES IV study. Overall, air toxics cancer risk in the SoCAB decreased by 54 percent since 2012 when MATES IV was conducted. MATES V showed the highest risk locations near the Los Angeles International Airport and the Ports of Long Beach and Los Angeles. Diesel particulate matter continues to be

the major contributor to air toxics cancer risk (approximately 72 percent of the total cancer risk). Goods movement and transportation corridors have the highest cancer risk. Transportation sources account for 88 percent of carcinogenic air toxics emissions, and the remainder is from stationary sources, which include large industrial operations such as refineries and power plants as well as smaller businesses such as gas stations and chrome-plating facilities. (South Coast AQMD 2021a).

SENSITIVE RECEPTORS

Some land uses are considered more sensitive to air pollution than others due to the types of population groups or activities involved. Sensitive population groups include children, the elderly, the acutely ill, and the chronically ill, especially those with cardio-respiratory diseases.

Residential areas are also considered to be sensitive receptors to air pollution because residents (including children and the elderly) tend to be at home for extended periods of time, resulting in sustained exposure to any pollutants present. Schools are also considered sensitive receptors, as children are present for extended durations and engage in regular outdoor activities. Recreational land uses are considered moderately sensitive to air pollution. Although exposure periods are generally short, exercise places a high demand on respiratory functions, which can be impaired by air pollution. In addition, noticeable air pollution can detract from the enjoyment of recreation. Industrial and commercial areas are considered the least sensitive to air pollution. Exposure periods are relatively short and intermittent, as the majority of the workers tend to stay indoors most of the time. In addition, the working population is generally the healthiest segment of the public.

The nearest offsite sensitive receptors are the single-family residences along Blackfoot Drive to the west and the single-family residences along Dune Mear Road to the south of the project site.

Thresholds of Significance

The analysis of the proposed project's air quality impacts follows the guidance and methodologies recommended in South Coast AQMD's *CEQA Air Quality Handbook* and the significance thresholds on South Coast AQMD's website (South Coast AQMD 1993). CEQA allows the significance criteria established by the applicable air quality management or air pollution control district to be used to assess impacts of a project on air quality. South Coast AQMD has established thresholds of significance for regional air quality emissions for construction activities and project operation. In addition to the daily thresholds listed above, projects are also subject to the AAQS. These are addressed through an analysis of localized CO impacts and localized significance thresholds (LSTs).

REGIONAL SIGNIFICANCE THRESHOLDS

The South Coast AQMD has adopted regional construction and operational emissions thresholds to determine a project's cumulative impact on air quality in the SoCAB. Table 5, *South Coast AQMD Significance Thresholds*, lists South Coast AQMD's regional significance thresholds that are applicable for all projects uniformly regardless of size or scope. There is growing evidence that although ultrafine particulates contribute a very small portion of the overall atmospheric mass concentration, they represent a greater

proportion of the health risk from PM. However, the EPA or CARB have not yet adopted AAQS to regulate ultrafine particulates; therefore, South Coast AQMD has not developed thresholds for them.

Table 5 South Coast AQMD Significance Thresholds

Air Pollutant	Construction Phase	Operational Phase
Reactive Organic Gases (ROGs)/ Volatile Organic Compounds (VOCs)	75 lbs/day	55 lbs/day
Nitrogen Oxides (NO _x)	100 lbs/day	55 lbs/day
Carbon Monoxide (CO)	550 lbs/day	550 lbs/day
Sulfur Oxides (SO _x)	150 lbs/day	150 lbs/day
Particulates (PM ₁₀)	150 lbs/day	150 lbs/day
Particulates (PM _{2.5})	55 lbs/day	55 lbs/day

Source: South Coast AQMD 2023a.

Projects that exceed the regional significance threshold contribute to the nonattainment designation of the SoCAB. The attainment designations are based on the AAQS, which are set at levels of exposure that are determined to not result in adverse health. Exposure to fine particulate pollution and ozone causes myriad health impacts, particularly to the respiratory and cardiovascular systems:

- Linked to increased cancer risk (PM_{2.5}, TACs)
- Aggravates respiratory disease (O₃, PM_{2.5})
- Increases bronchitis (O₃, PM_{2.5})
- Causes chest discomfort, throat irritation, and increased effort to take a deep breath (O₃)
- Reduces resistance to infections and increases fatigue (O₃)
- Reduces lung growth in children (PM_{2.5})
- Contributes to heart disease and heart attacks (PM_{2.5})
- Contributes to premature death (O₃, PM_{2.5})
- Linked to lower birth weight in newborns (PM_{2.5}) (South Coast AQMD 2015a)

Exposure to fine particulates and ozone aggravates asthma attacks and can amplify other lung ailments such as emphysema and chronic obstructive pulmonary disease. Exposure to current levels of PM_{2.5} is responsible for an estimated 4,300 cardiopulmonary-related deaths per year in the SoCAB. In addition, University of Southern California scientists responsible for a landmark children's health study found that lung growth improved as air pollution declined for children aged 11 to 15 in five communities in the SoCAB (South Coast AQMD 2015b).

South Coast AQMD is the primary agency responsible for ensuring the health and welfare of sensitive individuals exposed to elevated concentrations of air pollutants in the SoCAB and has established thresholds that would be protective of these individuals. To achieve the health-based standards established by the EPA, South Coast AQMD prepares an AQMP that details regional programs to attain the AAQS. Mass emissions thresholds shown in Table 5 are not correlated with concentrations of air pollutants but contribute to the cumulative air quality impacts in the SoCAB. These thresholds are based on the trigger levels for the federal

New Source Review Program, which was created to ensure projects are consistent with attainment of health-based federal AAQS. Regional emissions from a single project do not trigger a regional health impact, and it is speculative to identify how many more individuals in the air basin would be affected by the health effects listed previously. Projects that do not exceed the South Coast AQMD regional significance thresholds in Table 5 would not violate any air quality standards or contribute substantially to an existing or projected air quality violation.

If projects exceed the emissions levels presented in Table 5, then those emissions would cumulatively contribute to the nonattainment status of the air basin and would contribute to elevating health effects associated with these criteria air pollutants. Known health effects related to ozone include worsening of bronchitis, asthma, and emphysema and a decrease in lung function. Health effects associated with particulate matter include premature death of people with heart or lung disease, nonfatal heart attacks, irregular heartbeat, decreased lung function, and increased respiratory symptoms. Reducing emissions would contribute to reducing possible health effects related to criteria air pollutants. However, for projects that exceed the emissions in Table 5, it is speculative to determine how exceeding the regional thresholds would affect the number of days the region is in nonattainment, because mass emissions are not correlated with concentrations of emissions or how many additional individuals in the air basin would be affected by the health effects cited previously.

South Coast AQMD has not provided methodology to assess the specific correlation between mass emissions generated and the effect on health to address the issue raised in *Sierra Club v. County of Fresno* (Friant Ranch, L.P.) (2018) 6 Cal.5th 502, Case No. S21978. South Coast AQMD currently does not have methodologies that would provide the District with a consistent, reliable, and meaningful analysis to correlate specific health impacts that may result from a Proposed Project's mass emissions.⁷ Ozone concentrations are dependent on a variety of complex factors, including the presence of sunlight and precursor pollutants, natural topography, nearby structures that cause building downwash, atmospheric stability, and wind patterns. Because of the complexities of predicting ground-level ozone concentrations in relation to the National and California AAQS, and the absence of modeling tools that could provide statistically valid data and meaningful additional information regarding health effects from criteria air pollutants generated by individual projects, it is not possible to link specific health risks to the magnitude of emissions exceeding the significance thresholds. However, if a project in the SoCAB exceeds the regional significance thresholds, the project could contribute to an increase in health effects in the basin until the attainment standards are met in the SoCAB.

⁷ In April 2019, the Sacramento Metropolitan Air Quality Management District (SMAQMD) published an Interim Recommendation on implementing *Sierra Club v. County of Fresno* (2018) 6 Cal.5th 502 ("Friant Ranch") in the review and analysis of proposed projects under CEQA in Sacramento County. Consistent with the expert opinions submitted to the court in Friant Ranch by the San Joaquin Valley Air Pollution Control District (SJVAPCD) and South Coast AQMD, the SMAQMD guidance confirms the absence of an acceptable or reliable quantitative methodology that would correlate the expected criteria air pollutant emissions of projects to likely health consequences for people from project-generated criteria air pollutant emissions. The SMAQMD guidance explains that while it is in the process of developing a methodology to assess these impacts, lead agencies should follow the Friant Court's advice to explain in meaningful detail why this analysis is not yet feasible. Since this interim memorandum SMAQMD has provided methodology to address health impacts. However, a similar analysis is not available for projects within the South Coast AQMD region.

CO HOTSPOTS

Areas of vehicle congestion have the potential to create pockets of CO called hot spots. These pockets have the potential to exceed the state one-hour standard of 20 ppm or the eight-hour standard of 9 ppm. Because CO is produced in greatest quantities from vehicle combustion and does not readily disperse into the atmosphere, adherence to ambient air quality standards is typically demonstrated through an analysis of localized CO concentrations. Hot spots are typically produced at intersections, where traffic congestion is highest because vehicles queue for longer periods and are subject to reduced speeds. With the turnover of older vehicles, introduction of cleaner fuels, and implementation of control technology on industrial facilities, CO concentrations in the SoCAB and in the state have steadily declined.

In 2007, the SoCAB was designated in attainment for CO under both the California AAQS and National AAQS. The CO hotspot analysis conducted for the attainment by the South Coast AQMD for busiest intersections in Los Angeles during the peak morning and afternoon periods plan did not predict a violation of CO standards.⁸ As identified in the South Coast AQMD's 2003 AQMP and the 1992 Federal Attainment Plan for Carbon Monoxide (1992 CO Plan), peak carbon monoxide concentrations in the SoCAB in previous years, prior to redesignation, were a result of unusual meteorological and topographical conditions and not a result of congestion at a particular intersection. Under existing and future vehicle emission rates, a project would have to increase traffic volumes at a single intersection to more than 44,000 vehicles per hour—or 24,000 vehicles per hour where vertical and/or horizontal air does not mix—in order to generate a significant CO impact (BAAQMD 2023).

LOCALIZED SIGNIFICANCE THRESHOLDS

The South Coast AQMD developed LSTs for emissions of NO₂, CO, PM₁₀, and PM_{2.5} generated at the project site (offsite mobile-source emissions are not included in the LST analysis). LSTs represent the maximum emissions at a project site that are not expected to cause or contribute to an exceedance of the most stringent federal or state AAQS and are shown in Table 6, *South Coast AQMD Localized Significance Thresholds*.

Table 6 South Coast AQMD Localized Significance Thresholds

Air Pollutant (Relevant AAQS)	Concentration
1-Hour CO Standard (CAAQS)	20 ppm
8-Hour CO Standard (CAAQS)	9.0 ppm
1-Hour NO ₂ Standard (CAAQS)	0.18 ppm
Annual NO ₂ Standard (CAAQS)	0.03 ppm
24-Hour PM ₁₀ Standard – Construction (South Coast AQMD) ¹	10.4 µg/m ³
24-Hour PM _{2.5} Standard – Construction (South Coast AQMD) ¹	10.4 µg/m ³
24-Hour PM ₁₀ Standard – Operation (South Coast AQMD) ¹	2.5 µg/m ³

⁸ The four intersections were: Long Beach Boulevard and Imperial Highway; Wilshire Boulevard and Veteran Avenue; Sunset Boulevard and Highland Avenue; and La Cienega Boulevard and Century Boulevard. The busiest intersection evaluated (Wilshire and Veteran) had a daily traffic volume of approximately 100,000 vehicles per day with LOS E in the morning peak hour and LOS F in the evening peak hour.

24-Hour PM _{2.5} Standard – Operation (South Coast AQMD) ¹	2.5 µg/m ³
Source: South Coast AQMD 2023a. ppm – parts per million; µg/m ³ – micrograms per cubic meter	
¹ Threshold is based on South Coast AQMD Rule 403. Since the SoCAB is in nonattainment for PM ₁₀ and PM _{2.5} , the threshold is established as an allowable change in concentration. Therefore, background concentration is irrelevant.	

To assist lead agencies, South Coast AQMD developed screening-level LSTs to back-calculate the mass amount (lbs. per day) of emissions generated onsite that would trigger the levels shown in Table 6 for projects under 5-acres. These “screening-level” LSTs tables are the localized significance thresholds for all projects of five acres and less; however, it can be used as screening criteria for larger projects to determine whether or not dispersion modeling may be required to compare concentrations of air pollutants generated by the project to the localized concentrations shown in Table 6.

In accordance with South Coast AQMD’s LST methodology, the screening-level construction LSTs are based on the acreage disturbed per day based on equipment use. The screening-level construction LSTs for the project site in SRA 10 are shown in Table 7, *South Coast AQMD Screening-Level Localized Significance Thresholds*, for non-sensitive receptors within 82 feet (25 meters) for NO_x and CO and for sensitive receptors within 1,430 feet (436 meters) for PM₁₀ and PM_{2.5} of the project site.

Table 7 South Coast AQMD Screening-Level Localized Significance Thresholds

Acreage Disturbed	Threshold (lbs/day) ¹			
	Nitrogen Oxides (NO _x)	Carbon Monoxide (CO)	Coarse Particulates (PM ₁₀)	Fine Particulates (PM _{2.5})
≤1.00 Acre Disturbed Per Day	103	612	128.55	62.81
1.50 Acre Disturbed Per Day	126	748	132.44	65.10
2.00 Acre Disturbed Per Day	149	885	136.33	67.39

Source: South Coast AQMD 2008 and 2023a.
¹ LSTs are based on non-sensitive receptors within 82 feet (25 meters) for NO_x and CO and sensitive receptors within 1,430 feet (436 meters) for PM₁₀ and PM_{2.5} in Source Receptor Area (SRA) 10.

HEALTH RISK

Whenever a project would require use of chemical compounds that have been identified in South Coast AQMD Rule 1401, placed on CARB’s air toxics list pursuant to AB 1807, or placed on the EPA’s National Emissions Standards for Hazardous Air Pollutants, a health risk assessment is required by the South Coast AQMD. Table 8, *South Coast AQMD Toxic Air Contaminants Incremental Risk Thresholds*, lists the TAC incremental risk thresholds for operation of a project. The type of land uses that typically generate substantial quantities of criteria air pollutants and TACs from operations include industrial (stationary sources) and warehousing (truck idling) land uses (CARB 2005). School uses do not use substantial quantities of TACs, thus these thresholds are typically applied to new industrial projects only. Additionally, the purpose of this environmental evaluation is to identify the significant effects of the proposed project on the environment, not the significant effects of the environment on the proposed project (*California Building Industry Association v. Bay Area Air Quality Management District* (2015) 62 Cal.4th 369 (Case No. S213478)).

Table 8 South Coast AQMD Toxic Air Contaminants Incremental Risk Thresholds

Maximum Incremental Cancer Risk	≥ 10 in 1 million
Hazard Index (project increment)	≥ 1.0
Cancer Burden in areas ≥ 1 in 1 million	> 0.5 excess cancer cases
Source: South Coast AQMD 2023a.	

Draft Operational Cumulative Health Risk Thresholds

South Coast AQMD initiated a Working Group to identify cumulative health risk thresholds for development projects in order to address community concerns of health risk impacts of new projects being developed in areas where there is a higher pollution burden. The cumulative health risk threshold methodology first utilizes a screening approach to identify whether projects can qualitatively address cumulative health risk or quantitatively address health risk:

- **Low Cancer Risk Project Types:** Residential, commercial, recreational, educational, and retail.
- **Medium Cancer Risk Project Types:** Truck yards, gas stations, small industrial projects, and linear projects.
- **High Cancer Risk Project Types.** Industrial, major transportation projects (airports, port, railyard, bus/train station), and major planning projects.

For projects with low and medium cancer risks, like the proposed project, no quantitative analysis is required. For projects that result in potentially high cancer risk impacts, a quantitative is recommended. Additionally, the project-level health risk threshold of 10 in a million is adjusted based on the underlying health risk of the zip code the project is within based on South Coast AQMD's MATES V mapping. MATES V is utilized. MATES V identifies a gradient of the effects of air pollution on cancer risk in the South Coast AQMD Region, which is then used to adjust the project-level cancer risk levels as shown in Table 9, *MATES V-Adjusted Cumulative Significant Cancer Risk Thresholds*.

Table 9 MATES V-Adjusted Cumulative Significant Cancer Risk Thresholds

Threshold Increment	MATES V Cancer Risk	Adjusted Cumulative Cancer Risk Threshold
A	Most Stringent	≥ 1 in 1 million
B	>90th Percentile	≥ 3 in 1 million
C	90th Percentile to 50th Percentile	≥ 5 in 1 million
D	50th Percentile to 30th Percentile	≥ 7 in 1 million
E	< 30th Percentile	≥ 10 in 1 million
Source: South Coast AQMD 2023b.		

South Coast AQMD has also identified that the thresholds in Table 9 should be adjusted if any of the following criteria apply:

- **Criteria #1 – Post-2018 High Volume Diesel-Fueled Mobile Sources.** If there are post-2018 high volume highways or railroad mainlines, then increase the threshold increment by 1 (e.g., from step “D” to “C”).
- **Criteria #2 – Post-2018 Projects with High Volume Diesel Fueled Trucks.** Post-2018 projects are not accounted for in MATES V. Therefore, if new warehousing projects along the truck route have been constructed, then increase the threshold increment by 1 (e.g., from D to C).
- **Criteria #3 – Sensitive Receptor Population.** If the project site is within an AB 617 community or within the 80th percentile of CES 4.0, then increase the threshold increment by 1 (e.g., from D to C).

As mentioned previously, this type of project would be considered low to medium cancer risks; thus, an operational cancer risk analysis for the proposed project would not be warranted.

GREENHOUSE GAS EMISSIONS

Scientists have concluded that human activities are contributing to global climate change by adding large amounts of heat-trapping gases, known as GHG, to the atmosphere. Climate change is the variation of Earth’s climate over time, whether due to natural variability or as a result of human activities. The primary source of these GHG is fossil fuel use. The Intergovernmental Panel on Climate Change (IPCC) has identified four major GHG—water vapor,⁹ carbon (CO₂), methane (CH₄), and ozone (O₃)—that are the likely cause of an increase in global average temperatures observed within the 20th and 21st centuries. Other GHG identified by the IPCC that contribute to global warming to a lesser extent include nitrous oxide (N₂O), sulfur hexafluoride (SF₆), hydrofluorocarbons, perfluorocarbons, and chlorofluorocarbons (IPCC 2001).¹⁰ The major GHG are briefly described below.

- **Carbon dioxide (CO₂)** enters the atmosphere through the burning of fossil fuels (oil, natural gas, and coal), solid waste, trees and wood products, and respiration, and also as a result of other chemical reactions (e.g. manufacture of cement). Carbon dioxide is removed from the atmosphere (sequestered) when it is absorbed by plants as part of the biological carbon cycle.

⁹ Water vapor (H₂O) is the strongest GHG and the most variable in its phases (vapor, cloud droplets, ice crystals). However, water vapor is not considered a pollutant, but part of the feedback loop rather than a primary cause of change.

¹⁰ Black carbon contributes to climate change both directly, by absorbing sunlight, and indirectly, by depositing on snow (making it melt faster) and by interacting with clouds and affecting cloud formation. Black carbon is the most strongly light-absorbing component of particulate matter (PM) emitted from burning fuels such as coal, diesel, and biomass. Reducing black carbon emissions globally can have immediate economic, climate, and public health benefits. California has been an international leader in reducing emissions of black carbon, with close to 95 percent control expected by 2020 due to existing programs that target reducing PM from diesel engines and burning activities (CARB 2017). However, state and national GHG inventories do not yet include black carbon due to ongoing work resolving the precise global warming potential of black carbon. Guidance for CEQA documents does not yet include black carbon.

- **Methane (CH₄)** is emitted during the production and transport of coal, natural gas, and oil. Methane emissions also result from livestock and other agricultural practices and from the decay of organic waste in municipal landfills and water treatment facilities.
- **Nitrous oxide (N₂O)** is emitted during agricultural and industrial activities as well as during combustion of fossil fuels and solid waste.
- **Fluorinated gases** are synthetic, strong GHGs that are emitted from a variety of industrial processes. Fluorinated gases are sometimes used as substitutes for ozone-depleting substances. These gases are typically emitted in smaller quantities, but because they are potent GHGs, they are sometimes referred to as high global-warming-potential (GWP) gases.
 - **Chlorofluorocarbons (CFCs)** are GHGs covered under the 1987 Montreal Protocol and used for refrigeration, air conditioning, packaging, insulation, solvents, or aerosol propellants. Since they are not destroyed in the lower atmosphere (troposphere, stratosphere), CFCs drift into the upper atmosphere where, given suitable conditions, they break down ozone. These gases are also ozone-depleting gases and are therefore being replaced by other compounds that are GHGs covered under the Kyoto Protocol.
 - **Perfluorocarbons (PFCs)** are a group of human-made chemicals composed of carbon and fluorine only. These chemicals (predominantly perfluoromethane [CF₄] and perfluoroethane [C₂F₆]) were introduced as alternatives, along with HFCs, to the ozone-depleting substances. In addition, PFCs are emitted as by-products of industrial processes and are used in manufacturing. PFCs do not harm the stratospheric ozone layer, but they have a high global warming potential.
 - **Sulfur Hexafluoride (SF₆)** is a colorless gas soluble in alcohol and ether, slightly soluble in water. SF₆ is a strong GHG used primarily in electrical transmission and distribution systems as an insulator.
 - **Hydrochlorofluorocarbons (HCFCs)** contain hydrogen, fluorine, chlorine, and carbon atoms. Although ozone-depleting substances, they are less potent at destroying stratospheric ozone than CFCs. They have been introduced as temporary replacements for CFCs and are also GHGs.
 - **Hydrofluorocarbons (HFCs)** contain only hydrogen, fluorine, and carbon atoms. They were introduced as alternatives to ozone-depleting substances to serve many industrial, commercial, and personal needs. HFCs are emitted as by-products of industrial processes and are also used in manufacturing. They do not significantly deplete the stratospheric ozone layer, but they are strong GHGs (IPCC 2001; USEPA 2024b).

GHGs are dependent on the lifetime or persistence of the gas molecule in the atmosphere. Some GHGs have stronger greenhouse effects than others. These are referred to as high GWP gases. The GWP of GHG emissions are shown in Table 10, *GHG Emissions and Their Relative Global Warming Potential Compared to CO₂*. The GWP is used to convert GHGs to CO₂-equivalence (CO₂e) to show the relative potential that different GHGs have to retain infrared radiation in the atmosphere and contribute to the greenhouse effect. For

example, under IPCC's Fifth Assessment Report (AR5) GWP values for CH₄, a project that generates 10 MT of CH₄ would be equivalent to 250 MT of CO₂.¹¹

Table 10 GHG Emissions and Their Relative Global Warming Potential Compared to CO₂

GHGs	Fourth Assessment Report (AR4) Global Warming Potential Relative to CO ₂ ¹	Fifth Assessment Report (AR5) Global Warming Potential Relative to CO ₂ ¹	Sixth Assessment Report (AR6) Global Warming Potential Relative to CO ₂ ¹
Carbon Dioxide (CO ₂)	1	1	1
Methane ² (CH ₄)	25	28	30
Nitrous Oxide (N ₂ O)	298	265	273

Source: IPCC 2007, 2013, and 2023.

Notes: The IPCC published updated GWP values in its Sixth Assessment Report (AR6) that reflect latest information on atmospheric lifetimes of GHGs and an improved calculation of the radiative forcing of CO₂. However, GWP values identified in AR5 are used by the 2022 Scoping Plan for long-term emissions forecasting.

¹ Based on 100-year time horizon of the GWP of the air pollutant compared to CO₂.

² The methane GWP includes direct effects and indirect effects due to the production of tropospheric ozone and stratospheric water vapor. The indirect effect due to the production of CO₂ is not included.

GHG Regulatory Setting

REGULATION OF GHG EMISSIONS ON A NATIONAL LEVEL

The US Environmental Protection Agency (EPA) announced on December 7, 2009, that GHG emissions threaten the public health and welfare of the American people and that GHG emissions from on-road vehicles contribute to that threat. The EPA's final findings respond to the 2007 U.S. Supreme Court decision that GHG emissions fit within the Clean Air Act definition of air pollutants. The findings do not in and of themselves impose any emission reduction requirements but allow the EPA to finalize the GHG standards proposed in 2009 for new light-duty vehicles as part of the joint rulemaking with the Department of Transportation (USEPA 2009).

To regulate GHGs from passenger vehicles, EPA was required to issue an endangerment finding. The finding identifies emissions of six key GHGs—CO₂, CH₄, N₂O, hydrofluorocarbons, perfluorocarbons, and SF₆—that have been the subject of scrutiny and intense analysis for decades by scientists in the United States and around the world. The first three are applicable to the project's GHG emissions inventory because they constitute the majority of GHG emissions and, per South Coast AQMD guidance, are the GHG emissions that should be evaluated as part of a project's GHG emissions inventory.

US Mandatory Report Rule for GHGs (2009)

In response to the endangerment finding, the EPA issued the Mandatory Reporting of GHG Rule that requires substantial emitters of GHG emissions (large stationary sources, etc.) to report GHG emissions data. Facilities that emit 25,000 MT or more of CO₂ per year are required to submit an annual report.

¹¹ The global warming potential of a GHG is dependent on the lifetime, or persistence, of the gas molecule in the atmosphere.

Update to Corporate Average Fuel Economy Standards (2021 to 2026)

The federal government issued new Corporate Average Fuel Economy (CAFE) standards in 2012 for model years 2017 to 2025, which required a fleet average of 54.5 miles per gallon in 2025. On March 30, 2020, the EPA finalized an updated CAFE and GHG emissions standards for passenger cars and light trucks and established new standards covering model years 2021 through 2026, known as the Safer Affordable Fuel Efficient (SAFE) Vehicles Final Rule for Model Years 2021 to 2026. Under SAFE, the fuel economy standards will increase 1.5 percent per year compared to the 5 percent per year under the CAFE standards established in 2012. Overall, SAFE requires a fleet average of 40.4 MPG for model year 2026 vehicles (85 Federal Register 24174 (April 30, 2020)).

On December 21, 2021, under direction of Executive Order (EO) 13990 issued by President Biden, the National Highway Traffic Safety Administration repealed Safer Affordable Fuel Efficient Vehicles Rule Part One, which had preempted state and local laws related to fuel economy standards. In addition, on March 31, 2022, the National Highway Traffic Safety Administration finalized new fuel standards in response to EO 13990. Fuel efficiency under the standards proposed will increase 8 percent annually for model years 2024 to 2025 and 10 percent annual for model year 2026. Overall, the new CAFE standards require a fleet average of 49 MPG for passenger vehicles and light trucks for model year 2026, which would be a 10 MPG increase relative to model year 2021 (NHTSA 2022).

EPA Regulation of Stationary Sources under the Clean Air Act (Ongoing)

Pursuant to its authority under the Clean Air Act, the EPA has developed regulations for new, large, stationary sources of emissions, such as power plants and refineries. Under former President Obama's 2013 Climate Action Plan, the EPA was directed to develop regulations for existing stationary sources as well. On June 19, 2019, the EPA issued the final Affordable Clean Energy (ACE) rule, which became effective on August 19, 2019. The ACE rule was crafted under the direction of President Trump's Energy Independence EO. It officially rescinded the Clean Power Plan rule issued during the Obama Administration and set emissions guidelines for states in developing plans to limit CO₂ emissions from coal-fired power plants. The Affordable Clean Energy rule was vacated by the United States Court of Appeals for the District of Columbia Circuit on January 19, 2021. The Biden Administration is assessing options on potential future regulations.

REGULATION OF GHG EMISSIONS ON A STATE LEVEL

Current State of California guidance and goals for reductions in GHG emissions are generally embodied in EO S-03-05 and EO B-30-15, EO B-55-18, Assembly Bill 32 (AB 32), Senate Bill 32 (SB 32), and SB 375.

Executive Order S-3-05

Executive Order S-3-05, signed June 1, 2005. Executive Order S-3-05 set the following GHG reduction targets for the State:

- 2000 levels by 2010
- 1990 levels by 2020

- 80 percent below 1990 levels by 2050

Assembly Bill 32, the Global Warming Solutions Act (2006)

AB 32 was passed by the California state legislature on August 31, 2006, to place the state on a course toward reducing its contribution of GHG emissions. AB 32 follows the 2020 tier of emissions reduction targets established in EO S-03-05. CARB prepared the 2008 Scoping Plan to outline a plan to achieve the GHG emissions reduction targets of AB 32.

Executive Order B-30-15

EO B-30-15, signed April 29, 2015, set a goal of reducing GHG emissions within the state to 40 percent of 1990 levels by year 2030. EO B-30-15 also directed CARB to update the Scoping Plan to quantify the 2030 GHG reduction goal for the state and requires state agencies to implement measures to meet the interim 2030 goal as well as the long-term goal for 2050 in EO S-03-05. It also requires the Natural Resources Agency to conduct triennial updates of the California adaption strategy, “Safeguarding California”, in order to ensure climate change is accounted for in state planning and investment decisions.

Senate Bill 32 and Assembly Bill 197

In September 2016, Governor Brown signed SB 32 and AB 197 into law, making the Executive Order goal for year 2030 into a statewide mandated legislative target. AB 197 established a joint legislative committee on climate change policies and requires the CARB to prioritize direction emissions reductions rather than the market-based cap-and-trade program for large stationary, mobile, and other sources.

Executive Order B-55-18

Executive Order B-55-18, signed September 10, 2018, set a goal “to achieve carbon neutrality as soon as possible, and no later than 2045, and achieve and maintain net negative emissions thereafter.” Executive Order B-55-18 directs CARB to work with relevant state agencies to ensure that future Scoping Plans identify and recommend measures to achieve the carbon neutrality goal. The goal of carbon neutrality by 2045 is in addition to other statewide goals, meaning that not only should emissions be reduced to 80 percent below 1990 levels by 2050, but that, by no later than 2045, the remaining emissions should be offset by equivalent net removals of CO₂e from the atmosphere, including through sequestration in forests, soils, and other natural landscapes.

Assembly Bill 1279

AB 1279, signed by Governor Newsom in September 2022, codified the carbon neutrality targets of EO B-55-18 for year 2045 and sets a new legislative target for year 2045 of 85 percent below 1990 levels for anthropogenic GHG emissions. SB 1279 also requires CARB to update the Scoping Plan to address these new targets.

2022 Climate Change Scoping Plan

CARB adopted the *2022 Scoping Plan for Achieving Carbon Neutrality* (2022 Scoping Plan) on December 15, 2022, which lays out a path to achieve carbon neutrality by 2045 or earlier and to reduce the State’s anthropogenic GHG emissions (CARB 2022). The Scoping Plan provides updates to the previously adopted

2017 Scoping Plan and addresses the carbon neutrality goals of EO B-55-18 (discussed below) and the ambitious GHG reduction target as directed by AB 1279. Previous Scoping Plans focused on specific GHG reduction targets for our industrial, energy, and transportation sectors—to meet 1990 levels by 2020, and then the more aggressive 40 percent below that for the 2030 target. The 2022 Scoping Plan updates the target of reducing anthropogenic emissions to 85 percent below 1990 levels by 2045. Carbon neutrality takes it one step further by expanding actions to capture and store carbon including through natural and working lands and mechanical technologies, while drastically reducing anthropogenic sources of carbon pollution at the same time.

The path forward was informed by the recent Sixth Assessment Report (AR6) of the IPCC and the measures would achieve 85 percent below 1990 levels by 2045 in accordance AB 1279. CARB's 2022 Scoping Plan identifies strategies as shown in Table 11, *Priority Strategies for Local Government Climate Action Plans*, that would be most impactful at the local level for ensuring substantial progress towards the State's carbon neutrality goals.

Table 11 Priority Strategies for Local Government Climate Action Plans

Priority Area	Priority Strategies
Transportation Electrification	Convert local government fleets to zero-emission vehicles (ZEV) and provide EV charging at public sites.
	Create a jurisdiction-specific ZEV ecosystem to support deployment of ZEVs statewide (such as building standards that exceed state building codes, permit streamlining, infrastructure siting, consumer education, preferential parking policies, and ZEV readiness plans).
VMT Reduction	Reduce or eliminate minimum parking standards.
	Implement Complete Streets policies and investments, consistent with general plan circulation element requirements.
	Increase access to public transit by increasing density of development near transit, improving transit service by increasing service frequency, creating bus priority lanes, reducing or eliminating fares, microtransit, etc.
	Increase public access to clean mobility options by planning for and investing in electric shuttles, bike share, car share, and walking
	Implement parking pricing or transportation demand management pricing strategies.
	Amend zoning or development codes to enable mixed-use, walkable, transit-oriented, and compact infill development (such as increasing allowable density of the neighborhood).
	Preserve natural and working lands by implementing land use policies that guide development toward infill areas and do not convert "greenfield" land to urban uses (e.g., green belts, strategic conservation easements)

Table 11 Priority Strategies for Local Government Climate Action Plans

Priority Area	Priority Strategies
Building Decarbonization	Adopt all-electric new construction reach codes for residential and commercial uses.
	Adopt policies and incentive programs to implement energy efficiency retrofits for existing buildings, such as weatherization, lighting upgrades, and replacing energy-intensive appliances and equipment with more efficient systems (such as Energy Star-rated equipment and equipment controllers).
	Adopt policies and incentive programs to electrify all appliances and equipment in existing buildings such as appliance rebates, existing building reach codes, or time of sale electrification ordinances ¹¹ .
	Facilitate deployment of renewable energy production and distribution and energy storage on privately owned land uses (e.g., permit streamlining, information sharing) ¹¹ .
	Deploy renewable energy production and energy storage directly in new public projects and on existing public facilities (e.g., solar photovoltaic systems on rooftops of municipal buildings and on canopies in public parking lots, battery storage systems in municipal buildings) ¹¹ .

Source: CARB 2022

Based on Appendix D of the 2022 CARB Climate Change Scoping Plan, for residential and mixed-use development projects, CARB recommends first demonstrating that these land use development projects are aligned with State climate goals based on the attributes of land use development that reduce operational GHG emissions while simultaneously advancing fair housing. Attributes that accommodate growth in a manner consistent with the GHG and equity goals of SB 32 have all the following attributes:

- Transportation Electrification
 - Provide EV charging infrastructure that, at a minimum, meets the most ambitious voluntary standards in the California Green Building Standards Code at the time of project approval.
- VMT Reduction
 - Is located on infill sites that are surrounded by existing urban uses and reuses or redevelops previously undeveloped or underutilized land that is presently served by existing utilities and essential public services (e.g., transit, streets, water, sewer).
 - Does not result in the loss or conversion of the State's natural and working lands;
 - Consists of transit-supportive densities (minimum of 20 residential dwelling units/acre), or is in proximity to existing transit stops (within a half mile), or satisfies more detailed and stringent criteria specified in the region's Sustainable Communities Strategy (SCS);
 - Reduces parking requirements by:
 - Eliminating parking requirements or including maximum allowable parking ratios (i.e., the ratio of parking spaces to residential units or square feet); or
 - Providing residential parking supply at a ratio of <1 parking space per dwelling unit; or
 - For multifamily residential development, requiring parking costs to be unbundled from costs to rent or own a residential unit.

- At least 20 percent of the units are affordable to lower-income residents;
 - Result in no net loss of existing affordable units.
- Building Decarbonization
- Use all electric appliances without any natural gas connections and does not use propane or other fossil fuels for space heating, water heating, or indoor cooking (CARB 2022).

If the first approach to demonstrating consistency is not applicable (such as in the case of this school modernization project), the second approach to project-level alignment with state climate goals is to achieve net zero GHG emissions. The third approach to demonstrating project-level alignment with state climate goals is to align with GHG thresholds of significance, which many local air quality management (AQMDs) and air pollution control districts (APCDs) have developed or adopted (CARB 2022).

Senate Bill 375

In 2008, SB 375, the Sustainable Communities and Climate Protection Act, was adopted to connect the GHG emissions reductions targets established in the 2008 Scoping Plan for the transportation sector to local land use decisions that affect travel behavior. Its intent is to reduce GHG emissions from light-duty trucks and automobiles (excludes emissions associated with goods movement) by aligning regional long-range transportation plans, investments, and housing allocations to local land use planning to reduce VMT and vehicle trips. Specifically, SB 375 required CARB to establish GHG emissions reduction targets for each of the 18 metropolitan planning organizations (MPO). The Southern California Association of Governments (SCAG) is the MPO for the Southern California region, which includes the counties of Los Angeles, Orange, San Bernardino, Riverside, Ventura, and Imperial.

Pursuant to the recommendations of the Regional Transportation Advisory Committee, CARB adopted per capita reduction targets for each of the MPOs rather than a total magnitude reduction target. SCAG's targets are an 8 percent per capita reduction from 2005 GHG emission levels by 2020 and a 13 percent per capita reduction from 2005 GHG emission levels by 2035 (CARB 2010). The 2020 targets are smaller than the 2035 targets because a significant portion of the built environment in 2020 is defined by decisions that have already been made. In general, the 2020 scenarios reflect that more time is needed for large land use and transportation infrastructure changes. Most of the reductions in the interim are anticipated to come from improving the efficiency of the region's transportation network. The targets would result in 3 MMTCO_{2e} of reductions by 2020 and 15 MMTCO_{2e} of reductions by 2035. Based on these reductions, the passenger vehicle target in CARB's Scoping Plan (for AB 32) would be met (CARB 2010).

2017 Update to the SB 375 Targets

CARB is required to update the targets for the MPOs every eight years. CARB adopted revised SB 375 targets for the MPOs in March 2018. The updated targets became effective in October 2018. All SCSs adopted after October 1, 2018, are subject to these new targets. CARB's updated SB 375 targets for the SCAG region were an 8 percent per capita GHG reduction in 2020 from 2005 levels (unchanged from the 2010 target) and a 19

percent per capita GHG reduction in 2035 from 2005 levels (compared to the 2010 target of 13 percent) (CARB 2018).

The targets consider the need to further reduce VMT, as identified in the 2017 Scoping Plan Update (for SB 32), while balancing the need for additional and more flexible revenue sources to incentivize positive planning and action toward sustainable communities. Like the 2010 targets, the updated SB 375 targets are in units of “percent per capita” reductions in GHG emissions from automobiles and light trucks relative to 2005; this excludes reductions anticipated from implementation of state technology and fuels strategies and any potential future state strategies, such as statewide road user pricing. The proposed targets call for greater per-capita GHG emission reductions from SB 375 than are currently in place, which for 2035 translate into proposed targets that either match or exceed the emission reduction levels in the MPOs’ currently adopted SCSs to achieve the SB 375 targets. CARB foresees that the additional GHG emissions reductions in 2035 may be achieved from land use changes, transportation investment, and technology strategies (CARB 2018).

SCAG’s Regional Transportation Plan / Sustainable Communities Strategy

SB 375 requires each MPO to prepare a sustainable communities strategy in its regional transportation plan. For the SCAG region, the 2020-2045 RTP/SCS (Connect SoCal) was adopted on September 3, 2020, and is an update to the 2016-2040 RTP/SCS. In general, the SCS outlines a development pattern for the region that, when integrated with the transportation network and other transportation measures and policies, would reduce vehicle miles traveled from automobiles and light duty trucks and thereby reduce GHG emissions from these sources.

Connect SoCal focuses on the continued efforts of the previous RTP/SCSs to integrate transportation and land use strategies in development of the SCAG region through horizon year 2045 (SCAG 2020). Connect SoCal forecasts that the SCAG region will meet its GHG per capita reduction targets of 8 percent by 2020 and 19 percent by 2035. Additionally, Connect SoCal also forecasts that implementation of the plan will reduce VMT per capita in year 2045 by 4.1 percent compared to baseline conditions for that year. Connect SoCal includes a “Core Vision” that centers on maintaining and better managing the transportation network for moving people and goods while expanding mobility choices by locating housing, jobs, and transit closer together and increasing investments in transit and complete streets (SCAG 2020).

Transportation Sector Specific Regulations

Advanced Clean Fleets and Advanced Clean Trucks

CARB adopted the Advanced Clean Fleets (ACF) regulation in 2023 to accelerate the transition to zero-emission medium- and heavy-duty vehicles. In conjunction with the Advanced Clean Trucks (ACT) regulation, the ACF regulations helps to ensure that medium- and heavy-duty zero-emission vehicles (ZEV) are brought to the market, by requiring certain fleets to purchase zero emission vehicles (ZEVs). The ACF ZEV phase-in approach which provides initial focus where the best fleet electrification opportunities exist, sets clear targets for regulated fleets to make a full conversion to ZEVs, and creates a catalyst to accelerate development of a heavy-duty public charging infrastructure network.

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 EPA. In 2012, the EPA 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 CO₂e 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 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

Senate Bill 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 Code: Building Energy Efficiency Standards

Energy conservation standards for new residential and nonresidential buildings were adopted by the California Energy Resources Conservation and Development Commission (now the CEC) in June 1977 (Title 24, Part 6, of the California Code of Regulations [CCR]). Title 24 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.

On August 11, 2021, the CEC adopted the 2022 Building Energy Efficiency Standards, which were subsequently approved by the California Building Standards Commission in December 2021. The 2022 standards went into effect on January 1, 2023, replacing the existing 2019 standards. The 2022 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 (CEC 2021).

California Building Code: 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") was adopted as part of the California Building Standards Code. 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.¹² The mandatory provisions of CALGreen became effective January 1, 2011. In 2021, the CEC approved the 2022 CALGreen, which went into effect on January 1, 2023, replacing the existing 2019 standards.

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 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

¹² The green building standards became mandatory in the 2010 edition of the code.

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 CH₄. 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.

Existing Conditions

CALIFORNIA'S GREENHOUSE GAS SOURCES AND RELATIVE CONTRIBUTION

In 2021, the statewide GHG emissions inventory was updated for 2000 to 2019 emissions using the GWPs in IPCC's AR4 (IPCC 2013). Based on these GWPs, California produced 418.2 MMTCO_{2e} GHG emissions in 2019. California's transportation sector was the single largest generator of GHG emissions, producing 39.7 percent of the state's total emissions. Industrial sector emissions made up 21.1 percent, and electric power generation made up 14.1 percent of the state's emissions inventory. Other major sectors of GHG emissions include commercial and residential (10.5 percent), agriculture and forestry (7.6 percent), high GWP (4.9 percent), and recycling and waste (2.1 percent) (CARB 2021).

Since the peak level in 2004, California's GHG emission have generally followed a decreasing trend. In 2016, California statewide GHG emissions dropped below the AB 32 target for year 2020 of 431 MMTCO_{2e} and have remained below this target since then. In 2019, emissions from routine GHG-emitting activities statewide were almost 13 MMTCO_{2e} lower than the AB 32 target for year 2020. Per-capita GHG emissions in California have dropped from a 2001 peak of 14.0 MTCO_{2e} per person to 10.5 MTCO_{2e} per person in 2019, a 25 percent decrease.

Transportation emissions continued to decline in 2019 statewide as they had done in 2018, with even more substantial reductions due to a significant increase in renewable diesel. Since 2008, California's electricity sector has followed an overall downward trend in emissions. In 2019, solar power generation continued its rapid growth since 2013. Emissions from high-GWP gases comprised 4.9 percent of California's emissions in 2019. This continues the increasing trend as the gases replace ozone-depleting substances being phased out under the 1987 Montreal Protocol. Overall trends in the inventory also demonstrate that the carbon intensity of California's economy (the amount of carbon pollution per million dollars of gross domestic product) has

declined 45 percent since the 2001 peak, though the state's gross domestic product grew 63 percent during this period (CARB 2021).

Thresholds of Significance

The CEQA Guidelines recommend that a lead agency consider the following when assessing the significance of impacts from GHG emissions on the environment:

1. The extent to which the project may increase (or reduce) GHG emissions as compared to the existing environmental setting;
2. Whether the project emissions exceed a threshold of significance that the lead agency determines applies to the project;
3. The extent to which the project complies with regulations or requirements adopted to implement an adopted statewide, regional, or local plan for the reduction or mitigation of GHG emissions.¹³

SOUTH COAST AQMD WORKING GROUP

To provide guidance to local lead agencies on determining significance for GHG emissions in their CEQA documents, South Coast AQMD convened a GHG CEQA Significance Threshold Working Group (Working Group). The South Coast AQMD Working Group (Meeting No. 15) identified a tiered approach for evaluating GHG emissions for development projects where South Coast AQMD is not the lead agency (South Coast AQMD 2010):

- **Tier 1.** If a project is exempt from CEQA, project-level and cumulative GHG emissions are less than significant.
- **Tier 2.** If the project complies with a GHG emissions reduction plan or mitigation program that avoids or substantially reduces GHG emissions in the project's geographic area (i.e., city or county), project-level and cumulative GHG emissions are less than significant.
- **Tier 3.** If GHG emissions are less than the screening-level threshold, project-level and cumulative GHG emissions are less than significant.

For projects that are not exempt or where no qualifying GHG reduction plans are directly applicable, South Coast AQMD requires an assessment of GHG emissions. The South Coast AQMD Working Group identified a screening-level threshold of 3,000 MTCO_{2e} annually for all land use types or the following land-use-specific thresholds: 1,400 MTCO_{2e} for commercial projects, 3,500 MTCO_{2e} for

¹³ The Governor's Office of Planning and Research recommendations include a requirement that such a plan must be adopted through a public review process and include specific requirements that reduce or mitigate the project's incremental contribution of GHG emissions. If there is substantial evidence that the possible effects of a particular project are still cumulatively considerable, notwithstanding compliance with the adopted regulations or requirements, an EIR must be prepared for the project.

residential projects, or 3,000 MTCO₂e for mixed-use projects. These bright-line thresholds are based on a review of the Governor's Office of Planning and Research database of CEQA projects. Based on their review of 711 CEQA projects, 90 percent of CEQA projects would exceed the bright-line thresholds identified above. Therefore, projects that do not exceed the bright-line threshold would have a nominal, and therefore, less than cumulatively considerable impact on GHG emissions:

- **Tier 4.** If emissions exceed the screening threshold, a more detailed review of the project's GHG emissions is warranted.

The South Coast AQMD Working Group has identified an efficiency target for projects that exceed the screening threshold of 4.8 MTCO₂e per year per service population (MTCO₂e/year/SP) for project-level analyses and 6.6 MTCO₂e/year/SP for plan level projects (e.g., program-level projects such as general plans) for the year 2020.¹⁴ The per capita efficiency targets are based on the AB 32 GHG reduction target and 2020 GHG emissions inventory prepared for CARB's 2008 Scoping Plan.

The bright-line screening-level criterion of 3,000 MTCO₂e/yr is used as the significance threshold for this project. Therefore, if the project operation-phase emissions exceed the 3,000 MTCO₂e/yr threshold, GHG emissions would be considered potentially significant in the absence of mitigation measures.

¹⁴ It should be noted that the Working Group also considered efficiency targets for 2035 for the first time in this Working Group meeting.

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Assumptions Worksheet

CalEEMod Inputs-Gale Avenue Roadway Realignment Project, Construction

Name: Gale Avenue Roadway Realignment Project, Construction
Project Number: CASS-02
Project Location: 17280 Gale Ave, City of Industry, CA 91748
County/Air Basin: Los Angeles County
Climate Zone: 9
Land Use Setting: Urban
Operational Year: 2027
Utility Company: Southern California Edison
Gas Utility: Southern California Gas
Air Basin: South Coast Air Basin
Air District: South Coast AQMD
SRA: 10 - Pomona/Walnut Valley

Project Site Acreage	20.70
Disturbed Site Acreage	8.60

	SQFT	Amount of Debris		
Demolition				
Asphalt Demolition (Tons)	130,000	1,926		
Project Components	SQFT	Building Footprint	Acres	Length of Roadway (miles)
Construction				
Roadway Construction	310,000	310,000	7.12	0.89
Landscaping	12,000	12,000	0.28	NA
Hardscape	52,800	52,800	1.21	NA

Land Use Type	Land Use Subtype	Size	Unit	Lot Acreage	Land Use Square Feet	Landscape Area Square Feet
Linear	Road Construction	0.89	Mile	8.60	NA	NA
Parking	Other Asphalt Surfaces	0.00	1000 sqft	0.00	NA	0
				8.60		

Predominant Soil/Site Type: Sand Gravel

Demolition						
Component	Amount to be Demolished	Haul Truck Capacity ¹	Haul Distance (miles) ¹	Total Trip Ends	Duration (days)	Trip Ends Per Day
Asphalt (Tons)	1,926	20	20	193	20	10
Total						10

Notes¹ CalEEMod default used.

Architectural Coating

	Default Percent Painted
Exterior Painted:	100%

Rule 1113

VOC content for Parking/Linear Paint:	100	grams per liter
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Structures	Land Use Square Feet	CalEEMod Factor ²	Total Paintable Surface Area	Paintable Interior Area ¹	Paintable Exterior Area ¹
Parking					
Road Construction	310,000	6%	3,888	-	3,888

Notes¹ Assumes that all non-parking asphalt will be striped. CalEEMod methodology assumes 6% of surface area is striped.

Construction Mitigation

Water Exposed Area	Frequency:	2	per day
	PM10:	55	% Reduction
	PM25:	55	% Reduction

Unpaved Roads	Vehicle Speed:	25	mph
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SCAQMD Rule 1186	Clean Paved Road	9	% PM Reduction
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Pavement Volume to Weight Conversion

Component	Total SF of Area ¹	Assumed Thickness (foot) ²	Debris Volume (cu. ft)	Weight of Crushed Asphalt (lbs/cf) ³	AC Mass (lbs)	AC Mass (tons)
Asphalt Demolition	130,000	0.333	43,333	89	3,851,852	1925.93
Total	130,000					1,926

¹ Provided by Applicant.

² Gibbons, Jim. 1999. Pavements and Surface Materials. Nonpoint Education for Municipal Officials, Technical Paper Number 8. University of Connecticut Cooperative Extension System. https://www.uni-groupusa.org/PDF/NEMO_tech_8.pdf

³ CalRecycle. 2019. Solid Waste Cleanup Program Weights and Volumes for Project Estimates. <https://www.delmar.ca.us/DocumentCenter/View/5668/CalRecycle-Conversion-Table>

Construction Activities and Schedule Assumptions

* based on schedule provided by the Applicant

Construction Activities	Phase Type	Construction Schedule		
		Start Date	End Date	CalEEMod Duration (Workday)
Asphalt Demolition ¹	Demolition	7/1/2026	7/28/2026	20
Linear, Grubbing & Land Clearing	Linear, Grubbing & Land Clearing	7/1/2026	7/14/2026	10
Site Preparation	Linear, Grubbing & Land Clearing	7/15/2026	8/25/2026	30
Rough Grading for Roadway	Linear, Grading & Excavation	8/26/2026	11/17/2026	60
Utility Trenching	Linear, Drainage, Utilities, & Sub-Grade	11/18/2026	5/4/2027	120
Fine Grading for Roadway	Linear, Grading & Excavation	5/5/2027	6/15/2027	30
Roadway Construction	Linear, Drainage, Utilities, & Sub-Grade	6/16/2027	10/19/2027	90
Linear, Paving	Linear, Paving	10/20/2027	11/16/2027	20
Paving	Paving	10/20/2027	11/16/2027	20
Architectural Coating	Architectural Coating	11/17/2027	11/30/2027	10
Finishing/Landscaping	Trenching	12/1/2027	12/28/2027	20

Notes

¹ CalEEMod default for duration used.

² Paving activity was added since CalEEMod does not account for paving off-gas emissions in the Linear, Paving activity.

Overlapping Construction Schedule (CalEEMod)

Construction Activities	Start Date	End Date	CalEEMod Duration (Workday)
Linear, Grubbing & Land Clearing and Asphalt Demolition	7/1/2026	7/14/2026	10
Site Preparation and Asphalt Demolition	7/15/2026	7/28/2026	10
Site Preparation	7/29/2026	8/25/2026	20
Rough Grading for Roadway	8/26/2026	11/17/2026	60
Utility Trenching	11/18/2026	5/4/2027	120
Fine Grading for Roadway	5/5/2027	6/15/2027	30
Roadway Construction	6/16/2027	10/19/2027	90
Linear, Paving	10/20/2027	11/16/2027	20
Architectural Coating	11/17/2027	11/30/2027	10
Finishing/Landscaping	12/1/2027	12/28/2027	20

CalEEMod Construction Off-Road Equipment Inputs

Based on information from Applicant where indicated. CalEEMod default worker and vendor trips have been used for all construction activities. Where information has not been provided by the Applicant, CalEEMod defaults have been used.

Construction Equipment Details					
Equipment Provided	CalEEMod Equipment	# of Equipment	hr/day	total trips per day	On-Site Water Truck Travel Distance (miles/day)
Asphalt Demolition					
Cold Milling Machine	Crushing/Proc. Equipment	1	8		
Wheel/Skip Loader	Rubber Tired Loaders	2	8		
Worker Trips				8	
Vendor Trips				6	
Hauling Trips ¹				14	
Water Trucks			Acres Disturbed: 1.00	6	0.83
Linear, Grubbing & Land Clearing					
Motor Grader	Graders	2	8		
Worker Trips				5	
Vendor Trips				6	
Hauling Trips ¹				4	
Water Trucks			Acres Disturbed: 1	6	0.83
Site Preparation					
Wheel/Skip Loader	Rubber Tired Loaders	1	8		
Excavator/Backhoe	Excavators	2	8		
Worker Trips				8	
Vendor Trips				4	
Hauling Trips ¹				4	
Water Trucks			Acres Disturbed: 1	4	0.41
Rough Grading for Roadway					
Motor Grader	Graders	2	8		
Wheel/Skip Loader	Rubber Tired Loaders	2	8		
Drum Roller	Rollers	1	8		
Worker Trips				13	
Vendor Trips				10	
Hauling Trips ¹				4	
Water Trucks			Acres Disturbed: 2	10	1.65
Fine Grading for Roadway					
Motor Grader	Graders	1	8		
Drum Roller	Rollers	1	8		
Worker Trips				5	
Vendor Trips				4	
Hauling Trips				0	
Water Trucks			Acres Disturbed: 1	4	0.41
Utility Trenching					
Wheel/Skip Loader	Rubber Tired Loaders	2	8		
Excavator/Backhow	Excavators	2	8		
Drum Roller	Rollers	1	8		
Worker Trips				13	
Vendor Trips				6	
Hauling Trips				0	
Water Trucks			Acres Disturbed: 1	6	0.83

Roadway Construction					
Wheel/Skip Loader	Rubber Tired Loaders	1	8		
Excavator/Backhoe	Excavators	1	8		
Drum Roller	Rollers	1	8		
Worker Trips				8	
Vendor Trips				0	
Hauling Trips				0	
Linear, Paving					
AC Paver	Pavers	1	8		
Drum Roller	Rollers	2	8		
Worker Trips				8	
Vendor Trips				0	
Hauling Trips ¹				2	
Architectural Coating					
None provided	Air Compressors	1	6		
Worker Trips				0	
Vendor Trips				0	
Hauling Trips ¹				2	
Finishing/Landscaping					
Excavator/Backhoe	Excavators	1	8		
Worker Trips				3	
Vendor Trips				0	
Hauling Trips				0	

Notes:

¹ Included hauling trips to account for dump trucks and striping machine/truck as provided by applicant.

Water Truck Vendor Trip Calculation

Amount of Water (gal/ acre/ day) ¹	Water Truck Capacity (gallons) ²
10,000	4,000

Notes:

¹ 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)

² Based on standard water truck capacity:
 McLellan Industries. 2022, January (access). Water Trucks. <https://www.mclellanindustries.com/trucks/water-trucks/>

³ Assumes that dozers, tractors/loaders/backhoes, and graders can disturb 0.50 acres per day and scrapers can disturb 1 acre per day.

Phase Name	Worker Trip Ends Per Day	Vendor Trip Ends Per Day	Haul Truck Trip Ends Per Day	Start Date	End Date	Workdays
Asphalt Demolition	8	6	14	7/1/2026	7/28/2026	20
Linear, Grubbing & Land Clearing	5	6	4	7/1/2026	7/14/2026	10
Site Preparation	8	4	4	7/15/2026	8/25/2026	30
Rough Grading for Roadway	13	10	4	8/26/2026	11/17/2026	60
Fine Grading for Roadway	5	4	0	5/5/2027	6/15/2027	30
Utility Trenching	13	6	0	11/18/2026	5/4/2027	120
Roadway Construction	8	0	0	6/16/2027	10/19/2027	90
Linear, Paving	8	0	2	10/20/2027	11/16/2027	20
Architectural Coating	0	0	2	11/17/2027	11/30/2027	10
Finishing/Landscaping	3	0	0	12/1/2027	12/28/2027	20

Construction Activity (Overlapping)	Worker Trip Ends Per Day	Vendor Trip Ends Per Day	Haul Truck Trip Ends Per Day	Start Date	End Date	Workdays
Linear, Grubbing & Land Clearing and Asphalt Demolition	13	12	18	7/1/2026	7/14/2026	10
Site Preparation and Asphalt Demolition	16	10	18	7/15/2026	7/28/2026	10
Site Preparation	8	4	4	7/29/2026	8/25/2026	20
Rough Grading for Roadway	13	10	4	8/26/2026	11/17/2026	60
Utility Trenching	13	6	0	11/18/2026	5/4/2027	120
Fine Grading for Roadway	5	4	0	5/5/2027	6/15/2027	30
Roadway Construction	8	0	0	6/16/2027	10/19/2027	90
Linear, Paving	8	0	2	10/20/2027	11/16/2027	20
Architectural Coating	0	0	2	11/17/2027	11/30/2027	10
Finishing/Landscaping	3	0	0	12/1/2027	12/28/2027	20
	16	12	18			

CalEEMod Construction Model

CASS-02 Custom Report

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8. User Changes to Default Data

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	CASS-02
Construction Start Date	2/25/2024
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	1.80
Precipitation (days)	22.4
Location	17280 Gale Ave, City of Industry, CA 91748, USA
County	Los Angeles-South Coast
City	Industry
Air District	South Coast AQMD
Air Basin	South Coast
TAZ	5011
EDFZ	7
Electric Utility	City of Industry
Gas Utility	Southern California Gas
App Version	2022.1.1.22

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
Other Asphalt Surfaces	0.00	1000sqft	0.00	0.00 A-51	0.00	0.00	—	—

Road Construction	0.89	Mile	8.60	0.00	0.00	—	—	—
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1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

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.	37.3	36.5	24.9	71.1	0.05	1.64	4.31	5.96	1.42	0.64	2.06	—	5,748	5,748	0.25	0.29	4.34	5,845
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.53	1.92	9.72	15.5	0.03	0.48	2.00	2.48	0.44	0.26	0.70	—	3,032	3,032	0.13	0.11	0.05	3,069
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	2.39	2.29	3.57	7.59	0.01	0.19	0.58	0.78	0.17	0.08	0.25	—	1,027	1,027	0.04	0.04	0.32	1,041
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.44	0.42	0.65	1.38	< 0.005	0.03	0.11	0.14	0.03	0.02	0.05	—	170	170	0.01	0.01	0.05	172

2.2. 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
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Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	37.3	36.5	24.9	71.1	0.05	1.64	4.31	5.96	1.42	0.64	2.06	—	5,748	5,748	0.25	0.29	4.34	5,845
2027	0.89	0.74	5.11	10.2	0.01	0.20	0.78	0.95	0.18	0.10	0.27	—	1,782	1,782	0.07	0.04	1.00	1,798
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	1.53	1.26	9.72	15.5	0.03	0.48	2.00	2.48	0.44	0.26	0.70	—	3,032	3,032	0.13	0.11	0.05	3,069
2027	0.89	1.92	5.13	10.1	0.01	0.20	0.52	0.72	0.18	0.08	0.27	—	1,774	1,774	0.07	0.04	0.03	1,788
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	2.39	2.29	3.57	7.59	0.01	0.19	0.58	0.78	0.17	0.08	0.25	—	1,027	1,027	0.04	0.04	0.32	1,041
2027	0.43	0.46	2.50	4.57	0.01	0.10	0.22	0.32	0.09	0.04	0.13	—	784	784	0.03	0.02	0.18	790
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	0.44	0.42	0.65	1.38	< 0.005	0.03	0.11	0.14	0.03	0.02	0.05	—	170	170	0.01	0.01	0.05	172
2027	0.08	0.08	0.46	0.83	< 0.005	0.02	0.04	0.06	0.02	0.01	0.02	—	130	130	0.01	< 0.005	0.03	131

3. Construction Emissions Details

3.1. Linear, Grubbing & Land Clearing (2026) - 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
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.80	0.67	5.41	7.27	0.01	0.30	—	0.30	0.28	—	0.28	—	1,136	1,136	0.05	0.01	—	1,140

Dust From Material Movement:	—	—	—	—	—	—	1.06	1.06	—	0.11	0.11	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	0.31	0.31	< 0.005	0.03	0.03	—	4.43	4.43	< 0.005	< 0.005	0.01	4.67
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.15	0.20	< 0.005	0.01	—	0.01	0.01	—	0.01	—	31.1	31.1	< 0.005	< 0.005	—	31.2
Dust From Material Movement:	—	—	—	—	—	—	0.03	0.03	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	0.12	0.12	< 0.005	< 0.005	< 0.005	0.13
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.03	0.04	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	5.15	5.15	< 0.005	< 0.005	—	5.17
Dust From Material Movement:	—	—	—	—	—	—	0.01	0.01	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.02	0.02	< 0.005	< 0.005	< 0.005	0.02
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.02	0.32	0.00	0.00	0.07	0.07	0.00	0.02	0.02	—	67.7	67.7	< 0.005	< 0.005	0.23	68.7
Vendor	0.01	0.01	0.21	0.10	< 0.005	< 0.005	0.05	0.05	< 0.005	0.01	0.02	—	187	187	0.01	0.03	0.51	196
Hauling	0.02	< 0.005	0.33	0.13	< 0.005	< 0.005	0.07	0.08	< 0.005	0.02	0.02	—	272	272	0.02	0.04	0.61	286

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.79	1.79	< 0.005	< 0.005	< 0.005	1.81
Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	5.13	5.13	< 0.005	< 0.005	0.01	5.36
Hauling	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	7.46	7.46	< 0.005	< 0.005	0.01	7.83
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.30	0.30	< 0.005	< 0.005	< 0.005	0.30
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.85	0.85	< 0.005	< 0.005	< 0.005	0.89
Hauling	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	1.23	1.23	< 0.005	< 0.005	< 0.005	1.30

3.3. Site Preparation (2026) - 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
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.47	0.39	2.98	5.17	0.01	0.12	—	0.12	0.11	—	0.11	—	785	785	0.03	0.01	—	787
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	0.15	0.15	< 0.005	0.02	0.02	—	3.03	3.03	< 0.005	< 0.005	< 0.005	3.21
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	0.03	0.24	0.43	< 0.005	0.01	—	0.01	0.01	—	0.01	—	64.5	64.5	< 0.005	< 0.005	—	64.7
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	0.25	0.25	< 0.005	< 0.005	< 0.005	0.26
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.04	0.08	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	10.7	10.7	< 0.005	< 0.005	—	10.7
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.04	0.04	< 0.005	< 0.005	< 0.005	0.04
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.03	0.48	0.00	0.00	0.10	0.10	0.00	0.02	0.02	—	102	102	< 0.005	< 0.005	0.34	103
Vendor	0.01	< 0.005	0.14	0.07	< 0.005	< 0.005	0.03	0.04	< 0.005	0.01	0.01	—	125	125	0.01	0.02	0.34	130
Hauling	0.02	< 0.005	0.33	0.13	< 0.005	< 0.005	0.07	0.08	< 0.005	0.02	0.02	—	272	272	0.02	0.04	0.61	286
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.04	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	8.03	8.03	< 0.005	< 0.005	0.01	8.14
Vendor	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	10.3	10.3	< 0.005	< 0.005	0.01	10.7

Hauling	< 0.005	< 0.005	0.03	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	22.4	22.4	< 0.005	< 0.005	0.02	23.5
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.33	1.33	< 0.005	< 0.005	< 0.005	1.35
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	1.70	1.70	< 0.005	< 0.005	< 0.005	1.77
Hauling	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	3.70	3.70	< 0.005	< 0.005	< 0.005	3.89

3.5. Rough Grading for Roadway (2026) - 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
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.43	1.20	8.95	14.5	0.02	0.48	—	0.48	0.44	—	0.44	—	2,280	2,280	0.09	0.02	—	2,288
Dust From Material Movement	—	—	—	—	—	—	1.06	1.06	—	0.11	0.11	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	0.61	0.61	< 0.005	0.06	0.06	—	7.15	7.15	< 0.005	< 0.005	0.01	7.53
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.43	1.20	8.95	14.5	0.02	0.48	—	0.48	0.44	—	0.44	—	2,280	2,280	0.09	0.02	—	2,288
Dust From Material Movement	—	—	—	—	—	—	1.06	1.06	—	0.11	0.11	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	0.61	0.61	< 0.005	0.06	0.06	—	7.18	7.18	< 0.005	< 0.005	< 0.005	7.54

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.24	0.20	1.47	2.39	< 0.005	0.08	—	0.08	0.07	—	0.07	—	375	375	0.02	< 0.005	—	376
Dust From Material Movement	—	—	—	—	—	—	0.17	0.17	—	0.02	0.02	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.09	0.09	< 0.005	0.01	0.01	—	1.18	1.18	< 0.005	< 0.005	< 0.005	1.24
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	0.04	0.27	0.44	< 0.005	0.01	—	0.01	0.01	—	0.01	—	62.1	62.1	< 0.005	< 0.005	—	62.3
Dust From Material Movement	—	—	—	—	—	—	0.03	0.03	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	< 0.005	—	0.19	0.19	< 0.005	< 0.005	< 0.005	0.21
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.05	0.05	0.81	0.00	0.00	0.16	0.16	0.00	0.04	0.04	—	169	169	0.01	0.01	0.57	172
Vendor	0.02	0.01	0.34	0.17	< 0.005	< 0.005	0.09	0.09	< 0.005	0.02	0.03	—	312	312	0.01	0.04	0.84	326
Hauling	0.02	< 0.005	0.33	0.13	< 0.005	< 0.005	0.07	0.08	< 0.005	0.02	0.02	—	272	272	0.02	0.04	0.61	286
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.05	0.05	0.69	0.00	0.00	0.16	0.16	0.00	0.04	0.04	—	161	161	0.01	0.01	0.01	163
Vendor	0.02	0.01	0.36	0.17	< 0.005	< 0.005	0.09	0.09	< 0.005	0.02	0.03	—	312	312	0.01	0.04	0.02	326
Hauling	0.02	< 0.005	0.34	0.13	< 0.005	< 0.005	0.07	0.08	< 0.005	0.02	0.02	—	272	272	0.02	0.04	0.02	286

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.12	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	26.8	26.8	< 0.005	< 0.005	0.04	27.1
Vendor	< 0.005	< 0.005	0.06	0.03	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	51.3	51.3	< 0.005	0.01	0.06	53.6
Hauling	< 0.005	< 0.005	0.06	0.02	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	44.7	44.7	< 0.005	0.01	0.04	47.0
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	4.43	4.43	< 0.005	< 0.005	0.01	4.49
Vendor	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	8.49	8.49	< 0.005	< 0.005	0.01	8.87
Hauling	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	7.41	7.41	< 0.005	< 0.005	0.01	7.78

3.7. Fine Grading for Roadway (2027) - 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
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.53	0.44	3.31	4.64	0.01	0.17	—	0.17	0.16	—	0.16	—	710	710	0.03	0.01	—	713
Dust From Material Movement	—	—	—	—	—	—	0.53	0.53	—	0.06	0.06	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	0.15	0.15	< 0.005	0.02	0.02	—	2.98	2.98	< 0.005	< 0.005	< 0.005	3.15
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	0.04	0.27	0.38	< 0.005	0.01	—	0.01	0.01 A-59	—	0.01	—	58.4	58.4	< 0.005	< 0.005	—	58.6

Dust From Material Movement:	—	—	—	—	—	—	0.04	0.04	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	0.25	0.25	< 0.005	< 0.005	< 0.005	0.26
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.05	0.07	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	9.66	9.66	< 0.005	< 0.005	—	9.70
Dust From Material Movement:	—	—	—	—	—	—	0.01	0.01	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.04	0.04	< 0.005	< 0.005	< 0.005	0.04
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.02	0.30	0.00	0.00	0.07	0.07	0.00	0.02	0.02	—	66.4	66.4	< 0.005	< 0.005	0.21	67.4
Vendor	0.01	< 0.005	0.13	0.06	< 0.005	< 0.005	0.03	0.04	< 0.005	0.01	0.01	—	122	122	0.01	0.02	0.32	128
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	5.25	5.25	< 0.005	< 0.005	0.01	5.32
Vendor	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	10.1	10.1	< 0.005	< 0.005	0.01	10.5
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.87	0.87	< 0.005	< 0.005	< 0.005	0.88
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	1.66	1.66	< 0.005	< 0.005	< 0.005	1.74

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
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3.9. Roadway Construction (2027) - 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
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.49	0.41	2.86	5.15	0.01	0.12	—	0.12	0.11	—	0.11	—	785	785	0.03	0.01	—	788
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.49	0.41	2.86	5.15	0.01	0.12	—	0.12	0.11	—	0.11	—	785	785	0.03	0.01	—	788
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.12	0.10	0.70	1.27	< 0.005	0.03	—	0.03	0.03	—	0.03	—	194	194	0.01	< 0.005	—	194

Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.13	0.23	< 0.005	0.01	—	0.01	< 0.005	—	< 0.005	—	32.0	32.0	< 0.005	< 0.005	—	32.2
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.03	0.45	0.00	0.00	0.10	0.10	0.00	0.02	0.02	—	99.7	99.7	< 0.005	< 0.005	0.31	101
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.03	0.38	0.00	0.00	0.10	0.10	0.00	0.02	0.02	—	94.5	94.5	< 0.005	< 0.005	0.01	95.6
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.10	0.00	0.00	0.02	0.02	0.00	0.01	0.01	—	23.6	23.6	< 0.005	< 0.005	0.03	23.9
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	3.91	3.91	< 0.005	< 0.005	0.01	3.96
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.11. Utility Trenching (2026) - 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
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.86	0.72	5.18	9.30	0.01	0.22	—	0.22	0.21	—	0.21	—	1,428	1,428	0.06	0.01	—	1,432
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	0.31	0.31	< 0.005	0.03	0.03	—	4.46	4.46	< 0.005	< 0.005	< 0.005	4.69
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.07	0.06	0.45	0.80	< 0.005	0.02	—	0.02	0.02	—	0.02	—	123	123	< 0.005	< 0.005	—	123
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.02	0.02	< 0.005 A-63	< 0.005	< 0.005	—	0.38	0.38	< 0.005	< 0.005	< 0.005	0.40

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.08	0.15	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	20.4	20.4	< 0.005	< 0.005	—	20.4
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.06	0.06	< 0.005	< 0.005	< 0.005	0.07
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.05	0.05	0.69	0.00	0.00	0.16	0.16	0.00	0.04	0.04	—	161	161	0.01	0.01	0.01	163
Vendor	0.01	0.01	0.22	0.10	< 0.005	< 0.005	0.05	0.05	< 0.005	0.01	0.02	—	187	187	0.01	0.03	0.01	195
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.01	0.06	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	14.0	14.0	< 0.005	< 0.005	0.02	14.2
Vendor	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	16.1	16.1	< 0.005	< 0.005	0.02	16.8
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	2.32	2.32	< 0.005	< 0.005	< 0.005	2.35
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	2.67	2.67	< 0.005	< 0.005	< 0.005	2.79
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.13. Utility Trenching (2027) - 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
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.82	0.69	4.85	9.32	0.01	0.20	—	0.20	0.18	—	0.18	—	1,428	1,428	0.06	0.01	—	1,433
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	0.31	0.31	< 0.005	0.03	0.03	—	4.35	4.35	< 0.005	< 0.005	0.01	4.58
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.82	0.69	4.85	9.32	0.01	0.20	—	0.20	0.18	—	0.18	—	1,428	1,428	0.06	0.01	—	1,433
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	0.31	0.31	< 0.005	0.03	0.03	—	4.38	4.38	< 0.005	< 0.005	< 0.005	4.61
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.20	0.17	1.18	2.26	< 0.005	0.05	—	0.05	0.04	—	0.04	—	347	347	0.01	< 0.005	—	348
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.07	0.07	< 0.005	0.01	0.01	—	1.06	1.06	< 0.005	< 0.005	< 0.005	1.11
Annual	—	—	—	—	—	—	—	—	— A-65	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.04	0.03	0.21	0.41	< 0.005	0.01	—	0.01	0.01	—	0.01	—	57.4	57.4	< 0.005	< 0.005	—	57.6
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	0.18	0.18	< 0.005	< 0.005	< 0.005	0.18
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.04	0.04	0.75	0.00	0.00	0.16	0.16	0.00	0.04	0.04	—	166	166	0.01	0.01	0.52	169
Vendor	0.01	0.01	0.20	0.09	< 0.005	< 0.005	0.05	0.05	< 0.005	0.01	0.02	—	183	183	0.01	0.03	0.48	192
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.04	0.05	0.64	0.00	0.00	0.16	0.16	0.00	0.04	0.04	—	157	157	< 0.005	0.01	0.01	159
Vendor	0.01	0.01	0.21	0.10	< 0.005	< 0.005	0.05	0.05	< 0.005	0.01	0.02	—	184	184	0.01	0.03	0.01	191
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.16	0.00	0.00	0.04	0.04	0.00	0.01	0.01	—	38.8	38.8	< 0.005	< 0.005	0.05	39.3
Vendor	< 0.005	< 0.005	0.05	0.02	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	44.5	44.5	< 0.005	0.01	0.05	46.5
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	6.42	6.42	< 0.005	< 0.005	0.01	6.50
Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	7.37	7.37	< 0.005	< 0.005	0.01	7.69
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.15. Linear, Paving (2027) - 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
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.47	0.39	3.20	4.04	0.01	0.14	—	0.14	0.13	—	0.13	—	599	599	0.02	< 0.005	—	601
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.02	0.18	0.22	< 0.005	0.01	—	0.01	0.01	—	0.01	—	32.8	32.8	< 0.005	< 0.005	—	32.9
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.03	0.04	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	5.43	5.43	< 0.005	< 0.005	—	5.45
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.03	0.03	0.03	0.38	0.00	0.00	0.10	0.10	0.00	0.02	0.02	—	94.5	94.5	< 0.005	< 0.005	0.01	95.6
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.01	< 0.005	0.16	0.06	< 0.005	< 0.005	0.04	0.04	< 0.005	0.01	0.01	—	133	133	0.01	0.02	0.01	140
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	5.25	5.25	< 0.005	< 0.005	0.01	5.32
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	7.31	7.31	< 0.005	< 0.005	0.01	7.68
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.87	0.87	< 0.005	< 0.005	< 0.005	0.88
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	1.21	1.21	< 0.005	< 0.005	< 0.005	1.27

3.17. Asphalt Demolition (2026) - 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
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	36.3	35.7	17.5	62.2	0.03	1.32	—	1.32	1.12	—	1.12	—	2,835	2,835	0.12	0.02	—	2,845
Demolition	—	—	—	—	—	—	2.04	2.04	—	0.31	0.31	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	0.31	0.31	< 0.005	0.03	0.03	—	4.43	4.43	< 0.005	< 0.005	0.01	4.67
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.99	1.96	0.96	3.41	< 0.005	0.07	—	0.07	0.06	—	0.06	—	155	155	0.01	< 0.005	—	156
Demolition	—	—	—	—	—	—	0.11	0.11	—	0.02	0.02	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	< 0.005	—	0.24	0.24	< 0.005	< 0.005	< 0.005	0.26
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.36	0.36	0.18	0.62	< 0.005	0.01	—	0.01	0.01	—	0.01	—	25.7	25.7	< 0.005	< 0.005	—	25.8
Demolition	—	—	—	—	—	—	0.02	0.02	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.04	0.04	< 0.005	< 0.005	< 0.005	0.04
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.03	0.48	0.00	0.00	0.10	0.10	0.00	0.02	0.02	—	102	102	< 0.005	< 0.005	0.34	103
Vendor	0.01	0.01	0.21	0.10	< 0.005	< 0.005	0.05	0.05	< 0.005	0.01	0.02	—	187	187	0.01	0.03	0.51	196
Hauling	0.07	0.02	1.15	0.45	0.01	0.01	0.26	0.27	0.01	0.07	0.08	—	952	952	0.05	0.15	2.14	1,001
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	5.36	5.36	< 0.005	< 0.005	0.01	5.43
Vendor	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	10.3	10.3	< 0.005	< 0.005	0.01	10.7
Hauling	< 0.005	< 0.005	0.07	0.02	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	52.2	52.2	< 0.005	0.01	0.05	54.8
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.89	0.89	< 0.005	< 0.005	< 0.005	0.90

Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	1.70	1.70	< 0.005	< 0.005	< 0.005	1.77
Hauling	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	8.64	8.64	< 0.005	< 0.005	0.01	9.07

3.19. Paving (2027) - 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
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Paving	—	0.93	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Paving	—	0.05	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Paving	—	0.01	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.21. Architectural Coating (2027) - 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
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.14	0.11	0.83	1.13	< 0.005	0.02	—	0.02	0.02	—	0.02	—	134	134	0.01	< 0.005	—	134
Architect ural Coatings	—	1.80	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.02	0.03	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	3.66	3.66	< 0.005	< 0.005	—	3.67
Architect ural Coatings	—	0.05	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	< 0.005	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.61	0.61	< 0.005	< 0.005	—	0.61
Architect ural Coatings	—	0.01	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.01	< 0.005	0.16	0.06	< 0.005	< 0.005	0.04	0.04	< 0.005	0.01	0.01	—	133	133	0.01	0.02	0.01	140
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	3.65	3.65	< 0.005	< 0.005	< 0.005	3.84
Annual	—	—	—	—	—	—	—	—	— A-72	—	—	—	—	—	—	—	—	—

Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.60	0.60	< 0.005	< 0.005	< 0.005	0.64

3.23. Finishing/Landscaping (2027) - 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
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.11	0.09	0.81	1.02	< 0.005	0.02	—	0.02	0.02	—	0.02	—	142	142	0.01	< 0.005	—	142
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	< 0.005	0.04	0.06	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	7.77	7.77	< 0.005	< 0.005	—	7.79
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.29	1.29	< 0.005	< 0.005	—	1.29
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.13	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	31.5	31.5	< 0.005	< 0.005	< 0.005	31.9
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.75	1.75	< 0.005	< 0.005	< 0.005	1.77
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.29	0.29	< 0.005	< 0.005	< 0.005	0.29
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

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	7/1/2026	7/14/2026	5.00	10.0	—
Site Preparation	Linear, Grubbing & Land Clearing	7/15/2026	8/25/2026	5.00	30.0	—
Rough Grading for Roadway	Linear, Grading & Excavation	8/26/2026	11/17/2026	5.00	60.0	—

Fine Grading for Roadway	Linear, Grading & Excavation	5/5/2027	6/15/2027	5.00	30.0	—
Roadway Construction	Linear, Drainage, Utilities, & Sub-Grade	6/16/2027	10/19/2027	5.00	90.0	—
Utility Trenching	Linear, Drainage, Utilities, & Sub-Grade	11/18/2026	5/4/2027	5.00	120	—
Linear, Paving	Linear, Paving	10/20/2027	11/16/2027	5.00	20.0	—
Asphalt Demolition	Demolition	7/1/2026	7/28/2026	5.00	20.0	—
Paving	Paving	10/20/2027	11/16/2027	5.00	20.0	—
Architectural Coating	Architectural Coating	11/17/2027	11/30/2027	5.00	10.0	—
Finishing/Landscaping	Trenching	12/1/2027	12/28/2027	5.00	20.0	—

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	Graders	Diesel	Average	2.00	8.00	148	0.41
Site Preparation	Excavators	Diesel	Average	2.00	8.00	36.0	0.38
Site Preparation	Rubber Tired Loaders	Diesel	Average	1.00	8.00	150	0.36
Rough Grading for Roadway	Graders	Diesel	Average	2.00	8.00	148	0.41
Rough Grading for Roadway	Rollers	Diesel	Average	1.00	8.00	36.0	0.38
Rough Grading for Roadway	Rubber Tired Loaders	Diesel	Average	2.00	8.00	150	0.36
Fine Grading for Roadway	Graders	Diesel	Average	1.00	8.00	148	0.41
Fine Grading for Roadway	Rollers	Diesel	Average	1.00	8.00	36.0	0.38
Roadway Construction	Rubber Tired Loaders	Diesel	Average	1.00	8.00	150	0.36

Roadway Construction	Excavators	Diesel	Average	1.00	8.00	36.0	0.38
Roadway Construction	Rollers	Diesel	Average	1.00	8.00	36.0	0.38
Utility Trenching	Rubber Tired Loaders	Diesel	Average	2.00	8.00	150	0.36
Utility Trenching	Excavators	Diesel	Average	2.00	8.00	36.0	0.38
Utility Trenching	Rollers	Diesel	Average	1.00	8.00	36.0	0.38
Linear, Paving	Rollers	Diesel	Average	2.00	8.00	36.0	0.38
Linear, Paving	Pavers	Diesel	Average	1.00	8.00	81.0	0.42
Asphalt Demolition	Rubber Tired Dozers	Diesel	Average	2.00	8.00	367	0.40
Asphalt Demolition	Crushing/Proc. Equipment	Gasoline	Average	1.00	8.00	12.0	0.85
Architectural Coating	Air Compressors	Diesel	Average	1.00	6.00	37.0	0.48
Finishing/Landscaping	Excavators	Diesel	Average	1.00	8.00	36.0	0.38

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	—	—	—	—
Linear, Grubbing & Land Clearing	Worker	5.00	18.5	LDA,LDT1,LDT2
Linear, Grubbing & Land Clearing	Vendor	6.00	10.2	HHDT,MHDT
Linear, Grubbing & Land Clearing	Hauling	4.00	20.0	HHDT
Linear, Grubbing & Land Clearing	Onsite truck	1.00	0.83	HHDT
Rough Grading for Roadway	—	—	—	—
Rough Grading for Roadway	Worker	12.5	18.5	LDA,LDT1,LDT2
Rough Grading for Roadway	Vendor	10.0	10.2	HHDT,MHDT
Rough Grading for Roadway	Hauling	4.00	20.0	HHDT
Rough Grading for Roadway	Onsite truck	1.00	1.65	HHDT
Roadway Construction	—	—A-76	—	—

Roadway Construction	Worker	7.50	18.5	LDA,LDT1,LDT2
Roadway Construction	Vendor	0.00	10.2	HHDT,MHDT
Roadway Construction	Hauling	0.00	20.0	HHDT
Roadway Construction	Onsite truck	—	—	HHDT
Linear, Paving	—	—	—	—
Linear, Paving	Worker	7.50	18.5	LDA,LDT1,LDT2
Linear, Paving	Vendor	0.00	10.2	HHDT,MHDT
Linear, Paving	Hauling	2.00	20.0	HHDT
Linear, Paving	Onsite truck	—	—	HHDT
Architectural Coating	—	—	—	—
Architectural Coating	Worker	0.00	18.5	LDA,LDT1,LDT2
Architectural Coating	Vendor	0.00	10.2	HHDT,MHDT
Architectural Coating	Hauling	2.00	20.0	HHDT
Architectural Coating	Onsite truck	—	—	HHDT
Finishing/Landscaping	—	—	—	—
Finishing/Landscaping	Worker	2.50	18.5	LDA,LDT1,LDT2
Finishing/Landscaping	Vendor	—	10.2	HHDT,MHDT
Finishing/Landscaping	Hauling	0.00	20.0	HHDT
Finishing/Landscaping	Onsite truck	—	—	HHDT
Fine Grading for Roadway	—	—	—	—
Fine Grading for Roadway	Worker	5.00	18.5	LDA,LDT1,LDT2
Fine Grading for Roadway	Vendor	4.00	10.2	HHDT,MHDT
Fine Grading for Roadway	Hauling	0.00	20.0	HHDT
Fine Grading for Roadway	Onsite truck	1.00	0.41	HHDT
Asphalt Demolition	—	—	—	—
Asphalt Demolition	Worker	7.50	18.5	LDA,LDT1,LDT2
Asphalt Demolition	Vendor	6.00	10.2	HHDT,MHDT

Asphalt Demolition	Hauling	14.0	20.0	HHDT
Asphalt Demolition	Onsite truck	1.00	0.83	HHDT
Site Preparation	—	—	—	—
Site Preparation	Worker	7.50	18.5	LDA,LDT1,LDT2
Site Preparation	Vendor	4.00	10.2	HHDT,MHDT
Site Preparation	Hauling	4.00	20.0	HHDT
Site Preparation	Onsite truck	1.00	0.41	HHDT
Utility Trenching	—	—	—	—
Utility Trenching	Worker	12.5	18.5	LDA,LDT1,LDT2
Utility Trenching	Vendor	6.00	10.2	HHDT,MHDT
Utility Trenching	Hauling	0.00	20.0	HHDT
Utility Trenching	Onsite truck	1.00	0.83	HHDT
Paving	—	—	—	—
Paving	Worker	0.00	18.5	LDA,LDT1,LDT2
Paving	Vendor	0.00	10.2	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	0.00	—	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	0.00	0.00	0.00	0.00	3,888

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (cy)	Material Exported (cy)	Acres Graded (acres)	Material Demolished (Ton of Debris)	Acres Paved (acres)
Linear, Grubbing & Land Clearing	—	—	8.60	0.00	—
Site Preparation	—	—	8.60	0.00	—
Rough Grading for Roadway	—	—	8.60	0.00	—
Fine Grading for Roadway	—	—	8.60	0.00	—
Roadway Construction	—	—	8.60	0.00	—
Utility Trenching	—	—	8.60	0.00	—
Asphalt Demolition	0.00	0.00	0.00	1,926	—
Paving	0.00	0.00	0.00	0.00	7.12

5.6.2. Construction Earthmoving Control Strategies

Non-applicable. No control strategies activated by user.

5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt
Other Asphalt Surfaces	0.00	100%
Road Construction	7.12	100%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2026	0.00	453	0.03	< 0.005
2027	0.00	453	0.03	< 0.005

8. User Changes to Default Data

Screen	Justification
Construction: Construction Phases	Based on applicant info., see assumptions file
Construction: Off-Road Equipment	Applicant provided equipment, see assumptions file
Construction: Trips and VMT	Based on applicant info, see assumptions file
Construction: Paving	Based on 310,000 sqft of roadway construction being paved

Emissions Worksheet

Regional Construction Emissions Worksheet:

3.1. Linear, Grubbing & Land Clearing (2026) - Unmitigated ²						
	ROG	NOx	CO	SO	PM10 Total	PM2.5Total
Onsite	Summer					
Off-Road Equipment	0.67	5.41	7.27	0.01	0.30	0.28
Dust From Material Movement	0.00	0.00	0.00	0.00	1.06	0.11
Onsite truck	0.01	0.02	0.01	0.01	0.31	0.03
Total	0.68	5.43	7.28	0.02	1.67	0.42
Offsite						
Worker	0.02	0.02	0.32	0.00	0.07	0.02
Vendor	0.01	0.21	0.10	0.01	0.05	0.02
Hauling	0.01	0.33	0.13	0.01	0.08	0.02
Total	0.04	0.56	0.55	0.01	0.20	0.06
TOTAL	0.71	5.99	7.83	0.03	1.87	0.48

3.3. Site Preparation (2026) - Unmitigated ²						
	ROG	NOx	CO	SO	PM10 Total	PM2.5Total
Onsite	Summer					
Off-Road Equipment	0.39	2.98	5.17	0.01	0.12	0.11
Dust From Material Movement	0.00	0.00	0.00	0.00	0.00	0.00
Onsite truck	0.01	0.02	0.01	0.01	0.15	0.02
Total	0.40	3.00	5.18	0.02	0.27	0.13
Offsite						
Worker	0.03	0.03	0.48	0.00	0.10	0.02
Vendor	0.01	0.14	0.07	0.01	0.04	0.01
Hauling	0.01	0.33	0.13	0.01	0.08	0.02
Total	0.04	0.50	0.68	0.01	0.22	0.05
TOTAL	0.44	3.50	5.86	0.03	0.49	0.18

3.5. Rough Grading for Roadway (2026) - Unmitigated ²						
	ROG	NOx	CO	SO	PM10 Total	PM2.5Total
Onsite	Summer					
Off-Road Equipment	1.20	8.95	14.50	0.02	0.48	0.44
Dust From Material Movement	0.00	0.00	0.00	0.00	1.06	0.11
Onsite truck	0.01	0.02	0.01	0.01	0.61	0.06
Total	1.21	8.97	14.51	0.03	2.15	0.61
Offsite						
Worker	0.05	0.05	0.81	0.00	0.16	0.04
Vendor	0.01	0.34	0.17	0.01	0.09	0.03
Hauling	0.01	0.33	0.13	0.01	0.08	0.02
Total	0.07	0.72	1.11	0.01	0.33	0.09
TOTAL	1.27	9.69	15.62	0.04	2.48	0.70

3.7. Fine Grading for Roadway (2027) - Unmitigated ²						
	ROG	NOx	CO	SO	PM10 Total	PM2.5Total
Onsite	Summer					
Off-Road Equipment	0.44	3.31	4.64	0.01	0.17	0.16
Dust From Material Movement	0.00	0.00	0.00	0.00	0.53	0.06
Onsite truck	0.01	0.02	0.01	0.01	0.15	0.02
Total	0.45	3.33	4.65	0.02	0.85	0.24
Offsite						
Worker	0.02	0.02	0.30	0.00	0.07	0.02
Vendor	0.01	0.13	0.06	0.01	0.04	0.01
Hauling	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.03	0.15	0.36	0.01	0.11	0.03
TOTAL	0.47	3.48	5.01	0.02	0.96	0.27

3.9. Roadway Construction (2027) - Unmitigated						
	ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Onsite	Summer					
Off-Road Equipment	0.41	2.86	5.15	0.01	0.12	0.11
Dust From Material Movement	0.00	0.00	0.00	0.00	0.00	0.00
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.41	2.86	5.15	0.01	0.12	0.11
Offsite						
Worker	0.03	0.03	0.45	0.00	0.10	0.02
Vendor	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.03	0.03	0.45	0.00	0.10	0.02
TOTAL	0.44	2.89	5.60	0.01	0.22	0.13

3.11. Utility Trenching (2026) - Unmitigated						
	ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Onsite	Winter					
Off-Road Equipment	0.72	5.18	9.30	0.01	0.22	0.21
Dust From Material Movement	0.00	0.00	0.00	0.00	0.00	0.00
Onsite truck	0.01	0.02	0.01	0.01	0.31	0.03
Total	0.73	5.20	9.31	0.02	0.53	0.24
Offsite						
Worker	0.05	0.05	0.69	0.00	0.16	0.04
Vendor	0.01	0.22	0.10	0.01	0.05	0.02
Hauling	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.06	0.27	0.79	0.01	0.21	0.06
TOTAL	0.79	5.47	10.10	0.02	0.74	0.30

3.13. Utility Trenching (2027) - Unmitigated						
	ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Onsite	Summer					
Off-Road Equipment	0.69	4.85	9.32	0.01	0.20	0.18
Dust From Material Movement	0.00	0.00	0.00	0.00	0.00	0.00
Onsite truck	0.01	0.02	0.01	0.01	0.31	0.03
Total	0.70	4.87	9.33	0.02	0.51	0.21
Offsite						
Worker	0.04	0.04	0.75	0.00	0.16	0.04
Vendor	0.01	0.20	0.09	0.01	0.05	0.02
Hauling	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.05	0.24	0.84	0.01	0.21	0.06
TOTAL	0.75	5.11	10.17	0.02	0.72	0.27

3.15. Linear, Paving (2027) - Unmitigated						
	ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Onsite	Winter					
Off-Road Equipment	0.39	3.20	4.04	0.01	0.14	0.13
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.39	3.20	4.04	0.01	0.14	0.13
Offsite						
Worker	0.03	0.03	0.38	0.00	0.10	0.02
Vendor	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.01	0.16	0.06	0.01	0.04	0.01
Total	0.04	0.19	0.44	0.01	0.14	0.03
TOTAL	0.43	3.39	4.48	0.02	0.28	0.16

3.17. Asphalt Demolition (2026) - Unmitigated						
	ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Onsite	Summer					
Off-Road Equipment	35.70	17.50	62.20	0.03	1.32	1.12
Demolition	0.00	0.00	0.00	0.00	2.04	0.31
Onsite truck	0.01	0.02	0.01	0.01	0.31	0.03
Total	35.71	17.52	62.21	0.04	3.67	1.46
Offsite						
Worker	0.03	0.03	0.48	0.00	0.10	0.02
Vendor	0.01	0.21	0.10	0.01	0.05	0.02
Hauling	0.02	1.15	0.45	0.01	0.27	0.08
Total	0.06	1.39	1.03	0.02	0.42	0.12
TOTAL	35.77	18.91	63.24	0.05	4.09	1.58

3.19. Paving (2027) - Unmitigated							
		ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Onsite		Winter					
	Paving	0.93	0.00	0.00	0.00	0.00	0.00
	Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00
	Total	0.93	0.00	0.00	0.00	0.00	0.00
Offsite	Worker	0.00	0.00	0.00	0.00	0.00	0.00
	Vendor	0.00	0.00	0.00	0.00	0.00	0.00
	Hauling	0.00	0.00	0.00	0.00	0.00	0.00
	Total	0.00	0.00	0.00	0.00	0.00	0.00
TOTAL		0.93	0.00	0.00	0.00	0.00	0.00

3.21. Architectural Coating (2027) - Unmitigated							
		ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Onsite		Winter					
	Off-Road Equipment	0.11	0.83	1.13	0.01	0.02	0.02
	Architectural Coating	1.80	0.00	0.00	0.00	0.00	0.00
	Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00
	Total	1.91	0.83	1.13	0.01	0.02	0.02
Offsite	Worker	0.00	0.00	0.00	0.00	0.00	0.00
	Vendor	0.00	0.00	0.00	0.00	0.00	0.00
	Hauling	0.01	0.16	0.06	0.01	0.04	0.01
	Total	0.01	0.16	0.06	0.01	0.04	0.01
TOTAL		1.92	0.99	1.19	0.01	0.06	0.03

3.23. Finishing/Landscaping (2027) - Unmitigated							
		ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Onsite		Winter					
	Off-Road Equipment	0.09	0.81	1.02	0.01	0.02	0.02
	Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00
	Total	0.09	0.81	1.02	0.01	0.02	0.02
Offsite	Worker	0.01	0.01	0.13	0.00	0.03	0.01
	Vendor	0.00	0.00	0.00	0.00	0.00	0.00
	Hauling	0.00	0.00	0.00	0.00	0.00	0.00
	Total	0.01	0.01	0.13	0.00	0.03	0.01
TOTAL		0.10	0.82	1.15	0.01	0.05	0.03

	ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Linear, Grubbing & Land Clearing and Asphalt Demolition	36	25	71	0	6	2
Site Preparation and Asphalt Demolition	36	22	69	0	5	2
Site Preparation	0	4	6	0	0	0
Rough Grading for Roadway	1	10	16	0	2	1
Utility Trenching 2026	1	5	10	0	1	0
Utility Trenching 2027	1	5	10	0	1	0
Fine Grading for Roadway	0	3	5	0	1	0
Roadway Construction	0	3	6	0	0	0
Linear, Paving	1	3	4	0	0	0
Architectural Coating	2	1	1	0	0	0
Finishing/Landscaping	0	1	1	0	0	0
MAX DAILY	36	25	71	0	6	2
Regional Thresholds	75	100	550	150	150	55
Exceeds Thresholds?	No	No	No	No	No	No

Notes:

¹ VOC emissions from Paving activity was used since CalEEMod does not account for paving off-gas emissions in the Linear, Paving activity.

Construction LST Worksheet:

3.1. Linear, Grubbing & Land Clearing (2026) - Unmitigated

	NOx	CO	PM10 Total	PM2.5Total
Onsite				
Off-Road Equipment	5.41	7.27	0.30	0.28
Dust From Material Movement	0.00	0.00	1.06	0.11
Onsite truck	0.02	0.01	0.31	0.03
Total	5.43	7.28	1.67	0.42
TOTAL	5.43	7.28	1.67	0.42

3.3. Site Preparation (2026) - Unmitigated

	NOx	CO	PM10 Total	PM2.5Total
Onsite				
Off-Road Equipment	2.98	5.17	0.12	0.11
Dust From Material Movement	0.00	0.00	0.00	0.00
Onsite truck	0.02	0.01	0.15	0.02
Total	3.00	5.18	0.27	0.13
TOTAL	3.00	5.18	0.27	0.13

3.5. Rough Grading for Roadway (2026) - Unmitigated

	NOx	CO	PM10 Total	PM2.5Total
Onsite				
Off-Road Equipment	8.95	14.50	0.48	0.44
Dust From Material Movement	0.00	0.00	1.06	0.11
Onsite truck	0.02	0.01	0.61	0.06
Total	8.97	14.51	2.15	0.61
TOTAL	8.97	14.51	2.15	0.61

3.7. Fine Grading for Roadway (2027) - Unmitigated

	NOx	CO	PM10 Total	PM2.5Total
Onsite				
Off-Road Equipment	3.31	4.64	0.17	0.16
Dust From Material Movement	0.00	0.00	0.53	0.06
Onsite truck	0.02	0.01	0.15	0.02
Total	3.33	4.65	0.85	0.24
TOTAL	3.33	4.65	0.85	0.24

3.9. Roadway Construction (2027) - Unmitigated

	NOx	CO	PM10 Total	PM2.5 Total
Onsite				
Off-Road Equipment	2.86	5.15	0.12	0.11
Dust From Material Movement	0.00	0.00	0.00	0.00
Onsite truck	0.00	0.00	0.00	0.00
Total	2.86	5.15	0.12	0.11
TOTAL	2.86	5.15	0.12	0.11

3.11. Utility Trenching (2026) - Unmitigated

	NOx	CO	PM10 Total	PM2.5 Total
Onsite				
Off-Road Equipment	5.18	9.30	0.22	0.21
Dust From Material Movement	0.00	0.00	0.00	0.00
Onsite truck	0.02	0.01	0.31	0.03
Total	5.20	9.31	0.53	0.24
TOTAL	5.20	9.31	0.53	0.24

3.13. Utility Trenching (2027) - Unmitigated

	NOx	CO	PM10 Total	PM2.5 Total
Onsite				
Off-Road Equipment	4.85	9.32	0.20	0.18
Dust From Material Movement	0.00	0.00	0.00	0.00
Onsite truck	0.02	0.01	0.31	0.03
Total	4.87	9.33	0.51	0.21
TOTAL	4.87	9.33	0.51	0.21

3.15. Linear, Paving (2027) - Unmitigated

	NOx	CO	PM10 Total	PM2.5 Total
Onsite				
Off-Road Equipment	3.20	4.04	0.14	0.13
Onsite truck	0.00	0.00	0.00	0.00
Total	3.20	4.04	0.14	0.13
TOTAL	3.20	4.04	0.14	0.13

3.17. Asphalt Demolition (2026) - Unmitigated

	NOx	CO	PM10 Total	PM2.5 Total
Onsite				
Off-Road Equipment	17.50	62.20	1.32	1.12
Demolition	0.00	0.00	2.04	0.31
Onsite truck	0.02	0.01	0.31	0.03
Total	17.52	62.21	3.67	1.46
TOTAL	17.52	62.21	3.67	1.46

3.19. Paving (2027) - Unmitigated

	NOx	CO	PM10 Total	PM2.5 Total
Onsite				
Paving	0.00	0.00	0.00	0.00
Onsite truck	0.00	0.00	0.00	0.00
Total	0.00	0.00	0.00	0.00
TOTAL	0.00	0.00	0.00	0.00

3.21. Architectural Coating (2027) - Unmitigated

	NOx	CO	PM10 Total	PM2.5 Total
Onsite				
Off-Road Equipment	0.83	1.13	0.02	0.02
Architectural Coating	0.00	0.00	0.00	0.00
Onsite truck	0.00	0.00	0.00	0.00
Total	0.83	1.13	0.02	0.02
TOTAL	0.83	1.13	0.02	0.02

3.23. Finishing/Landscaping (2027) - Unmitigated

	NOx	CO	PM10 Total	PM2.5 Total
Onsite				
Off-Road Equipment	0.81	1.02	0.02	0.02
Onsite truck	0.00	0.00	0.00	0.00
Total	0.81	1.02	0.02	0.02
TOTAL	0.81	1.02	0.02	0.02

	NOx	CO	PM10 Total	PM2.5 Total
Linear, Grubbing & Land Clearing and Asphalt Demolition	23	69	5.34	1.88
2.00 Acre LST	149	885	136.33	67.39
Exceeds LST?	no	no	no	no
Site Preparation and Asphalt Demolition	21	67	3.94	1.59
1.50 Acre LST	126	748	132.44	65.10
Exceeds LST?	no	no	no	no
Site Preparation	3	5	0.27	0.13
≤ 1.00 Acre LST	103	612	128.55	62.81
Exceeds LST?	no	no	no	no
Rough Grading for Roadway	9	15	2.15	0.61
2.00 Acre LST	149	885	136.33	67.39
Exceeds LST?	no	no	no	no
Utility Trenching 2026	5	9	0.53	0.24
≤ 1.00 Acre LST	103	612	128.55	62.81
Exceeds LST?	no	no	no	no
Utility Trenching 2027	5	9	0.51	0.21
< 1.00 Acre LST	103	612	128.55	62.81
Exceeds LST?	no	no	no	no
Fine Grading for Roadway	3	5	0.85	0.24
≤ 1.00 Acre LST	103	612	128.55	62.81
Exceeds LST?	no	no	no	no
Roadway Construction	3	5	0.12	0.11
≤ 1.00 Acre LST	103	612	128.55	62.81
Exceeds LST?	no	no	no	no
Linear, Paving	3	4	0.14	0.13
≤ 1.00 Acre LST	103	612	128.55	62.81
Exceeds LST?	no	no	no	no
Architectural Coating	1	1	0.02	0.02
≤ 1.00 Acre LST	103	612	128.55	62.81
Exceeds LST?	no	no	no	no
Finishing/Landscaping	1	1	0.02	0.02
≤ 1.00 Acre LST	103	612	128.55	62.81
Exceeds LST?	no	no	no	no

GHG Emissions Inventory

Proposed Project Buildout

Construction¹

	MTCO ₂ e
2026	172
2027	131
Total Construction	303
30-Year Amortization ²	10

¹ CalEEMod, Version 2022.1.

² Total construction emissions are amortized over 30 years per SCAQMD methodology; SCAQMD. 2009, November 19. Greenhouse Gases (GHG) CEQA Significance Thresholds Working Group Meeting 14. [http://www.aqmd.gov/docs/default-source/ceqa/handbook/greenhouse-gases-\(ghg\)-ceqa-significance-thresholds/year-2008-2009/ghg-meeting-14/ghg-meeting-14-main-presentation.pdf?sfvrsn=2](http://www.aqmd.gov/docs/default-source/ceqa/handbook/greenhouse-gases-(ghg)-ceqa-significance-thresholds/year-2008-2009/ghg-meeting-14/ghg-meeting-14-main-presentation.pdf?sfvrsn=2).

LST Worksheets

Construction Localized Significance Thresholds: Linear, Grubbing & Land Clearing, and Asphalt Demolition

SRA No.	Acres	NOx & CO		PM10 & PM2.5		Construction / Project Site Size (Acres)
		Source Receptor Distance (meters)	Source Receptor Distance (Feet)	Source Receptor Distance (meters)	Source Receptor Distance (Feet)	
10	2.00	25	82	436	1430	8.60

Source Receptor Distance (meters)	Pomona/Walnut Valley	Equipment	Acres/8-hr Day		Daily hours	Equipment Used	Acres
	25						
NOx	149	Tractors	0.5	0.0625	8	2	1
CO	885	Graders	0.5	0.0625	8	2	1
PM10	136.33	Dozers	0.5	0.0625			0
PM2.5	67.39	Scrapers	1	0.125			0
						Acres	2.00
	Acres	25	50		100	200	500
NOx	2	149	175		230	330	598
	2	149	175		230	330	598
		149	175		230	330	598
CO	2	885	1358		2298	5097	20256
	2	885	1358		2298	5097	20256
		885	1358		2298	5097	20256
PM10	2	6	18		33	64	156
	2	6	18		33	64	156
		6	18		33	64	156
PM2.5	2	4	6		10	21	80
	2	4	6		10	21	80
		4	6		10	21	80
Pomona/Walnut Valley							
	2.00 Acres						
	25	50	100		200	500	
NOx	149	175	230		330	598	
CO	885	1358	2298		5097	20256	
PM10	6	18	33		64	156	
PM2.5	4	6	10		21	80	

Acre Below		Acre Above	
SRA No.	Acres	SRA No.	Acres
10	2	10	2
Distance Increment Below			
25			
Distance Increment Above			
25			

Updated: 10/21/2009 - Table C-1. 2006 – 2008

Construction Localized Significance Thresholds: Site Preparation and Asphalt Demolition

SRA No.	Acres	NOx & CO		PM10 & PM2.5		Construction / Project Site Size (Acres)
		Source Receptor Distance (meters)	Source Receptor Distance (Feet)	Source Receptor Distance (meters)	Source Receptor Distance (Feet)	
10	1.50	25	82	436	1430	8.60

Source Receptor Distance (meters)	Pomona/Walnut Valley	Equipment	Acres/8-hr Day		Daily hours	Equipment Used	Acres
	25						
NOx	126	Tractors	0.5	0.0625	8	3	1.5
CO	748	Graders	0.5	0.0625			0
PM10	132.44	Dozers	0.5	0.0625			0
PM2.5	65.10	Scrapers	1	0.125			0
						Acres	1.50

	Acres	25	50	100	200	500
NOx	1	103	129	185	292	570
	2	149	175	230	330	598
		126	152	208	311	584
CO	1	612	911	1741	4345	18991
	2	885	1358	2298	5097	20256
		749	1135	2020	4721	19624
PM10	1	4	11	26	57	148
	2	6	18	33	64	156
		5	15	30	61	152
PM2.5	1	3	4	7	18	75
	2	4	6	10	21	80
		4	5	9	20	78
Pomona/Walnut Valley						
	1.50 Acres					
	25	50	100	200	500	
NOx	126	152	208	311	584	
CO	749	1135	2020	4721	19624	
PM10	5	15	30	61	152	
PM2.5	4	5	9	20	78	

Acre Below		Acre Above	
SRA No.	Acres	SRA No.	Acres
10	1	10	2
Distance Increment Below			
25			
Distance Increment Above			
25			

Updated: 10/21/2009 - Table C-1. 2006 – 2008

Construction Localized Significance Thresholds: Site Preparation

SRA No.	Acres	NOx & CO		PM10 & PM2.5		Construction / Project Site Size (Acres)
		Source Receptor Distance (meters)	Source Receptor Distance (Feet)	Source Receptor Distance (meters)	Source Receptor Distance (Feet)	
10	0.50	25	82	436	1430	8.60

Source Receptor	Pomona/Walnut Valley		Equipment	Acres/8-hr Day		Daily hours	Equipment Used	Acres
Distance (meters)	25							
	NOx	103	Tractors	0.5	0.0625	8	1	0.5
	CO	612	Graders	0.5	0.0625			0
	PM10	128.55	Dozers	0.5	0.0625			0
	PM2.5	62.81	Scrapers	1	0.125			0
							Acres	0.50
		Acres	25	50	100		200	500
	NOx	1	103	129	185		292	570
		1	103	129	185		292	570
			103	129	185		292	570
	CO	1	612	911	1741		4345	1899
		1	612	911	1741		4345	1899
			612	911	1741		4345	1899
	PM10	1	4	11	26		57	148
		1	4	11	26		57	148
			4	11	26		57	148
	PM2.5	1	3	4	7		18	75
		1	3	4	7		18	75
			3	4	7		18	75
Pomona/Walnut Valley								
	0.50 Acres							
		25	50	100	200		500	
	NOx	103	129	185	292		570	
	CO	612	911	1741	4345		18991	
	PM10	4	11	26	57		148	
	PM2.5	3	4	7	18		75	

Acre Below		Acre Above	
SRA No.	Acres	SRA No.	Acres
10	1	10	1
Distance Increment Below			
25			
Distance Increment Above			
25			

Updated: 10/21/2009 - Table C-1. 2006 – 2008

Construction Localized Significance Thresholds: Rough Grading for Roadway

SRA No.	Acres	NOx & CO		PM10 & PM2.5		Construction / Project Site Size (Acres)
		Source Receptor Distance (meters)	Source Receptor Distance (Feet)	Source Receptor Distance (meters)	Source Receptor Distance (Feet)	
10	2.00	25	82	436	1430	8.60

Source Receptor Distance (meters)	Pomona/Walnut Valley	Equipment	Acres/8-hr Day		Daily hours	Equipment Used	Acres
	25						
NOx	149	Tractors	0.5	0.0625	8	2	1
CO	885	Graders	0.5	0.0625	8	2	1
PM10	136.33	Dozers	0.5	0.0625			0
PM2.5	67.39	Scrapers	1	0.125			0
						Acres	2.00
	Acres	25	50		100	200	500
NOx	2	149	175		230	330	598
	2	149	175		230	330	598
		149	175		230	330	598
CO	2	885	1358		2298	5097	20256
	2	885	1358		2298	5097	20256
		885	1358		2298	5097	20256
PM10	2	6	18		33	64	156
	2	6	18		33	64	156
		6	18		33	64	156
PM2.5	2	4	6		10	21	80
	2	4	6		10	21	80
		4	6		10	21	80
Pomona/Walnut Valley							
2.00 Acres							
	25	50	100		200	500	
NOx	149	175	230		330	598	
CO	885	1358	2298		5097	20256	
PM10	6	18	33		64	156	
PM2.5	4	6	10		21	80	

Acre Below		Acre Above	
SRA No.	Acres	SRA No.	Acres
10	2	10	2
Distance Increment Below			
25			
Distance Increment Above			
25			

Updated: 10/21/2009 - Table C-1. 2006 – 2008

Construction Localized Significance Thresholds: Utility Trenching

SRA No.	Acres	NOx & CO		PM10 & PM2.5		Construction / Project Site Size (Acres)
		Source Receptor Distance (meters)	Source Receptor Distance (Feet)	Source Receptor Distance (meters)	Source Receptor Distance (Feet)	
10	1.00	25	82	436	1430	8.60

Source Receptor	Pomona/Walnut Valley		Equipment	Acres/8-hr Day		Daily hours	Equipment Used	Acres
Distance (meters)	25							
	NOx	103	Tractors	0.5	0.0625	8	2	1
	CO	612	Graders	0.5	0.0625			0
	PM10	128.55	Dozers	0.5	0.0625			0
	PM2.5	62.81	Scrapers	1	0.125			0
							Acres	1.00
		Acres	25	50	100		200	500
	NOx	1	103	129	185		292	570
		1	103	129	185		292	570
			103	129	185		292	570
	CO	1	612	911	1741		4345	1899
		1	612	911	1741		4345	1899
			612	911	1741		4345	1899
	PM10	1	4	11	26		57	148
		1	4	11	26		57	148
			4	11	26		57	148
	PM2.5	1	3	4	7		18	75
		1	3	4	7		18	75
			3	4	7		18	75
Pomona/Walnut Valley								
	1.00 Acres							
		25	50	100	200		500	
	NOx	103	129	185	292		570	
	CO	612	911	1741	4345		18991	
	PM10	4	11	26	57		148	
	PM2.5	3	4	7	18		75	

Acre Below		Acre Above	
SRA No.	Acres	SRA No.	Acres
10	1	10	1
Distance Increment Below			
25			
Distance Increment Above			
25			

Updated: 10/21/2009 - Table C-1. 2006 – 2008

Construction Localized Significance Thresholds: Fine Grading for Roadway

SRA No.	Acres	NOx & CO		PM10 & PM2.5		Construction / Project Site Size (Acres)
		Source Receptor Distance (meters)	Source Receptor Distance (Feet)	Source Receptor Distance (meters)	Source Receptor Distance (Feet)	
10	0.50	25	82	436	1430	8.60

Source Receptor	Pomona/Walnut Valley		Equipment	Acres/8-hr Day		Daily hours	Equipment Used	Acres
Distance (meters)	25							
	NOx	103	Tractors	0.5	0.0625			0
	CO	612	Graders	0.5	0.0625	8	1	0.5
	PM10	128.55	Dozers	0.5	0.0625			0
	PM2.5	62.81	Scrapers	1	0.125			0
							Acres	0.50
		Acres	25	50	100		200	500
	NOx	1	103	129	185		292	570
		1	103	129	185		292	570
			103	129	185		292	570
	CO	1	612	911	1741		4345	1899
		1	612	911	1741		4345	1899
			612	911	1741		4345	1899
	PM10	1	4	11	26		57	148
		1	4	11	26		57	148
			4	11	26		57	148
	PM2.5	1	3	4	7		18	75
		1	3	4	7		18	75
			3	4	7		18	75
Pomona/Walnut Valley								
	0.50 Acres							
		25	50	100	200		500	
	NOx	103	129	185	292		570	
	CO	612	911	1741	4345		18991	
	PM10	4	11	26	57		148	
	PM2.5	3	4	7	18		75	

Acre Below		Acre Above	
SRA No.	Acres	SRA No.	Acres
10	1	10	1
Distance Increment Below			
25			
Distance Increment Above			
25			

Updated: 10/21/2009 - Table C-1. 2006 – 2008

Construction Localized Significance Thresholds: Roadway Construction

SRA No.	Acres	NOx & CO		PM10 & PM2.5		Construction / Project Site Size (Acres)
		Source Receptor Distance (meters)	Source Receptor Distance (Feet)	Source Receptor Distance (meters)	Source Receptor Distance (Feet)	
10	0.50	25	82	436	1430	8.60

Source Receptor	Pomona/Walnut Valley		Equipment	Acres/8-hr Day		Daily hours	Equipment Used	Acres
Distance (meters)	25							
NOx	103		Tractors	0.5	0.0625	8	1	0.5
CO	612		Graders	0.5	0.0625			0
PM10	128.55		Dozers	0.5	0.0625			0
PM2.5	62.81		Scrapers	1	0.125			0
							Acres	0.50
	Acres	25	50		100		200	500
NOx	1	103	129		185		292	570
	1	103	129		185		292	570
		103	129		185		292	570
CO	1	612	911		1741		4345	1899
	1	612	911		1741		4345	1899
		612	911		1741		4345	1899
PM10	1	4	11		26		57	148
	1	4	11		26		57	148
		4	11		26		57	148
PM2.5	1	3	4		7		18	75
	1	3	4		7		18	75
		3	4		7		18	75
Pomona/Walnut Valley								
0.50 Acres								
	25	50	100		200		500	
NOx	103	129	185		292		570	
CO	612	911	1741		4345		18991	
PM10	4	11	26		57		148	
PM2.5	3	4	7		18		75	

Acre Below		Acre Above	
SRA No.	Acres	SRA No.	Acres
10	1	10	1
Distance Increment Below			
25			
Distance Increment Above			
25			

Updated: 10/21/2009 - Table C-1. 2006 – 2008

Construction Localized Significance Thresholds: Linear, Paving

SRA No.	Acres	NOx & CO		PM10 & PM2.5		Construction / Project Site Size (Acres)
		Source Receptor Distance (meters)	Source Receptor Distance (Feet)	Source Receptor Distance (meters)	Source Receptor Distance (Feet)	
10	0.00	25	82	436	1430	8.60

Source Receptor Distance (meters)	Pomona/Walnut Valley	Equipment	Acres/8-hr Day		Daily hours	Equipment Used	Acres
	25						
NOx	103	Tractors	0.5	0.0625			0
CO	612	Graders	0.5	0.0625			0
PM10	128.55	Dozers	0.5	0.0625			0
PM2.5	62.81	Scrapers	1	0.125			0
						Acres	0.00
	Acres	25	50		100	200	500
NOx	1	103	129		185	292	570
	1	103	129		185	292	570
		103	129		185	292	570
CO	1	612	911		1741	4345	18991
	1	612	911		1741	4345	18991
		612	911		1741	4345	18991
PM10	1	4	11		26	57	148
	1	4	11		26	57	148
		4	11		26	57	148
PM2.5	1	3	4		7	18	75
	1	3	4		7	18	75
		3	4		7	18	75
Pomona/Walnut Valley							
	0.00 Acres						
	25	50	100		200	500	
NOx	103	129	185		292	570	
CO	612	911	1741		4345	18991	
PM10	4	11	26		57	148	
PM2.5	3	4	7		18	75	

Acre Below		Acre Above	
SRA No.	Acres	SRA No.	Acres
10	1	10	1
Distance Increment Below			
25			
Distance Increment Above			
25			

Updated: 10/21/2009 - Table C-1. 2006 – 2008

Construction Localized Significance Thresholds: Architectural Coating

SRA No.	Acres	NOx & CO		PM10 & PM2.5		Construction / Project Site Size (Acres)
		Source Receptor Distance (meters)	Source Receptor Distance (Feet)	Source Receptor Distance (meters)	Source Receptor Distance (Feet)	
10	0.00	25	82	436	1430	8.60

Source Receptor Distance (meters)	Pomona/Walnut Valley	Equipment	Acres/8-hr Day		Daily hours	Equipment Used	Acres
	25						
NOx	103	Tractors	0.5	0.0625			0
CO	612	Graders	0.5	0.0625			0
PM10	128.55	Dozers	0.5	0.0625			0
PM2.5	62.81	Scrapers	1	0.125			0
						Acres	0.00
	Acres	25	50		100	200	500
NOx	1	103	129		185	292	570
	1	103	129		185	292	570
		103	129		185	292	570
CO	1	612	911		1741	4345	18991
	1	612	911		1741	4345	18991
		612	911		1741	4345	18991
PM10	1	4	11		26	57	148
	1	4	11		26	57	148
		4	11		26	57	148
PM2.5	1	3	4		7	18	75
	1	3	4		7	18	75
		3	4		7	18	75
Pomona/Walnut Valley	0.00 Acres						
	25	50	100		200	500	
NOx	103	129	185		292	570	
CO	612	911	1741		4345	18991	
PM10	4	11	26		57	148	
PM2.5	3	4	7		18	75	

Acre Below		Acre Above	
SRA No.	Acres	SRA No.	Acres
10	1	10	1
Distance Increment Below			
25			
Distance Increment Above			
25			

Updated: 10/21/2009 - Table C-1. 2006 – 2008

Construction Localized Significance Thresholds: Finishing/Landscaping

SRA No.	Acres	NOx & CO		PM10 & PM2.5		Construction / Project Site Size (Acres)
		Source Receptor Distance (meters)	Source Receptor Distance (Feet)	Source Receptor Distance (meters)	Source Receptor Distance (Feet)	
10	0.00	25	82	436	1430	8.60

Source Receptor Distance (meters)	Pomona/Walnut Valley	Equipment	Acres/8-hr Day		Daily hours	Equipment Used	Acres
	25						
NOx	103	Tractors	0.5	0.0625			0
CO	612	Graders	0.5	0.0625			0
PM10	128.55	Dozers	0.5	0.0625			0
PM2.5	62.81	Scrapers	1	0.125			0
						Acres	0.00
	Acres	25	50		100	200	500
NOx	1	103	129		185	292	570
	1	103	129		185	292	570
		103	129		185	292	570
CO	1	612	911		1741	4345	18991
	1	612	911		1741	4345	18991
		612	911		1741	4345	18991
PM10	1	4	11		26	57	148
	1	4	11		26	57	148
		4	11		26	57	148
PM2.5	1	3	4		7	18	75
	1	3	4		7	18	75
		3	4		7	18	75
Pomona/Walnut Valley							
0.00 Acres							
	25	50	100		200	500	
NOx	103	129	185		292	570	
CO	612	911	1741		4345	18991	
PM10	4	11	26		57	148	
PM2.5	3	4	7		18	75	

Acre Below		Acre Above	
SRA No.	Acres	SRA No.	Acres
10	1	10	1
Distance Increment Below			
25			
Distance Increment Above			
25			

Updated: 10/21/2009 - Table C-1. 2006 – 2008

Energy Calculations

Construction-Related Fuel/Energy Usage

CONSTRUCTION WORKER COMMUTE

Year	Gas		Diesel		Electricity	
	VMT	Gallons	VMT	Gallons	VMT	kWh
2026	29,499	1,129	39	1	912	333
2027	39,916	1,499	51	1	1,362	498
Total	69,415	2,628	90	3	2,274	831

CONSTRUCTION VENDOR TRIPS

Year	Gas		Diesel	
	VMT	Gallons	VMT	Gallons
2026	1,286	244	9,852	1,371
2027	746	140	5,864	807
Total	2,032	384	15,716	2,178

CONSTRUCTION TRUCK HAUL TRIPS

Year	Gas		Diesel	
	VMT	Gallons	VMT	Gallons
2026	0	0	599	96
2027	0	0	186	29
Total	0	0	786	126

CONSTRUCTION OFF-ROAD EQUIPMENT

Year	Gasoline gallons	Diesel gallons
2026	0	11,867
2027	136	10,168
Total	136	22,035

CONSTRUCTION TOTAL

Year	Gas		Diesel		Electricity	
	VMT	Gallons	VMT	Gallons	VMT	kWh
2026	30,786	1,373	10,491	13,335	912	333
2027	40,662	1,775	6,101	11,006	1,362	498
Total	71,447	3,148	16,592	24,341	2,274	831

Construction Worker Trips Fuel Usage Worksheet

Note: Per CalEEMod methodology, worker vehicles are "LD_Mix", which is 25% LDA, 50% LDT1, and 25% LDT2

Activity ¹	Daily trips ^{1,2}	Trip miles ²	Trip days ¹	Annual VMT
2026				
Asphalt Demolition	8	18.5	20	2,960
Linear, Grubbing & Land Clearing	5	18.5	10	925
Site Preparation	8	18.5	30	4,440
Rough Grading for Roadway	13	18.5	60	14,430
Utility Trenching 2026	13	18.5	32	7,696
2027				
Utility Trenching 2027	13	18.5	88	21,164
Fine Grading for Roadway	5	18.5	30	2,775
Roadway Construction	8	18.5	90	13,320
Linear, Paving	8	18.5	20	2,960
Architectural Coating	0	18.5	10	0
Finishing/Landscaping	3	18.5	20	1,110

¹ Based on information provided.

² Based on CalEEMod defaults.

Year	LDA VMT	LDT1 VMT	LDT2 VMT	Gasoline ¹						Diesel ¹						Electricity ¹					
				LDA mpg	LDA gallons	LDT1 mpg	LDT1 gallons	LDT2 mpg	LDT2 gallons	LDA mpg	LDA gallons	LDT1 mpg	LDT1 gallons	LDT2 mpg	LDT2 gallons	LDA m/kWh	LDA kWh	LDT1 m/kWh	LDT1 kWh	LDT2 m/kWh	LDT2 kWh
2026	7,613	15,226	7,613	30.16	230	25.15	601	24.98	299	41.18	0	23.16	0	32.86	1	2.71	250	2.78	41	2.87	43
2027	10,332	20,665	10,332	30.74	304	25.62	799	25.53	396	41.87	0	24.03	0	33.45	1	2.70	362	2.78	69	2.86	66

¹ EMFAC2021 v1.0.2.

Year	VMT from gasoline			VMT from diesel			VMT from electricity		
	LDA	LDT1	LDT2	LDA	LDT1	LDT2	LDA	LDT1	LDT2
2026	90.96%	99.24%	98.05%	0.15%	0.02%	0.34%	8.89%	0.74%	1.62%
2027	90.39%	99.06%	97.82%	0.14%	0.01%	0.34%	9.48%	0.93%	1.84%

100.00%

Gasoline		Diesel		Electricity	
VMT	Gallons	VMT	Gallons	VMT	kWh
29,499	1,129	39	1	912	333
39,916	1,499	51	1	1,362	498
69,415	2,628	90	3	2,274	831

Vendor Trips Fuel Usage Worksheet

Note: Based on CalEEMod methodology, vendor vehicles are 50% HHDT (T7) and 50% MHDT (T6).

Activity ¹	Daily trips ^{1,2}	Trip miles ²	Trip days ¹	Annual VMT
2026				
Asphalt Demomlition	6	10.2	20	1,224
Linear, Grubbing & Land Clearing	6	10.2	10	612
Site Preparation	4	10.2	30	1,224
Rough Grading for Roadway	10	10.2	60	6,120
Utility Trenching 2026	6	10.2	32	1,958
2027				
Utility Trenching 2027	6	10.2	88	5,386
Fine Grading for Roadway	4	10.2	30	1,224
Roadway Construction	0	10.2	90	0
Linear, Paving	0	10.2	20	0
Architectural Coating	0	10.2	10	0
Finishing/Landscaping	0	10.2	20	0

¹ Based on information provided.

² Based on CalEEMod defaults.

Year	HHDT (T7) VMT	MHDT (T6) VMT	Gasoline ¹				Diesel ¹			
			HHDT (T7) mpg	HHDT (T7) gallons	MHDT (T6) mpg	MHDT (T6) gallons	HHDT (T7) mpg	HHDT (T7) gallons	MHDT (T6) mpg	MHDT (T6) gallons
2026	5,569	5,569	4.25	0	5.27	244	6.23	894	8.98	477
2027	3,305	3,305	4.35	0	5.32	140	6.32	523	9.02	284

¹ EMFAC2021 v1.0.2.

Year	VMT from gasoline		VMT from diesel	
	HHDT (T7)	MHDT (T6)	HHDT (T7)	MHDT (T6)
2026	0.03%	22.44%	89.60%	74.89%
2027	0.03%	21.61%	93.11%	74.30%
Adjusted VMT Mix Between Gasoline and Diesel				
2026	0.04%	23.05%	99.96%	76.95%
2027	0.04%	22.53%	99.96%	77.47%

VENDOR			
Gasoline		Diesel	
VMT	Gallons	VMT	Gallons
1,285.94	244.21	9,852	1,371
746	140	5,864	807
2,031.59	384.42	15,716.41	2,177.53

Truck Haul Trips Fuel Usage Worksheet

Note: Hauling vehicles are HHDT (T7)

Activity	Daily trips ^{1,2}	Trip miles ²	Trip days ¹	Annual VMT
2026				
Asphalt Demomlition	14	20	280	78,400
Linear, Grubbing & Land Clearing	4	20	80	6,400
Site Preparation	4	20	80	6,400
Rough Grading for Roadway	4	20	80	6,400
Utility Trenching 2026	6	20	120	14,400
2027				
Utility Trenching 2027	6	20	120	14,400
Fine Grading for Roadway	0	20	0	0
Roadway Construction	0	20	0	0
Linear, Paving	2	20	40	1,600
Architectural Coating	2	20	40	1,600
Finishing/Landscaping	0	20	0	0

Year	VMT	Gasoline ¹		Diesel ¹	
		HHDT (T7) mpg	HHDT (T7) gallons	HHDT (T7) mpg	HHDT (T7) gallons
2026	640	4.25	0	6.23	96
2027	200	4.35	0	6.32	29

¹ EMFAC2021 v1.0.2.

Year	VMT from gasoline	VMT from diesel
2026	0.04%	93.65%
2027	0.03%	93.11%

Gasoline		Diesel	
VMT	Gallons	VMT	Gallons
0	0	599	96
0	0	186	29
0	0	786	126

Off-Road Construction Equipment Fuel Usage Worksheet

Year		Total Gasoline	Total Diesel Gallons	Total Natural Gas
2026		0	11,867	0
2027		136	10,168	0
Total		136	22,035	0

Equipment Type ¹	Number of Equipment ¹	Horsepower	OFFROAD2017 Horsepower Category	Fuel Type	Working days ¹	Hours Per Day	Total Hours of Operation	Gasoline Gal/Hr ²	Total Gasoline gallons	Diesel Gal/Hr ²	Total Diesel gallons	Natural Gas Gal/Hr ²	Total Natural Gas gallons
2026													
Asphalt Demolition													
Crushing/Proc. Equipment	1	12	25	Diesel	20	8	160	0.00	0	0.00	0	0.00	0
Rubber Tired Dozers	2	367	600	Diesel	20	8	320	0.00	0	6.96	2,227	0.00	0
Linear, Grubbing & Land Clearing													
Graders	2	148	175	Diesel	10	8	160	0.00	0	3.29	527	0.00	0
Site Preparation													
Excavators	2	36	50	Diesel	30	8	480	0.00	0	0.76	366	0.00	0
Rubber Tired Loaders	1	150	175	Diesel	30	8	240	0.00	0	2.68	644	0.00	0
Rough Grading for Roadway													
Graders	2	148	175	Diesel	60	8	960	0.00	0	3.29	3,163	0.00	0
Rollers	1	36	50	Diesel	60	8	480	0.00	0	0.81	391	0.00	0
Rubber Tired Loaders	2	150	175	Diesel	60	8	960	0.00	0	2.68	2,577	0.00	0
Utility Trenching 2026													
Rubber Tired Loaders	2	150	175	Diesel	32	8	512	0.00	0	2.68	1,375	0.00	0
Excavators	2	36	50	Diesel	32	8	512	0.00	0	0.76	390	0.00	0
Rollers	1	36	50	Diesel	32	8	256	0.00	0	0.81	208	0.00	0
TOTAL									0		11,867		0
2027													
Utility Trenching 2027													
Rubber Tired Loaders	2	150	175	Diesel	88	8	1,408	0.00	0	2.68	3,780	0.00	0
Excavators	2	36	50	Diesel	88	8	1,408	0.00	0	0.76	1,072	0.00	0
Rollers	1	36	50	Diesel	88	8	704	0.00	0	0.81	573	0.00	0
Fine Grading for Roadway													
Graders	1	148	175	Diesel	30	8	240	0.00	0	3.28	787	0.00	0
Rollers	1	36	50	Diesel	30	8	240	0.00	0	0.81	193	0.00	0
Roadway Construction													
Rubber Tired Loaders	1	150	175	Diesel	90	8	720	0.00	0	2.69	1,934	0.00	0
Excavators	1	36	50	Diesel	90	8	720	0.00	0	0.76	548	0.00	0
Rollers	1	36	50	Diesel	90	8	720	0.00	0	0.81	580	0.00	0
Linear, Paving													
Rollers	2	36	50	Diesel	20	8	320	0.00	0	0.81	258	0.00	0
Pavers	1	81	100	Diesel	20	8	160	0.00	0	2.01	321	0.00	0
Architectural Coating													
Air Compressors	1	37	50	Gasoline	10	6	60	2.27	136	0.00	0	0.00	0
Finishing/Landscaping													
Excavators	1	36	50	Diesel	20	8	160	0.00	0	0.76	122	0.00	0
TOTAL									136		10,168		0

¹ Based on information provided.

² OFFROAD2021 v.1.0.5

EMFAC Fuel Usage: Year 2026

Vehicle type	GAS			DSL			NG			ELEC		
	VMT/day	Gallons/day	Miles/gallon	VMT/day	Gallons/day	Miles/gallon	VMT/day	Gallons/day	Miles/gallon	VMT/day	kWh/day	Miles/kWh
All other buses	0	0	0.00	81,976	8,715	9.41	20,859	2,358	8.84	0	0	0.00
LDA	127,796,949	4,237,331	30.16	212,062	5,150	41.18	0	0	0.00	12,485,673	4,613,207	2.71
LDT1	11,007,023	437,609	25.15	1,719	74	23.16	0	0	0.00	82,027	29,537	2.78
LDT2	67,243,281	2,691,851	24.98	230,832	7,026	32.86	0	0	0.00	1,107,899	386,201	2.87
LHD1	4,960,392	351,171	14.13	2,704,306	130,828	20.67	0	0	0.00	177,949	99,444	1.79
LHD2	702,537	57,217	12.28	1,209,849	69,101	17.51	0	0	0.00	43,796	24,491	1.79
MCY	1,005,181	24,235	41.48	0	0	0.00	0	0	0.00	0	0	0.00
MDV	36,869,691	1,811,689	20.35	428,852	17,498	24.51	0	0	0.00	935,450	338,000	2.77
MH	146,048	30,181	4.84	60,244	6,055	9.95	0	0	0.00	0	0	0.00
Motor coach	0	0	0.00	85,108	15,080	5.64	0	0	0.00	0	0	0.00
OBUS	130,669	25,467	5.13	0	0	0.00	0	0	0.00	2,316	2,440	0.95
PTO	0	0	0.00	108,286	21,294	5.09	0	0	0.00	2,361	4,890	0.48
SBUS	63,137	6,986	9.04	29,450	4,003	7.36	39,205	9,257	4.24	1,385	1,601	0.86
T6	760,041	144,284	5.27	2,536,951	282,498	8.98	45,313	5,565	8.14	56,342	58,913	0.96
T7	2,530	595	4.25	6,711,523	1,077,296	6.23	388,065	64,884	5.98	64,320	113,816	0.57
UBUS	30,712	6,645	4.62	935	161	5.81	406,414	131,419	3.09	17,147	36,044	0.48
Total	250,718,192	9,825,261	25.52	14,402,091	1,644,779	8.76	899,855	213,484	4.22	14,976,665	5,708,584	2.62

Source: EMFAC2021 (v1.0.2) Emissions Inventory
Region Type: Sub-Area
Region: Los Angeles (SC)
Calendar Year: 2026
Season: Annual
Vehicle Classification: EMFAC202x Categories
Units: miles/day for CVMT and EVMT, trips/day for Trips, kWh/day for Energy Consumption, tons/day for Emissions, 1000 gallons/day for Fuel Consumption

Region	Calendar Year	Vehicle Category	Model Year	Speed	Fuel	Population	Total VMT	CVMT	EVMT	Trips	Fuel Consumption	Energy Consumption	
Los Angeles (SC)	2026	All Other Buses	Aggregate	Aggregate	Diesel	1544.947819	81975.64777	81975.64777		0	13750.03559	8.715367931	0
Los Angeles (SC)	2026	All Other Buses	Aggregate	Aggregate	Natural Gas	358.9603738	20858.73557	20858.73557		0	3194.747327	2.358338765	0
Los Angeles (SC)	2026	LDA	Aggregate	Aggregate	Gasoline	3219652.786	125598332.2	125598332.2		0	14941928.73	4156.999113	0
Los Angeles (SC)	2026	LDA	Aggregate	Aggregate	Diesel	7348.716503	212062.0866	212062.0866		0	30172.50067	5.149764542	0
Los Angeles (SC)	2026	LDA	Aggregate	Aggregate	Electricity	209865.581	10019447.29	0	10019447.29	1040525.933	0	3868333.604	
Los Angeles (SC)	2026	LDA	Aggregate	Aggregate	Plug-in Hybrid	103430.6361	4664842.379	2198616.804	2466225.574	427685.6805	80.33226876	744873.6287	
Los Angeles (SC)	2026	LDT1	Aggregate	Aggregate	Gasoline	303121.7183	10988219.26	10988219.26		0	1336831.01	436.9194811	0
Los Angeles (SC)	2026	LDT1	Aggregate	Aggregate	Diesel	88.7979738	1718.50539	1718.50539		0	245.8298953	0.074204054	0
Los Angeles (SC)	2026	LDT1	Aggregate	Aggregate	Electricity	1265.851297	56656.04808	0	56656.04808	6103.901355	0	21873.91064	
Los Angeles (SC)	2026	LDT1	Aggregate	Aggregate	Plug-in Hybrid	890.9485459	44174.8973	18804.21024	25370.68706	3684.072237	0.689479092	7662.703659	
Los Angeles (SC)	2026	LDT2	Aggregate	Aggregate	Gasoline	1632990.627	66847121.76	66847121.76		0	7689350.933	2677.276355	0
Los Angeles (SC)	2026	LDT2	Aggregate	Aggregate	Diesel	5437.834714	230831.6694	230831.6694		0	26139.75562	7.025538956	0
Los Angeles (SC)	2026	LDT2	Aggregate	Aggregate	Electricity	17319.28615	613691.4866	0	613691.4866	87812.4163	0	236935.5645	
Los Angeles (SC)	2026	LDT2	Aggregate	Aggregate	Plug-in Hybrid	18786.14155	890366.9989	396159.696	494207.3029	77680.69531	14.57501217	149265.3352	
Los Angeles (SC)	2026	LHD1	Aggregate	Aggregate	Gasoline	123929.2199	4960391.725	4960391.725		0	1846360.723	351.17062	0
Los Angeles (SC)	2026	LHD1	Aggregate	Aggregate	Diesel	61552.22012	2704306.099	2704306.099		0	774249.4964	130.8276817	0
Los Angeles (SC)	2026	LHD1	Aggregate	Aggregate	Electricity	2671.099104	177948.9511	0	177948.9511	37344.02886	0	99444.46529	
Los Angeles (SC)	2026	LHD2	Aggregate	Aggregate	Gasoline	18802.30269	702537.4457	702537.4457		0	280126.2946	57.21721911	0
Los Angeles (SC)	2026	LHD2	Aggregate	Aggregate	Diesel	28207.89186	1209848.539	1209848.539		0	354819.794	69.10133677	0
Los Angeles (SC)	2026	LHD2	Aggregate	Aggregate	Electricity	691.3171043	43796.419	0	43796.419	9170.618635	0	24491.13451	
Los Angeles (SC)	2026	MCV	Aggregate	Aggregate	Gasoline	153887.3138	1005181.469	1005181.469		0	307774.6277	24.23505076	0
Los Angeles (SC)	2026	MDV	Aggregate	Aggregate	Gasoline	964398.5458	36646219.44	36646219.44		0	4482010.204	1803.349906	0
Los Angeles (SC)	2026	MDV	Aggregate	Aggregate	Diesel	11199.92317	428851.9709	428851.9709		0	52578.88767	17.49813003	0
Los Angeles (SC)	2026	MDV	Aggregate	Aggregate	Electricity	18645.2319	659895.0843	0	659895.0843	94502.15146	0	254773.9667	
Los Angeles (SC)	2026	MDV	Aggregate	Aggregate	Plug-in Hybrid	11391.54804	499026.5259	223471.711	275554.8149	47104.05116	8.338902977	83225.76695	
Los Angeles (SC)	2026	MH	Aggregate	Aggregate	Gasoline	14307.03368	146047.5722	146047.5722		0	1431.275649	30.18050526	0
Los Angeles (SC)	2026	MH	Aggregate	Aggregate	Diesel	5685.026918	60243.63088	60243.63088		0	568.5026918	6.054753085	0
Los Angeles (SC)	2026	Motor Coach	Aggregate	Aggregate	Diesel	659.4119321	85108.01675	85108.01675		0	15153.2862	15.08019822	0
Los Angeles (SC)	2026	OBUS	Aggregate	Aggregate	Gasoline	3466.029388	130669.0411	130669.0411		0	69348.31599	25.46693943	0
Los Angeles (SC)	2026	OBUS	Aggregate	Aggregate	Electricity	32.17174938	2316.377191	0	2316.377191	643.6923616	0	2439.741842	
Los Angeles (SC)	2026	PTO	Aggregate	Aggregate	Diesel	0	108285.7972	108285.7972		0	0	21.29432011	0
Los Angeles (SC)	2026	PTO	Aggregate	Aggregate	Electricity	0	2360.64142	0	2360.64142	0	0	4890.113006	
Los Angeles (SC)	2026	SBUS	Aggregate	Aggregate	Gasoline	1439.394428	63136.50277	63136.50277		0	5757.577711	6.985775097	0
Los Angeles (SC)	2026	SBUS	Aggregate	Aggregate	Diesel	1484.919634	29449.64017	29449.64017		0	21501.6363	4.00274451	0
Los Angeles (SC)	2026	SBUS	Aggregate	Aggregate	Electricity	43.7276656	1385.007139	0	1385.007139	472.0275714	0	1601.485615	
Los Angeles (SC)	2026	SBUS	Aggregate	Aggregate	Natural Gas	1619.758995	39204.63215	39204.63215		0	23454.11024	9.256785533	0
Los Angeles (SC)	2026	T6 CAIRP Class 4	Aggregate	Aggregate	Diesel	27.71966668	1820.834182	1820.834182		0	636.9979404	0.194845855	0
Los Angeles (SC)	2026	T6 CAIRP Class 4	Aggregate	Aggregate	Electricity	0.602687294	48.3956098	0	48.3956098	13.84975401	0	50.72189137	
Los Angeles (SC)	2026	T6 CAIRP Class 5	Aggregate	Aggregate	Diesel	36.48798473	2504.125518	2504.125518		0	838.4938891	0.268376631	0
Los Angeles (SC)	2026	T6 CAIRP Class 5	Aggregate	Aggregate	Electricity	0.702674434	60.12162483	0	60.12162483	16.14745849	0	63.01155283	
Los Angeles (SC)	2026	T6 CAIRP Class 6	Aggregate	Aggregate	Diesel	126.8224781	6479.202134	6479.202134		0	2914.380546	0.683131632	0
Los Angeles (SC)	2026	T6 CAIRP Class 6	Aggregate	Aggregate	Electricity	3.84506779	221.2490136	0	221.2490136	88.3596578	0	231.8840176	
Los Angeles (SC)	2026	T6 CAIRP Class 7	Aggregate	Aggregate	Diesel	206.0975947	41255.88581	41255.88581		0	4736.122727	4.028582981	0
Los Angeles (SC)	2026	T6 CAIRP Class 7	Aggregate	Aggregate	Electricity	3.481588965	739.4920745	0	739.4920745	80.00691441	0	775.0380009	
Los Angeles (SC)	2026	T6 CAIRP Class 7	Aggregate	Aggregate	Natural Gas	0.172449413	33.23847686	33.23847686		0	3.962887507	0.003379293	0
Los Angeles (SC)	2026	T6 Instate Delivery Class 4	Aggregate	Aggregate	Diesel	3907.591357	130759.0299	130759.0299		0	55761.32866	14.61703553	0
Los Angeles (SC)	2026	T6 Instate Delivery Class 4	Aggregate	Aggregate	Electricity	59.56320439	2414.498448	0	2414.498448	849.9669266	0	2523.704655	
Los Angeles (SC)	2026	T6 Instate Delivery Class 4	Aggregate	Aggregate	Natural Gas	17.02961631	605.1870291	605.1870291		0	243.0126247	0.075379135	0
Los Angeles (SC)	2026	T6 Instate Delivery Class 5	Aggregate	Aggregate	Diesel	4045.996295	136053.1245	136053.1245		0	57736.36713	15.32366095	0
Los Angeles (SC)	2026	T6 Instate Delivery Class 5	Aggregate	Aggregate	Electricity	54.16609187	2200.137558	0	2200.137558	772.950131	0	2299.64836	
Los Angeles (SC)	2026	T6 Instate Delivery Class 5	Aggregate	Aggregate	Natural Gas	14.06438379	503.1876517	503.1876517		0	200.6987566	0.062130933	0
Los Angeles (SC)	2026	T6 Instate Delivery Class 6	Aggregate	Aggregate	Diesel	12397.7995	415982.9871	415982.9871		0	176916.5989	46.67470467	0
Los Angeles (SC)	2026	T6 Instate Delivery Class 6	Aggregate	Aggregate	Electricity	169.9455974	6834.067849	0	6834.067849	2425.123674	0	7143.168328	
Los Angeles (SC)	2026	T6 Instate Delivery Class 6	Aggregate	Aggregate	Natural Gas	45.85324072	1625.462188	1625.462188		0	654.3257451	0.201277721	0
Los Angeles (SC)	2026	T6 Instate Delivery Class 7	Aggregate	Aggregate	Diesel	3128.926738	168114.157	168114.157		0	44649.78455	18.48769407	0
Los Angeles (SC)	2026	T6 Instate Delivery Class 7	Aggregate	Aggregate	Electricity	19.36624778	961.1484873	0	961.1484873	276.3563558	0	1004.620613	
Los Angeles (SC)	2026	T6 Instate Delivery Class 7	Aggregate	Aggregate	Natural Gas	90.11905315	4868.923052	4868.923052		0	1285.998888	0.593040312	0
Los Angeles (SC)	2026	T6 Instate Other Class 4	Aggregate	Aggregate	Diesel	4842.288848	198676.1739	198676.1739		0	55976.85908	22.26927082	0
Los Angeles (SC)	2026	T6 Instate Other Class 4	Aggregate	Aggregate	Electricity	81.20430325	3869.286009	0	3869.286009	938.7217456	0	4043.966667	
Los Angeles (SC)	2026	T6 Instate Other Class 4	Aggregate	Aggregate	Natural Gas	19.17466404	836.8863542	836.8863542		0	221.6591163	0.103045181	0
Los Angeles (SC)	2026	T6 Instate Other Class 5	Aggregate	Aggregate	Diesel	10973.07016	465081.8613	465081.8613		0	126848.691	52.35990278	0
Los Angeles (SC)	2026	T6 Instate Other Class 5	Aggregate	Aggregate	Electricity	156.8135234	7454.776776	0	7454.776776	1812.764331	0	7791.326028	
Los Angeles (SC)	2026	T6 Instate Other Class 5	Aggregate	Aggregate	Natural Gas	36.98628779	1630.056255	1630.056255		0	427.5614868	0.197158127	0
Los Angeles (SC)	2026	T6 Instate Other Class 6	Aggregate	Aggregate	Diesel	9811.733745	411849.432	411849.432		0	113423.6421	46.24056038	0
Los Angeles (SC)	2026	T6 Instate Other Class 6	Aggregate	Aggregate	Electricity	149.0244725	7047.826685	0	7047.826685	1722.722902	0	7366.003992	
Los Angeles (SC)	2026	T6 Instate Other Class 6	Aggregate	Aggregate	Natural Gas	34.79339013	1516.40852	1516.40852		0	402.2115899	0.184489583	0
Los Angeles (SC)	2026	T6 Instate Other Class 7	Aggregate	Aggregate	Diesel	4629.294792	207055.4816	207055.4816		0	53514.6478	22.87356032	0
Los Angeles (SC)	2026	T6 Instate Other Class 7	Aggregate	Aggregate	Electricity	46.98279942	3258.387983	0	3258.387983	543.1211613	0	3405.489375	
Los Angeles (SC)	2026	T6 Instate Other Class 7	Aggregate	Aggregate	Natural Gas	130.3257619	5869.595197	5869.595197		0	1506.565807	0.723965266	0
Los Angeles (SC)	2026	T6 Instate Tractor Class 6	Aggregate	Aggregate	Diesel	136.5172849	6922.509004	6922.509004		0	1578.139814	0.771845639	0
Los Angeles (SC)	2026	T6 Instate Tractor Class 6	Aggregate	Aggregate	Electricity	1.112545024	68.52288567	0	68.52288567	12.86102048	0	71.61638218	
Los Angeles (SC)	2026	T6 Instate Tractor Class 6	Aggregate	Aggregate	Natural Gas	0.461535614	25.6404759	25.6404759		0	5.335351702	0.003048366	0
Los Angeles (SC)	2026	T6 Instate Tractor Class 7	Aggregate	Aggregate	Diesel	1761.974162	100864.5707	100864.5707		0	20368.42131	10.51513199	0
Los Angeles (SC)	2026	T6 Instate Tractor Class 7	Aggregate	Aggregate	Electricity	9.664085584	791.6336673	0	791.6336673	111.7168294	0	827.3723254	
Los Angeles (SC)	2026	T6 Instate Tractor Class 7	Aggregate	Aggregate	Natural Gas	50.38713938	2898.342212	2898.342212		0	582.4753312	0.349137407	0
Los Angeles (SC)	2026	T6 OOS Class 4	Aggregate	Aggregate	Diesel	16.2957574	1064.062486	1064.062486		0	374.4765051	0.11180241	0
Los Angeles (SC)	2026	T6 OOS Class 5	Aggregate	Aggregate	Diesel	21.33767186	1459.702387	1459.702387		0	490.3396994	0.153821113	0
Los Angeles (SC)	2026	T6 OOS Class 6	Aggregate	Aggregate	Diesel	74.91264777	3814.2441	3814.2441					

Los Angeles (SC)	2026 T6 Public Class 7	Aggregate	Aggregate	Natural Gas	313.705502	15780.90126	15780.90126	0	1609.309225	1.919808858	0
Los Angeles (SC)	2026 T6 Utility Class 5	Aggregate	Aggregate	Diesel	630.9064516	25403.47619	25403.47619	0	8075.602581	2.718667011	0
Los Angeles (SC)	2026 T6 Utility Class 5	Aggregate	Aggregate	Electricity	17.83648726	773.9049474	0	773.9049474	228.3070369	0	810.0570549
Los Angeles (SC)	2026 T6 Utility Class 5	Aggregate	Aggregate	Natural Gas	3.689891278	146.5696186	146.5696186	0	47.23060835	0.016969332	0
Los Angeles (SC)	2026 T6 Utility Class 6	Aggregate	Aggregate	Diesel	119.1793904	4781.957418	4781.957418	0	1525.496197	0.509806678	0
Los Angeles (SC)	2026 T6 Utility Class 6	Aggregate	Aggregate	Electricity	3.408438381	147.8932124	0	147.8932124	43.62801128	0	154.8018791
Los Angeles (SC)	2026 T6 Utility Class 6	Aggregate	Aggregate	Natural Gas	1.167607424	44.84319644	44.84319644	0	14.94537502	0.005217324	0
Los Angeles (SC)	2026 T6 Utility Class 7	Aggregate	Aggregate	Diesel	134.2550082	6619.545181	6619.545181	0	1718.464105	0.700696646	0
Los Angeles (SC)	2026 T6 Utility Class 7	Aggregate	Aggregate	Electricity	3.89281937	236.4904655	0	236.4904655	49.82808794	0	247.5378542
Los Angeles (SC)	2026 T6 Utility Class 7	Aggregate	Aggregate	Natural Gas	1.508137537	65.41594481	65.41594481	0	19.30416047	0.007513512	0
Los Angeles (SC)	2026 T6TS	Aggregate	Aggregate	Gasoline	14018.64483	760040.5963	760040.5963	0	280485.0459	144.2836857	0
Los Angeles (SC)	2026 T6TS	Aggregate	Aggregate	Electricity	166.6906771	15391.92517	0	15391.92517	3335.147068	0	16102.63558
Los Angeles (SC)	2026 T7 CAIRP Class 8	Aggregate	Aggregate	Diesel	6769.338442	1371775.747	1371775.747	0	155559.3974	214.891633	0
Los Angeles (SC)	2026 T7 CAIRP Class 8	Aggregate	Aggregate	Electricity	143.5678164	28750.92261	0	28750.92261	3299.188422	0	50922.90027
Los Angeles (SC)	2026 T7 CAIRP Class 8	Aggregate	Aggregate	Natural Gas	27.14654357	5442.959691	5442.959691	0	623.8275712	0.971648483	0
Los Angeles (SC)	2026 T7 NNOOS Class 8	Aggregate	Aggregate	Diesel	6112.556763	1661640.346	1661640.346	0	140466.5544	250.5003145	0
Los Angeles (SC)	2026 T7 NOOS Class 8	Aggregate	Aggregate	Diesel	2607.144181	603343.3171	603343.3171	0	59912.17328	93.72977597	0
Los Angeles (SC)	2026 T7 POAK Class 8	Aggregate	Aggregate	Diesel	1.467440829	114.8389514	114.8389514	0	24.00733196	0.020625657	0
Los Angeles (SC)	2026 T7 POLA Class 8	Aggregate	Aggregate	Diesel	9699.774104	1217296.134	1217296.134	0	158688.3043	203.5128064	0
Los Angeles (SC)	2026 T7 POLA Class 8	Aggregate	Aggregate	Electricity	44.72702196	4904.125807	0	4904.125807	731.7340793	0	8675.025477
Los Angeles (SC)	2026 T7 POLA Class 8	Aggregate	Aggregate	Natural Gas	120.868058	15039.4796	15039.4796	0	1977.40143	2.620296978	0
Los Angeles (SC)	2026 T7 Public Class 8	Aggregate	Aggregate	Diesel	3433.905865	137721.0937	137721.0937	0	17615.93709	23.83022594	0
Los Angeles (SC)	2026 T7 Public Class 8	Aggregate	Aggregate	Electricity	53.34386261	3347.303015	0	3347.303015	273.6540152	0	5920.321205
Los Angeles (SC)	2026 T7 Public Class 8	Aggregate	Aggregate	Natural Gas	1431.599578	68479.79796	68479.79796	0	7344.105836	11.51121336	0
Los Angeles (SC)	2026 T7 Single Concrete/Transit Mix C	Aggregate	Aggregate	Diesel	711.5136922	48247.5505	48247.5505	0	6702.45898	7.787949147	0
Los Angeles (SC)	2026 T7 Single Concrete/Transit Mix C	Aggregate	Aggregate	Electricity	22.41780379	1816.15273	0	1816.15273	211.1757117	0	3206.572334
Los Angeles (SC)	2026 T7 Single Concrete/Transit Mix C	Aggregate	Aggregate	Natural Gas	65.64116575	4529.615839	4529.615839	0	618.3397813	0.774803617	0
Los Angeles (SC)	2026 T7 Single Dump Class 8	Aggregate	Aggregate	Diesel	2042.943561	112756.5251	112756.5251	0	19244.52835	18.69747336	0
Los Angeles (SC)	2026 T7 Single Dump Class 8	Aggregate	Aggregate	Electricity	28.4405103	2344.729294	0	2344.729294	267.909607	0	4139.819278
Los Angeles (SC)	2026 T7 Single Dump Class 8	Aggregate	Aggregate	Natural Gas	138.6342972	8273.622473	8273.622473	0	1305.935079	1.494125923	0
Los Angeles (SC)	2026 T7 Single Other Class 8	Aggregate	Aggregate	Diesel	6620.126024	344950.7231	344950.7231	0	62361.58714	56.61122291	0
Los Angeles (SC)	2026 T7 Single Other Class 8	Aggregate	Aggregate	Electricity	114.5061174	7727.780019	0	7727.780019	1078.647626	0	13644.05383
Los Angeles (SC)	2026 T7 Single Other Class 8	Aggregate	Aggregate	Natural Gas	486.9078834	26590.88196	26590.88196	0	4586.672261	4.661619939	0
Los Angeles (SC)	2026 T7 SWCV Class 8	Aggregate	Aggregate	Diesel	922.1390957	59857.71023	59857.71023	0	4241.83984	22.85900289	0
Los Angeles (SC)	2026 T7 SWCV Class 8	Aggregate	Aggregate	Electricity	44.21235599	2737.838194	0	2737.838194	203.3768376	0	4827.814554
Los Angeles (SC)	2026 T7 SWCV Class 8	Aggregate	Aggregate	Natural Gas	3430.728017	222091.3043	222091.3043	0	15781.34888	36.00797751	0
Los Angeles (SC)	2026 T7 Tractor Class 8	Aggregate	Aggregate	Diesel	15882.01154	1133316.983	1133316.983	0	230765.6277	181.5579077	0
Los Angeles (SC)	2026 T7 Tractor Class 8	Aggregate	Aggregate	Electricity	155.0066362	12364.92946	0	12364.92946	2252.246425	0	21902.16322
Los Angeles (SC)	2026 T7 Tractor Class 8	Aggregate	Aggregate	Natural Gas	520.5591645	37617.06388	37617.06388	0	7563.72466	6.842735189	0
Los Angeles (SC)	2026 T7 Utility Class 8	Aggregate	Aggregate	Diesel	474.459194	20501.92712	20501.92712	0	6073.077684	3.297029277	0
Los Angeles (SC)	2026 T7 Utility Class 8	Aggregate	Aggregate	Electricity	4.513486298	283.7899527	0	283.7899527	57.77262461	0	501.9347419
Los Angeles (SC)	2026 T7IS	Aggregate	Aggregate	Gasoline	31.71483174	2530.344681	2530.344681	0	634.5503534	0.595008255	0
Los Angeles (SC)	2026 T7IS	Aggregate	Aggregate	Electricity	0.146807205	42.68868092	0	42.68868092	2.937318567	0	75.28164656
Los Angeles (SC)	2026 UBUS	Aggregate	Aggregate	Gasoline	435.2433216	30711.79502	30711.79502	0	1740.973286	6.645484972	0
Los Angeles (SC)	2026 UBUS	Aggregate	Aggregate	Diesel	6.30137858	935.3704801	935.3704801	0	25.20551432	0.161043189	0
Los Angeles (SC)	2026 UBUS	Aggregate	Aggregate	Electricity	172.837956	17147.4887	0	17147.4887	691.3518241	0	36043.61113
Los Angeles (SC)	2026 UBUS	Aggregate	Aggregate	Natural Gas	3794.807103	406413.5462	406413.5462	0	15179.22841	131.4188537	0

EMFAC Fuel Usage: Year 2027

Vehicle type	GAS			DSL			NG			ELEC		
	VMT/day	Gallons/day	Miles/gallon	VMT/day	Gallons/day	Miles/gallon	VMT/day	Gallons/day	Miles/gallon	VMT/day	kWh/day	Miles/kWh
All other buses	0	0	0.00	81,744	8,590	9.52	21,246	2,377	8.94	0	0	0.00
LDA	125,726,848	4,090,518	30.74	191,084	4,564	41.87	0	0	0.00	13,182,845	4,873,734	2.70
LDT1	10,858,316	423,819	25.62	892	37	24.03	0	0	0.00	102,177	36,748	2.78
LDT2	68,315,987	2,675,958	25.53	237,466	7,100	33.45	0	0	0.00	1,284,834	449,223	2.86
LHD1	4,944,075	343,253	14.40	2,787,686	134,206	20.77	0	0	0.00	293,200	164,061	1.79
LHD2	695,274	55,564	12.51	1,252,647	71,070	17.63	0	0	0.00	72,414	40,542	1.79
MCY	1,019,766	24,522	41.59	0	0	0.00	0	0	0.00	0	0	0.00
MDV	37,282,800	1,791,120	20.82	430,681	17,260	24.95	0	0	0.00	1,086,066	392,830	2.76
MH	144,781	29,930	4.84	61,860	6,213	9.96	0	0	0.00	0	0	0.00
Motor coach	0	0	0.00	85,595	14,984	5.71	0	0	0.00	0	0	0.00
OBUS	123,909	23,903	5.18	0	0	0.00	0	0	0.00	3,625	3,816	0.95
PTO	0	0	0.00	108,418	21,055	5.15	0	0	0.00	3,749	7,767	0.48
SBUS	64,089	7,060	9.08	28,031	3,796	7.38	40,155	9,432	4.26	2,257	2,610	0.86
T6	739,073	138,922	5.32	2,541,698	281,934	9.02	46,605	5,706	8.17	93,291	97,676	0.96
T7	2,393	551	4.35	6,809,578	1,077,502	6.32	397,849	65,493	6.07	103,712	183,892	0.56
UBUS	30,483	6,572	4.64	933	161	5.81	395,871	127,332	3.11	28,837	60,596	0.48
Total	249,947,793	9,611,694	26.00	14,618,312	1,648,473	8.87	901,726	210,340	4.29	16,257,007	6,313,495	2.57

Source: EMFAC2021 (v1.0.2) Emissions Inventory
Region Type: Sub-Area
Region: Los Angeles (SC)
Calendar Year: 2027
Season: Annual
Vehicle Classification: EMFAC202x Categories
Units: miles/day for CVMT and EVMT, trips/day for Trips, kWh/day for Energy Consumption, tons/day for Emissions, 1000 gallons/day for Fuel Consumption

Region	Calendar Year	Vehicle Category	Model Year	Speed	Fuel	Population	Total VMT	CVMT	EVMT	Trips	Fuel Consumption	Energy Consumption	
Los Angeles (SC)	2027	All Other Buses	Aggregate	Aggregate	Diesel	1566.308106	81743.51032	81743.51032		0	13940.14215	8.590481023	0
Los Angeles (SC)	2027	All Other Buses	Aggregate	Aggregate	Natural Gas	371.9283173	21245.71448	21245.71448		0	3310.162024	2.376925334	0
Los Angeles (SC)	2027	LDA	Aggregate	Aggregate	Gasoline	3179092.826	123505266.4	123505266.4		0	14746293.75	4009.438092	0
Los Angeles (SC)	2027	LDA	Aggregate	Aggregate	Diesel	6534.724386	191083.9151	191083.9151		0	27083.18601	4.56398353	0
Los Angeles (SC)	2027	LDA	Aggregate	Aggregate	Electricity	226006.5991	10613840.63		0	10613840.63	1115756.105		4097818.49
Los Angeles (SC)	2027	LDA	Aggregate	Aggregate	Plug-in Hybrid	107928.2631	4790585.814	2221581.81		2569004.004	446283.3681	81.07995446	775915.7778
Los Angeles (SC)	2027	LDT1	Aggregate	Aggregate	Gasoline	299305.2204	10834971.77	10834971.77		0	1320990.44	422.9642527	0
Los Angeles (SC)	2027	LDT1	Aggregate	Aggregate	Diesel	45.23949508	892.2827514	892.2827514		0	126.7569526	0.037128442	0
Los Angeles (SC)	2027	LDT1	Aggregate	Aggregate	Electricity	1533.530787	70048.26106		0	70048.26106	7458.064361		27044.41017
Los Angeles (SC)	2027	LDT1	Aggregate	Aggregate	Plug-in Hybrid	1135.428964	55472.98057	23344.3848		32128.59577	4694.998765	0.854811555	9703.793508
Los Angeles (SC)	2027	LDT2	Aggregate	Aggregate	Gasoline	1666211.776	67880593.69	67880593.69		0	7842060.293	2659.957346	0
Los Angeles (SC)	2027	LDT2	Aggregate	Aggregate	Diesel	5647.118826	237466.0947	237466.0947		0	27083.50955	7.099804527	0
Los Angeles (SC)	2027	LDT2	Aggregate	Aggregate	Electricity	20892.07314	727697.1044		0	727697.1044	105464.9007		280951.1424
Los Angeles (SC)	2027	LDT2	Aggregate	Aggregate	Plug-in Hybrid	21318.0193	992530.1388	435393.5568		557136.582	88150.00981	16.00114517	168271.8531
Los Angeles (SC)	2027	LHD1	Aggregate	Aggregate	Gasoline	123790.2824	4944074.819	4944074.819		0	1844290.76	343.253308	0
Los Angeles (SC)	2027	LHD1	Aggregate	Aggregate	Diesel	64077.47622	2787685.885	2787685.885		0	806014.0414	134.205647	0
Los Angeles (SC)	2027	LHD1	Aggregate	Aggregate	Electricity	4540.547639	293199.8015		0	293199.8015	63473.86547		164060.6208
Los Angeles (SC)	2027	LHD2	Aggregate	Aggregate	Gasoline	18663.23138	695273.9383	695273.9383		0	278054.3394	55.5644299	0
Los Angeles (SC)	2027	LHD2	Aggregate	Aggregate	Diesel	29570.22458	1252646.951	1252646.951		0	371956.2258	71.07048352	0
Los Angeles (SC)	2027	LHD2	Aggregate	Aggregate	Electricity	1178.754467	72414.04476		0	72414.04476	15635.83065		40542.20274
Los Angeles (SC)	2027	MCV	Aggregate	Aggregate	Gasoline	157033.573	1019766.116	1019766.116		0	314067.146	24.52211084	0
Los Angeles (SC)	2027	MDV	Aggregate	Aggregate	Gasoline	976608.911	37034848.01	37034848.01		0	4541607.246	1781.876783	0
Los Angeles (SC)	2027	MDV	Aggregate	Aggregate	Diesel	11332.66965	430680.9504	430680.9504		0	53114.62369	17.26010389	0
Los Angeles (SC)	2027	MDV	Aggregate	Aggregate	Electricity	22186.78667	771017.0637		0	771017.0637	111921.8589		297676.2221
Los Angeles (SC)	2027	MDV	Aggregate	Aggregate	Plug-in Hybrid	13026.49459	563000.4861	247951.5994		315048.8868	53864.55514	9.243228581	95154.15376
Los Angeles (SC)	2027	MH	Aggregate	Aggregate	Gasoline	14005.69734	144781.4642	144781.4642		0	1401.129962	29.92997464	0
Los Angeles (SC)	2027	MH	Aggregate	Aggregate	Diesel	5836.820009	61860.09744	61860.09744		0	583.6820009	6.213213033	0
Los Angeles (SC)	2027	Motor Coach	Aggregate	Aggregate	Diesel	684.7432458	85594.61751	85594.61751		0	15735.39979	14.98420848	0
Los Angeles (SC)	2027	OBUS	Aggregate	Aggregate	Gasoline	3356.977295	123908.583	123908.583		0	67166.40172	23.90263812	0
Los Angeles (SC)	2027	OBUS	Aggregate	Aggregate	Electricity	51.09363126	3625.308364		0	3625.308364	1022.281374		3816.11624
Los Angeles (SC)	2027	PTO	Aggregate	Aggregate	Diesel	0	108417.9459	108417.9459		0	0	21.05529085	0
Los Angeles (SC)	2027	PTO	Aggregate	Aggregate	Electricity	0	3749.382318		0	3749.382318	0		7766.91584
Los Angeles (SC)	2027	SBUS	Aggregate	Aggregate	Gasoline	1466.79361	64088.6419	64088.6419		0	5867.174442	7.059930766	0
Los Angeles (SC)	2027	SBUS	Aggregate	Aggregate	Diesel	1416.231608	28030.62768	28030.62768		0	20507.03368	3.79611078	0
Los Angeles (SC)	2027	SBUS	Aggregate	Aggregate	Electricity	71.55685635	2257.450349		0	2257.450349	776.9586523		2610.292869
Los Angeles (SC)	2027	SBUS	Aggregate	Aggregate	Natural Gas	1676.629213	40155.22736	40155.22736		0	24277.591	9.432416707	0
Los Angeles (SC)	2027	T6 CAIRP Class 4	Aggregate	Aggregate	Diesel	27.72735231	1817.252857	1817.252857		0	637.174556	0.193236837	0
Los Angeles (SC)	2027	T6 CAIRP Class 4	Aggregate	Aggregate	Electricity	0.979317305	78.47872494		0	78.47872494	22.50471167		82.32624447
Los Angeles (SC)	2027	T6 CAIRP Class 5	Aggregate	Aggregate	Diesel	36.2762325	2501.642239	2501.642239		0	833.6278228	0.266592679	0
Los Angeles (SC)	2027	T6 CAIRP Class 5	Aggregate	Aggregate	Electricity	1.150384906	98.96059334		0	98.96059334	26.43584515		103.8122626
Los Angeles (SC)	2027	T6 CAIRP Class 6	Aggregate	Aggregate	Diesel	129.4557957	6451.508787	6451.508787		0	2974.894184	0.676485225	0
Los Angeles (SC)	2027	T6 CAIRP Class 6	Aggregate	Aggregate	Electricity	6.11382408	343.9408176		0	343.9408176	140.4956774		360.8029547
Los Angeles (SC)	2027	T6 CAIRP Class 7	Aggregate	Aggregate	Diesel	208.1745062	41372.38241	41372.38241		0	4783.850152	3.99049577	0
Los Angeles (SC)	2027	T6 CAIRP Class 7	Aggregate	Aggregate	Electricity	5.700543923	1219.93504		0	1219.93504	130.9984993		1279.74391
Los Angeles (SC)	2027	T6 CAIRP Class 7	Aggregate	Aggregate	Natural Gas	0.167659967	32.17726185	32.17726185		0	3.852826032	0.003246369	0
Los Angeles (SC)	2027	T6 Instate Delivery Class 4	Aggregate	Aggregate	Diesel	3928.387157	131057.5499	131057.5499		0	56058.08472	14.59513305	0
Los Angeles (SC)	2027	T6 Instate Delivery Class 4	Aggregate	Aggregate	Electricity	98.67797852	3972.786873		0	3972.786873	1408.134753		4158.29802
Los Angeles (SC)	2027	T6 Instate Delivery Class 4	Aggregate	Aggregate	Natural Gas	18.19775735	645.082511	645.082511		0	259.6819974	0.079834993	0
Los Angeles (SC)	2027	T6 Instate Delivery Class 5	Aggregate	Aggregate	Diesel	4086.743285	136453.9951	136453.9951		0	58317.82668	15.31654708	0
Los Angeles (SC)	2027	T6 Instate Delivery Class 5	Aggregate	Aggregate	Electricity	92.2784349	3723.435822		0	3723.435822	1316.813266		3897.303405
Los Angeles (SC)	2027	T6 Instate Delivery Class 5	Aggregate	Aggregate	Natural Gas	15.27601059	546.2966609	546.2966609		0	217.9886711	0.067027106	0
Los Angeles (SC)	2027	T6 Instate Delivery Class 6	Aggregate	Aggregate	Diesel	12510.08534	417170.3187	417170.3187		0	178518.9178	46.65635863	0
Los Angeles (SC)	2027	T6 Instate Delivery Class 6	Aggregate	Aggregate	Electricity	288.514279	11536.51027		0	11536.51027	4117.098761		12075.21303
Los Angeles (SC)	2027	T6 Instate Delivery Class 6	Aggregate	Aggregate	Natural Gas	49.43933653	1753.399963	1753.399963		0	705.4993323	0.215695072	0
Los Angeles (SC)	2027	T6 Instate Delivery Class 7	Aggregate	Aggregate	Diesel	3222.167552	169890.122	169890.122		0	45980.33097	18.70113187	0
Los Angeles (SC)	2027	T6 Instate Delivery Class 7	Aggregate	Aggregate	Electricity	32.61662847	1625.02768		0	1625.02768	465.4392882		1700.90911
Los Angeles (SC)	2027	T6 Instate Delivery Class 7	Aggregate	Aggregate	Natural Gas	92.38854859	4895.246125	4895.246125		0	1318.384588	0.594822967	0
Los Angeles (SC)	2027	T6 Instate Other Class 4	Aggregate	Aggregate	Diesel	4877.90824	198862.1659	198862.1659		0	56388.61925	22.19439622	0
Los Angeles (SC)	2027	T6 Instate Other Class 4	Aggregate	Aggregate	Electricity	136.3961026	6496.408677		0	6496.408677	1576.738946		6798.552016
Los Angeles (SC)	2027	T6 Instate Other Class 4	Aggregate	Aggregate	Natural Gas	20.83994616	907.3102169	907.3102169		0	240.9097776	0.110677059	0
Los Angeles (SC)	2027	T6 Instate Other Class 5	Aggregate	Aggregate	Diesel	11144.76559	465947.0486	465947.0486		0	128833.4903	52.24404634	0
Los Angeles (SC)	2027	T6 Instate Other Class 5	Aggregate	Aggregate	Electricity	275.9470522	13144.11955		0	13144.11955	3189.947924		13755.44319
Los Angeles (SC)	2027	T6 Instate Other Class 5	Aggregate	Aggregate	Natural Gas	40.82877355	1798.223466	1798.223466		0	471.9806223	0.21574268	0
Los Angeles (SC)	2027	T6 Instate Other Class 6	Aggregate	Aggregate	Diesel	9936.699361	412531.7914	412531.7914		0	114868.2446	46.13371353	0
Los Angeles (SC)	2027	T6 Instate Other Class 6	Aggregate	Aggregate	Electricity	257.2275611	12182.52715		0	12182.52715	2973.550607		12749.1278
Los Angeles (SC)	2027	T6 Instate Other Class 6	Aggregate	Aggregate	Natural Gas	38.1123987	1659.939786	1659.939786		0	440.579329	0.200213413	0
Los Angeles (SC)	2027	T6 Instate Other Class 7	Aggregate	Aggregate	Diesel	4807.978736	208129.1017	208129.1017		0	55580.23419	22.95510515	0
Los Angeles (SC)	2027	T6 Instate Other Class 7	Aggregate	Aggregate	Electricity	77.14399932	5288.548064		0	5288.548064	891.7846321		5534.514666
Los Angeles (SC)	2027	T6 Instate Other Class 7	Aggregate	Aggregate	Natural Gas	134.6493248	5830.846812	5830.846812		0	1556.546194	0.718031984	0
Los Angeles (SC)	2027	T6 Instate Tractor Class 6	Aggregate	Aggregate	Diesel	139.3295417	6906.190728	6906.190728		0	1610.649502	0.766410722	0
Los Angeles (SC)	2027	T6 Instate Tractor Class 6	Aggregate	Aggregate	Electricity	2.768478126	181.3626517		0	181.3626517	32.00360714		189.7976994
Los Angeles (SC)	2027	T6 Instate Tractor Class 6	Aggregate	Aggregate	Natural Gas	0.515269227	28.60080124	28.60080124		0	5.956512782	0.003365072	0
Los Angeles (SC)	2027	T6 Instate Tractor Class 7	Aggregate	Aggregate	Diesel	1829.38077	101714.2753	101714.2753		0	21147.71453	10.55992633	0
Los Angeles (SC)	2027	T6 Instate Tractor Class 7	Aggregate	Aggregate	Electricity	17.3300352	1428.888928		0	1428.888928	200.3352069		1495.345534
Los Angeles (SC)	2027	T6 Instate Tractor Class 7	Aggregate	Aggregate	Natural Gas	52.06790694	2893.748233	2893.748233		0	601.9050042	0.347388267	0
Los Angeles (SC)	2027	T6 OOS Class 4	Aggregate	Aggregate	Diesel	16.51598695	1079.148678	1079.148678		0	379.53738	0.111754919	0
Los Angeles (SC)	2027	T6 OOS Class 5	Aggregate	Aggregate	Diesel	21.47120261	1480.39793	1480.39793		0	493.4082361	0.153910991	0
Los Angeles (SC)	2027	T6 OOS Class 6	Aggregate	Aggregate	Diesel	77.70375408	3868.322146	3868.322146		0	1785.632269	0.392738391	0
Los Angeles (SC)	2027	T6 OOS Class 7	Aggregate	Aggregate	Diesel	111.5076615	28127.51222	28127.51222		0	2562.446062	2.673993608	0
Los Angeles (SC)	2027	T6 Public Class 4	Aggregate	Aggregate	Diesel	682.136625	24018.08007	2401					

Los Angeles (SC)	2027 T6 Public Class 5	Aggregate	Aggregate	Natural Gas	72.7760379	2837.944423	2837.944423	0	373.3410744	0.357291412	0
Los Angeles (SC)	2027 T6 Public Class 6	Aggregate	Aggregate	Diesel	556.4217078	19773.3217	19773.3217	0	2854.443361	2.296100471	0
Los Angeles (SC)	2027 T6 Public Class 6	Aggregate	Aggregate	Electricity	16.11978507	684.3447724	0	684.3447724	82.69449741	0	717.247329
Los Angeles (SC)	2027 T6 Public Class 6	Aggregate	Aggregate	Natural Gas	74.88565752	2922.766354	2922.766354	0	384.1634231	0.369600371	0
Los Angeles (SC)	2027 T6 Public Class 7	Aggregate	Aggregate	Diesel	2466.239617	109983.8481	109983.8481	0	12651.80923	12.51355817	0
Los Angeles (SC)	2027 T6 Public Class 7	Aggregate	Aggregate	Electricity	62.98099624	4018.991879	0	4018.991879	323.0925107	0	4212.220662
Los Angeles (SC)	2027 T6 Public Class 7	Aggregate	Aggregate	Natural Gas	329.9255356	16256.416	16256.416	0	1692.517998	1.973891804	0
Los Angeles (SC)	2027 T6 Utility Class 5	Aggregate	Aggregate	Diesel	622.4423702	24989.50322	24989.50322	0	7967.262338	2.666785977	0
Los Angeles (SC)	2027 T6 Utility Class 5	Aggregate	Aggregate	Electricity	28.41296082	1231.002424	0	1231.002424	363.6858985	0	1290.187689
Los Angeles (SC)	2027 T6 Utility Class 5	Aggregate	Aggregate	Natural Gas	3.609944863	143.0820427	143.0820427	0	46.20729424	0.016448796	0
Los Angeles (SC)	2027 T6 Utility Class 6	Aggregate	Aggregate	Diesel	117.5519688	4705.973063	4705.973063	0	1504.6652	0.500405951	0
Los Angeles (SC)	2027 T6 Utility Class 6	Aggregate	Aggregate	Electricity	5.428742	235.2088328	0	235.2088328	69.48789761	0	246.5174191
Los Angeles (SC)	2027 T6 Utility Class 6	Aggregate	Aggregate	Natural Gas	1.076959192	41.00250779	41.00250779	0	13.78507766	0.004746278	0
Los Angeles (SC)	2027 T6 Utility Class 7	Aggregate	Aggregate	Diesel	131.7175302	6503.431491	6503.431491	0	1685.984387	0.686150366	0
Los Angeles (SC)	2027 T6 Utility Class 7	Aggregate	Aggregate	Electricity	6.138451392	368.8694629	0	368.8694629	78.57217782	0	386.6043078
Los Angeles (SC)	2027 T6 Utility Class 7	Aggregate	Aggregate	Natural Gas	1.369799296	59.57251744	59.57251744	0	17.53343098	0.006802385	0
Los Angeles (SC)	2027 T6TS	Aggregate	Aggregate	Gasoline	13674.91053	739072.9664	739072.9664	0	273607.6098	138.9224355	0
Los Angeles (SC)	2027 T6TS	Aggregate	Aggregate	Electricity	266.2194126	24221.40358	0	24221.40358	5326.518007	0	25373.972
Los Angeles (SC)	2027 T7 CAIRP Class 8	Aggregate	Aggregate	Diesel	6832.757922	1380467.813	1380467.813	0	157016.7771	212.822864	0
Los Angeles (SC)	2027 T7 CAIRP Class 8	Aggregate	Aggregate	Electricity	225.6474967	46136.14254	0	46136.14254	5185.379475	0	81869.72557
Los Angeles (SC)	2027 T7 CAIRP Class 8	Aggregate	Aggregate	Natural Gas	26.80345057	5363.522063	5363.522063	0	615.943294	0.945161653	0
Los Angeles (SC)	2027 T7 NNOOS Class 8	Aggregate	Aggregate	Diesel	6210.862714	1692365.813	1692365.813	0	142725.6252	249.0830951	0
Los Angeles (SC)	2027 T7 NOOS Class 8	Aggregate	Aggregate	Diesel	2666.342509	614499.7656	614499.7656	0	61272.55087	93.44033243	0
Los Angeles (SC)	2027 T7 POAK Class 8	Aggregate	Aggregate	Diesel	1.413150415	116.5885753	116.5885753	0	23.11914079	0.02089984	0
Los Angeles (SC)	2027 T7 POLA Class 8	Aggregate	Aggregate	Diesel	9836.691653	1260645.7	1260645.7	0	160928.2754	210.269835	0
Los Angeles (SC)	2027 T7 POLA Class 8	Aggregate	Aggregate	Electricity	74.56757897	8540.337674	0	8540.337674	1219.925592	0	15136.9557
Los Angeles (SC)	2027 T7 POLA Class 8	Aggregate	Aggregate	Natural Gas	134.1326409	17063.24191	17063.24191	0	2194.410006	2.924884316	0
Los Angeles (SC)	2027 T7 Public Class 8	Aggregate	Aggregate	Diesel	3318.136251	133120.0939	133120.0939	0	17022.03897	22.88896034	0
Los Angeles (SC)	2027 T7 Public Class 8	Aggregate	Aggregate	Electricity	85.64827729	5312.390644	0	5312.390644	439.3756625	0	9415.158784
Los Angeles (SC)	2027 T7 Public Class 8	Aggregate	Aggregate	Natural Gas	1511.503038	71431.23448	71431.23448	0	7754.010587	11.90110333	0
Los Angeles (SC)	2027 T7 Single Concrete/Transit Mix C	Aggregate	Aggregate	Diesel	704.6777264	47593.43362	47593.43362	0	6638.064182	7.610102282	0
Los Angeles (SC)	2027 T7 Single Concrete/Transit Mix C	Aggregate	Aggregate	Electricity	34.98320072	2816.133591	0	2816.133591	329.5417507	0	4986.108117
Los Angeles (SC)	2027 T7 Single Concrete/Transit Mix C	Aggregate	Aggregate	Natural Gas	64.43196189	4382.046025	4382.046025	0	606.949081	0.739451963	0
Los Angeles (SC)	2027 T7 Single Dump Class 8	Aggregate	Aggregate	Diesel	2071.488899	111663.1684	111663.1684	0	19513.42543	18.43624079	0
Los Angeles (SC)	2027 T7 Single Dump Class 8	Aggregate	Aggregate	Electricity	47.03020629	3850.577968	0	3850.577968	443.0245433	0	6817.644633
Los Angeles (SC)	2027 T7 Single Dump Class 8	Aggregate	Aggregate	Natural Gas	142.6914988	8309.253525	8309.253525	0	1344.153919	1.481792785	0
Los Angeles (SC)	2027 T7 Single Other Class 8	Aggregate	Aggregate	Diesel	6866.41957	347136.4874	347136.4874	0	64681.67234	56.72154129	0
Los Angeles (SC)	2027 T7 Single Other Class 8	Aggregate	Aggregate	Electricity	184.1171794	12215.92723	0	12215.92723	1734.38383	0	21628.92206
Los Angeles (SC)	2027 T7 Single Other Class 8	Aggregate	Aggregate	Natural Gas	509.8301228	26930.05781	26930.05781	0	4802.599757	4.681277246	0
Los Angeles (SC)	2027 T7 SWCV Class 8	Aggregate	Aggregate	Diesel	836.1366311	54267.61818	54267.61818	0	3846.228503	20.64051122	0
Los Angeles (SC)	2027 T7 SWCV Class 8	Aggregate	Aggregate	Electricity	68.37791303	4260.847326	0	4260.847326	314.5383999	0	7534.549209
Los Angeles (SC)	2027 T7 SWCV Class 8	Aggregate	Aggregate	Natural Gas	3498.575854	226587.0506	226587.0506	0	16093.44893	35.9709521	0
Los Angeles (SC)	2027 T7 Tractor Class 8	Aggregate	Aggregate	Diesel	16562.81204	1147358.478	1147358.478	0	240657.659	182.3065793	0
Los Angeles (SC)	2027 T7 Tractor Class 8	Aggregate	Aggregate	Electricity	252.3983853	20038.73374	0	20038.73374	3667.348538	0	35543.79291
Los Angeles (SC)	2027 T7 Tractor Class 8	Aggregate	Aggregate	Natural Gas	541.4080611	37782.20015	37782.20015	0	7866.659127	6.848190847	0
Los Angeles (SC)	2027 T7 Utility Class 8	Aggregate	Aggregate	Diesel	476.5633382	20343.02689	20343.02689	0	6100.01073	3.260660941	0
Los Angeles (SC)	2027 T7 Utility Class 8	Aggregate	Aggregate	Electricity	7.640676431	473.9879912	0	473.9879912	97.80065832	0	840.049706
Los Angeles (SC)	2027 T7I5	Aggregate	Aggregate	Gasoline	28.46043311	2392.872562	2392.872562	0	569.4363456	0.550702282	0
Los Angeles (SC)	2027 T7I5	Aggregate	Aggregate	Electricity	0.236739484	67.13115548	0	67.13115548	4.736683603	0	118.6850324
Los Angeles (SC)	2027 UBUS	Aggregate	Aggregate	Gasoline	433.2360292	30482.51385	30482.51385	0	1732.944117	6.572380998	0
Los Angeles (SC)	2027 UBUS	Aggregate	Aggregate	Diesel	6.273852036	933.3184865	933.3184865	0	25.09540815	0.160747972	0
Los Angeles (SC)	2027 UBUS	Aggregate	Aggregate	Electricity	294.3792467	28836.71203	0	28836.71203	1177.516987	0	60595.62445
Los Angeles (SC)	2027 UBUS	Aggregate	Aggregate	Natural Gas	3684.164474	395870.766	395870.766	0	14736.6579	127.3316948	0

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Equipment Type		HP	Fuel (Gal/Yr)	Population	Gas Hrs/Yr	Gal/Hr	Fuel (Gal/Yr)	Population	Gas Hrs/Yr	Gal/Hr	Fuel (Gal/Yr)	Population	Natural Gas Hrs/Yr	Gal/Hr
Air Compressor25	Air Compressors	25	173908.7087	614.0453562	0	0	16044.32392	30.4066228	0	0	0	0	0	0
Air Compressor50	Air Compressors	50	130104.25	118.82	5345.4	2.26446885	226416.8	272.85	22192.5	1.020112154	0	0	0	0
Air Compressor75	Air Compressors	75	0	0	0	0	0	0	0	0	0	0	0	0
Air Compressor100	Air Compressors	100	701741.7	385.41	186306.95	3.766588954	0	0	0	0	0	0	0	0
Air Compressor175	Air Compressors	175	85906.4	25.91	12517.75	6.851819505	0	0	0	0	0	0	0	0
Air Compressor300	Air Compressors	300	0	0	0	0	0	0	0	0	0	0	0	0
Air Compressor800	Air Compressors	600	0	0	0	0	0	0	0	0	0	0	0	0
Air Compressor750	Air Compressors	750	0	0	0	0	0	0	0	0	0	0	0	0
Air Compressor9999	Air Compressors	9999	0	0	0	0	0	0	0	0	0	0	0	0
Aerial Lifts25	Aerial Lifts	25	73709.7081	436.240818	0	0	583.5709145	272.1425038	0	0	0	0	0	0
Aerial Lifts50	Aerial Lifts	50	266431.65	358.93	129684.5	1.591809738	175894.4059	933.9639305	21474.8612	0.819162043	0	0	0	0
Aerial Lifts75	Aerial Lifts	75	0	0	0	0	349791.803	988.5622994	29259.2519	1.194151542	0	0	0	0
Aerial Lifts100	Aerial Lifts	100	369953.05	358.93	129684.5	2.852176015	69200.12663	172.4447836	49066.24973	1.410340652	0	0	0	0
Aerial Lifts175	Aerial Lifts	175	0	0	0	0	101863.2322	122.0862109	54764.03552	1.898943117	0	0	0	0
Aerial Lifts300	Aerial Lifts	300	0	0	0	0	2166.588973	1.446460705	598.9081778	3.462494937	0	0	0	0
Aerial Lifts600	Aerial Lifts	600	0	0	0	0	1279.21291	0.578584282	217.3460293	5.885051552	0	0	0	0
Bore/Drill rigs25	Bore/Drill rigs	25	2498.2862	28.05286802	0	0	136.1182877	21.41532738	0	0	0	0	0	0
Bore/Drill rigs50	Bore/Drill rigs	50	1351.45	14.91	529.25	2.572413793	6038.147894	11.47301057	5421.586274	1.113723471	0	0	0	0
Bore/Drill rigs75	Bore/Drill rigs	75	0	0	0	0	23320.05558	26.72577613	12981.27261	1.796438322	0	0	0	0
Bore/Drill rigs100	Bore/Drill rigs	100	15403	22.5	2405.35	6.403641882	17971.7151	14.1335301	7240.245371	2.482196691	0	0	0	0
Bore/Drill rigs175	Bore/Drill rigs	175	5380.1	5.55	602.25	127343.7405	56.00767966	36377.51801	3.200278414	0	0	0	0	0
Bore/Drill rigs300	Bore/Drill rigs	300	0	0	0	0	151686.718	43.82155002	26944.24848	5.62961098	0	0	0	0
Bore/Drill rigs600	Bore/Drill rigs	600	0	0	0	0	218187.3451	37.65271353	21693.65345	10.05858524	0	0	0	0
Bore/Drill rigs750	Bore/Drill rigs	750	0	0	0	0	92066.60708	9.797302147	5536.130338	15.269541436	0	0	0	0
Bore/Drill rigs9999	Bore/Drill rigs	9999	0	0	0	0	29850.51905	2.378550971	1387.792715	21.50934987	0	0	0	0
Cement and Mortar Mixers25	Cement and Mortar Mixers	25	1775.279451	17.01740794	0	0	39.32481861	15.22023232	0	0	0	0	0	0
Cement and Mortar Mixers50	Cement and Mortar Mixers	50	0	0	0	0	0	0	0	0	0	0	0	0
Cement and Mortar Mixers75	Cement and Mortar Mixers	75	0	0	0	0	0	0	0	0	0	0	0	0
Cement and Mortar Mixers100	Cement and Mortar Mixers	100	0	0	0	0	0	0	0	0	0	0	0	0
Cement and Mortar Mixers175	Cement and Mortar Mixers	175	0	0	0	0	0	0	0	0	0	0	0	0
Cement and Mortar Mixers300	Cement and Mortar Mixers	300	0	0	0	0	0	0	0	0	0	0	0	0
Cement and Mortar Mixers600	Cement and Mortar Mixers	600	0	0	0	0	0	0	0	0	0	0	0	0
Cement and Mortar Mixers750	Cement and Mortar Mixers	750	0	0	0	0	0	0	0	0	0	0	0	0
Cement and Mortar Mixers9999	Cement and Mortar Mixers	9999	0	0	0	0	0	0	0	0	0	0	0	0
Concrete/Industrial Saws25	Concrete/Industrial Saws	25	38941.85172	186.4392315	0	0	26.94130166	5.634484828	0	0	0	0	0	0
Concrete/Industrial Saws50	Concrete/Industrial Saws	50	3096.6	18.29	11163.35	2.777455378	938.1	11.7	6792.45	1.38205366	0	0	0	0
Concrete/Industrial Saws75	Concrete/Industrial Saws	75	0	0	0	0	0	0	0	0	0	0	0	0
Concrete/Industrial Saws100	Concrete/Industrial Saws	100	30167.25	10.48	6398.45	4.714747672	0	0	0	0	0	0	0	0
Concrete/Industrial Saws175	Concrete/Industrial Saws	175	0	0	0	0	0	0	0	0	0	0	0	0
Concrete/Industrial Saws300	Concrete/Industrial Saws	300	0	0	0	0	0	0	0	0	0	0	0	0
Concrete/Industrial Saws600	Concrete/Industrial Saws	600	0	0	0	0	0	0	0	0	0	0	0	0
Concrete/Industrial Saws750	Concrete/Industrial Saws	750	0	0	0	0	0	0	0	0	0	0	0	0
Concrete/Industrial Saws9999	Concrete/Industrial Saws	9999	0	0	0	0	0	0	0	0	0	0	0	0
Cranes25	Cranes	25	0	0	0	0	446.6928333	0.27982926	45.93638265	9.724162581	0	0	0	0
Cranes50	Cranes	50	454.25	5.55	236.1	1.969393709	853.721272	1.64122915	11.19416641	0	0	0	0	0
Cranes75	Cranes	75	0	0	0	0	3584.731445	10.78020507	1972.991018	1.81690206	0	0	0	0
Cranes100	Cranes	100	15386.5	11.16	4631.85	3.317572892	8798.625566	21.546051	4097.037438	2.147558009	0	0	0	0
Cranes175	Cranes	175	989.15	0.83	188.25	5.31372549	4763.20317	95.114512	2506.0367	2.70218544	0	0	0	0
Cranes300	Cranes	300	0	0	0	0	206748.1965	213.95828	54557.45572	3.789550514	0	0	0	0
Cranes600	Cranes	600	0	0	0	0	282860.052	170.9785612	45083.65733	6.274115028	0	0	0	0
Cranes750	Cranes	750	0	0	0	0	43681.53811	18.73423599	4655.04073	9.403049139	0	0	0	0
Cranes9999	Cranes	9999	0	0	0	0	14720.77119	4.63595551	112.515767	13.1278175	0	0	0	0
Crawler Tractors25	Crawler Tractors	25	0	0	0	0	0	0	0	0	0	0	0	0
Crawler Tractors50	Crawler Tractors	50	0	0	0	0	4096.079671	12.03657075	3291.05404	1.244689014	0	0	0	0
Crawler Tractors75	Crawler Tractors	75	0	0	0	0	5044.33998	17.73104023	4135.65733	1.771500992	0	0	0	0
Crawler Tractors100	Crawler Tractors	100	0	0	0	0	95115.35183	120.1067803	42261.25787	2.250651226	0	0	0	0
Crawler Tractors175	Crawler Tractors	175	0	0	0	0	37373.6124	246.805714	11346.6866	2.97021758	0	0	0	0
Crawler Tractors300	Crawler Tractors	300	0	0	0	0	415615.113	197.7166581	86860.53574	1.784855179	0	0	0	0
Crawler Tractors600	Crawler Tractors	600	0	0	0	0	720848.2555	199.6126346	87577.74789	8.230952186	0	0	0	0
Crawler Tractors750	Crawler Tractors	750	0	0	0	0	4615.92997	9.122360897	3567.319794	12.95532076	0	0	0	0
Crawler Tractors9999	Crawler Tractors	9999	0	0	0	0	2866.2669	30.79299263	4308.2725	17.89505234	0	0	0	0
Crushing/Proc. Equipment25	Crushing/Proc. Equipment	25	456.1324262	2.259357216	0	0	0	0	0	0	0	0	0	0
Crushing/Proc. Equipment50	Crushing/Proc. Equipment	50	0	0	0	0	0	0	0	0	0	0	0	0
Crushing/Proc. Equipment75	Crushing/Proc. Equipment	75	0	0	0	0	0	0	0	0	0	0	0	0
Crushing/Proc. Equipment100	Crushing/Proc. Equipment	100	0	0	0	0	0	0	0	0	0	0	0	0
Crushing/Proc. Equipment175	Crushing/Proc. Equipment	175	0	0	0	0	0	0	0	0	0	0	0	0
Crushing/Proc. Equipment300	Crushing/Proc. Equipment	300	0	0	0	0	0	0	0	0	0	0	0	0
Crushing/Proc. Equipment600	Crushing/Proc. Equipment	600	0	0	0	0	0	0	0	0	0	0	0	0
Crushing/Proc. Equipment750	Crushing/Proc. Equipment	750	0	0	0	0	0	0	0	0	0	0	0	0
Crushing/Proc. Equipment9999	Crushing/Proc. Equipment	9999	0	0	0	0	0	0	0	0	0	0	0	0
Dumpers/Tenders25	Dumpers/Tenders	25	2890.93646	48.50567334	0	0	19.44533119	7.859686453	0	0	0	0	0	0
Dumpers/Tenders100	Dumpers/Tenders	100	1273.85	4	511	2.492857143	0	0	0	0	0	0	0	0
Excavators25	Excavators	25	0	0	0	0	18.6105452	12.48154326	57.3708388	2.59261602	0	0	0	0
Excavators50	Excavators	50	0	0	0	0	374230.0072	1045.60444	491389.5924	0.761574956	0	0	0	0
Excavators75	Excavators	75	0	0	0	0	29553.0136	432.4050951	22754.03	1.320785255	0	0	0	0
Excavators100	Excavators	100	0	0	0	0	23130.136	127.6702866	13898.0367	1.929360495	0	0	0	0
Excavators175	Excavators	175	0	0	0	0	1298457.348	646.9083595	461867.0268	2.811322896	0	0	0	0
Excavators300	Excavators	300	0	0	0	0	1388149.49	482.0122085	308977.1912	4.4927248	0	0	0	0
Excavators600	Excavators	600	0	0	0	0	1296318.335	136.0103618	12867.14779	7.616246219	0	0	0	0
Excavators750	Excavators	750	0	0	0	0	44355.00918	7.009322343	3723.174965	11.91321281	0	0	0	0
Excavators9999	Excavators	9999	0	0	0	0	224034.3729	13.02254082	7491.253719	29.90612537	0	0	0	0
Forklifts25	Forklifts	25	1392.971665	3.327580218	0	0	1.211765821	99.20456455	92.20456455	12.0293212	0	0	0	0
Forklifts50	Forklifts	50	34722.712	1201.52	215848.25	1.606664699	86545.81569	444.0283797	159679.266	0.5479783	6745440.9	2804.73	5052906.7	1.334962488
Forklifts75	Forklifts	75	0	0	0	0	863599.3847	2784.805194	1138921.313	0.846063177	0	0	0	0
Forklifts100	Forklifts	100	18062879.85	424.4	795848.6	2.115062861	105500.4178	493.493185	967.3833	42211333.55	8842.73	17734103.3	2380291146	0
Forklifts175	Forklifts	175	1217398.3	155.72	27535.05	4.040205866	2332582.571	2655.034953	1515752.838	1.538893751	31685305.3	36023.	448977.3	4.881997953
Forklifts300	Forklifts	300	0	0	0	0	142355.3613	166.7765588	64499.0384	2.207093455	0	0	0	0
Forklifts600	Forklifts	600	0	0	0	0	42984.12473	13.85422136	10488.98759	5.95122757	0	0	0	0
Forklifts750	Forklifts	750	0	0	0	0	3800.673304	1.007842801	476.6125345	7.974346096	0	0	0	0
Forklifts9999	Forklifts	9999	0	0	0	0	56456.21644	5.789788203	2853.788826	19.78289218	0	0	0	0
Generator Sets25	Generator Sets	25	261											

Los Angeles (SC)	2026 Pressure Craft - Vessels Winload Engines	Aggregate	75 Diesel	0.018788743	0.01804743	0.019663462	0.152280075	0.015515617	1.0689993	0.000169587	0.000128133	1.9387505	2.676186	0	0	0	0
Los Angeles (SC)	2026 Pressure Craft - Vessels Winload Engines	Aggregate	250 Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Los Angeles (SC)	2026 Pressure Craft - Vessels Winload Engines	Aggregate	50 Gasoline	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Los Angeles (SC)	2026 Pressure Craft - Vessels Winload Engines	Aggregate	50 Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Los Angeles (SC)	2026 Pressure Craft - Vessels Winload Engines	Aggregate	500 Gasoline	0.169993239	0.171695933	0.186971552	1.89961135	0.059970072	21.23252075	0.002225408	0.00618157	0.000328122	0.00032897	982883.0645	0	0	3997.38322
Los Angeles (SC)	2026 Pressure Craft - Vessels Winload Engines	Aggregate	750 Gasoline	0.00055986	0.00055459	0.000616092	0.000971915	0.000190182	0.014512906	1.5088126	1.1395455	1.5290966	2.11076	0	0	0	12.59388075
Los Angeles (SC)	2026 Pressure Craft - Vessels Winload Engines	Aggregate	750 Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Los Angeles (SC)	2026 Pressure Craft - Vessels Winload Jet Engines	Aggregate	102 Gasoline	0.039787670	0.040145480	0.043728383	0.117157248	0.001591316	0.380421724	0.001939221	0.001466519	6.7711886	9.3477116	26234.39974	0	0	253.0518602
Los Angeles (SC)	2026 Pressure Craft - Vessels Winload Jet Engines	Aggregate	120 Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Los Angeles (SC)	2026 Pressure Craft - Vessels Winload Jet Engines	Aggregate	15 Gasoline	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Los Angeles (SC)	2026 Pressure Craft - Vessels Winload Jet Engines	Aggregate	15 Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Los Angeles (SC)	2026 Pressure Craft - Vessels Winload Jet Engines	Aggregate	175 Gasoline	0.007607698	0.007737406	0.008430241	0.070523226	0.002939298	0.366503348	0.000172891	0.000130629	4.8229666	6.657476	18800.20385	0	0	148.5034288
Los Angeles (SC)	2026 Pressure Craft - Vessels Winload Jet Engines	Aggregate	175 Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Los Angeles (SC)	2026 Pressure Craft - Vessels Winload Jet Engines	Aggregate	25 Gasoline	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Los Angeles (SC)	2026 Pressure Craft - Vessels Winload Jet Engines	Aggregate	25 Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Los Angeles (SC)	2026 Pressure Craft - Vessels Winload Jet Engines	Aggregate	250 Gasoline	0.024487824	0.024732156	0.026294667	0.128744889	0.010136869	1.560838133	0.000463377	0.001967278	1.920226	2.653906	75377.67676	0	0	501.5238577
Los Angeles (SC)	2026 Pressure Craft - Vessels Winload Jet Engines	Aggregate	250 Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Los Angeles (SC)	2026 Pressure Craft - Vessels Winload Jet Engines	Aggregate	50 Gasoline	0.007714817	0.008019616	0.01012856	0.058550275	0.000700726	0.24042512	0.001860343	0.001395008	5.0042086	6.699147	18891.37385	0	0	365.5492555
Los Angeles (SC)	2026 Pressure Craft - Vessels Winload Jet Engines	Aggregate	50 Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Los Angeles (SC)	2026 Pressure Craft - Vessels Winload Jet Engines	Aggregate	750 Gasoline	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Los Angeles (SC)	2026 Pressure Craft - Vessels Winload Jet Engines	Aggregate	750 Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Los Angeles (SC)	2026 Pressure Craft - Vessels Winload Jet Engines	Aggregate	102 Gasoline	0.069093495	0.015184432	0.070270238	2.22864789	0.014822429	11.43394016	0.049189197	0.03765173	0.000164321	0.000226824	636493.184	0	0	3887.923941
Los Angeles (SC)	2026 Pressure Craft - Vessels Winload Jet Engines	Aggregate	120 Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Los Angeles (SC)	2026 Pressure Craft - Vessels Winload Jet Engines	Aggregate	15 Gasoline	0.091130023	0.092014053	0.100253319	0.353143536	0.008676872	1.201313039	0.004479958	0.006131524	2.259045	0.0003168	7760.2889	0	0	3955.796883
Los Angeles (SC)	2026 Pressure Craft - Vessels Winload Jet Engines	Aggregate	15 Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Los Angeles (SC)	2026 Pressure Craft - Vessels Winload Jet Engines	Aggregate	175 Gasoline	0.28555808	0.28841365	0.314236747	1.3340027	0.04722803	6.39041166	0.01232757	0.03598073	0.9053965	0.00012478	33696.2507	0	0	1159.878545
Los Angeles (SC)	2026 Pressure Craft - Vessels Winload Jet Engines	Aggregate	175 Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Los Angeles (SC)	2026 Pressure Craft - Vessels Winload Jet Engines	Aggregate	250 Gasoline	0.109501414	0.11059686	0.120502011	0.292557144	0.0099998259	1.1731132	0.00658567	0.00498705	2.934736	2.826096	75084.76886	0	0	1684.18006
Los Angeles (SC)	2026 Pressure Craft - Vessels Winload Jet Engines	Aggregate	25 Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Los Angeles (SC)	2026 Pressure Craft - Vessels Winload Jet Engines	Aggregate	250 Gasoline	0.720201408	0.727293423	0.797346167	1.3817132	0.048049165	8.27989428	0.0959208	0.044766765	0.000108584	0.000149887	42496.82799	0	0	1047.824823
Los Angeles (SC)	2026 Pressure Craft - Vessels Winload Jet Engines	Aggregate	250 Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Los Angeles (SC)	2026 Pressure Craft - Vessels Winload Jet Engines	Aggregate	50 Gasoline	0.026216504	0.026281669	0.028632389	0.760508113	0.029606349	3.45705188	0.01812221	0.014213677	5.849765	7.577915	207405.5043	0	0	2496.368066
Los Angeles (SC)	2026 Pressure Craft - Vessels Winload Jet Engines	Aggregate	50 Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Los Angeles (SC)	2026 Pressure Craft - Vessels Winload Jet Engines	Aggregate	750 Gasoline	0.10758021	0.108655011	0.118385462	0.066974376	0.0025606139	0.023213493	0.011935562	0.01016453	8.240303	8.240303	646.0021414	0	0	646.0021414
Los Angeles (SC)	2026 Pressure Craft - Vessels Winload Jet Engines	Aggregate	750 Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Los Angeles (SC)	2026 Pressure Craft - Vessels Winload Jet Engines	Aggregate	102 Gasoline	0.7489616	0.7496396	0.5225876	0.404036	0.23195146	0.00070867	7.13576508	4.3314168	8.8431236	9.145658	32.1106946	0	0	0.444831055
Los Angeles (SC)	2026 Pressure Craft - Vessels Winload Jet Engines	Aggregate	120 Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Los Angeles (SC)	2026 Pressure Craft - Vessels Winload Jet Engines	Aggregate	15 Gasoline	0.00315441	0.003316568	0.003470947	0.005129455	0.00017945	0.03807768	0.579848	0.579848	6.051446	8.16378	18277.99149	0	0	1598.000013
Los Angeles (SC)	2026 Pressure Craft - Vessels Winload Jet Engines	Aggregate	15 Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Los Angeles (SC)	2026 Pressure Craft - Vessels Winload Jet Engines	Aggregate	175 Gasoline	0.03206481	0.024044546	0.02619758	0.267806574	0.009165881	0.004067756	0.000353415	0.5300606	0.690068	0.93221531	0	0	0	1684.264218
Los Angeles (SC)	2026 Pressure Craft - Vessels Winload Jet Engines	Aggregate	175 Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Los Angeles (SC)	2026 Pressure Craft - Vessels Winload Jet Engines	Aggregate	250 Gasoline	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Los Angeles (SC)	2026 Pressure Craft - Vessels Winload Jet Engines	Aggregate	25 Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Los Angeles (SC)	2026 Pressure Craft - Vessels Winload Jet Engines	Aggregate	250 Gasoline	0.11435093	0.11549444	0.12583623	1.30327315	0.10112480	11.8041206	0.00117861	0.000890214	0.00319162	0.00019849	53156.471	0	0	3394.617661
Los Angeles (SC)	2026 Pressure Craft - Vessels Winload Jet Engines	Aggregate	250 Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Los Angeles (SC)	2026 Pressure Craft - Vessels Winload Jet Engines	Aggregate	50 Gasoline	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Los Angeles (SC)	2026 Pressure Craft - Vessels Winload Jet Engines	Aggregate	50 Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Los Angeles (SC)	2026 Pressure Craft - Vessels Winload Jet Engines	Aggregate	750 Gasoline	0.14350886	0.14493585	0.157913971	0.999662887	0.054798807	21.2284633	0.0022515	0.001673944	0.00020294	0.000307739	86940.80095	0	0	4309.679838
Los Angeles (SC)	2026 Pressure Craft - Vessels Winload Jet Engines	Aggregate	750 Diesel	0.01329071	0.01342367	0.01463527	0.0472859	0.004052653	7.566181	5.940848	7.421226	9.815738	29152.23285	0	0	0	77.4630431
Los Angeles (SC)	2026 Pressure Equipment - Non-Rental Compressor	Aggregate	100 Diesel	0.000477603	0.0005779	0.0008087749	0.014682175	0.007254101	2.19399187	0.00052602	0.000489931	2.031838	1.749495	71350.45041	0	0	100.449839
Los Angeles (SC)	2026 Pressure Equipment - Non-Rental Compressor	Aggregate	150 Diesel	0.000291923	0.000291923	0.000291923	0.000291923	0.000291923	0.000291923	0.000291923	0.000291923	0.000291923	0.000291923	0.000291923	0	0	168.817434
Los Angeles (SC)	2026 Pressure Equipment - Non-Rental Compressor	Aggregate	200 Diesel	0.000383777	0.000403866	0.000505262	0.000527403	0.000327259	2.97587368	0.0001506	1.938455	2.253313	87976.84829	2084.19926	49.200316	0	555447.722
Los Angeles (SC)	2026 Pressure Equipment - Non-Rental Compressor	Aggregate	50 Diesel	1.8303105	2.242148	2.668348	0.00093108	0.00038564	0.000318662	0.000011505	1.035865	5.750217	5.811867	2079.55181	0	0	76.7005728
Los Angeles (SC)	2026 Pressure Equipment - Non-Rental Compressor	Aggregate	600 Diesel	0.000558371	0.000875629	0.000804054	0.007120969	0.003071091	3.76949253	0.00041134	0.000129843	3.4959225	3.908565	122851.7651	39.7026382	760004.275	0
Los Angeles (SC)	2026 Pressure Equipment - Non-Rental Compressor	Aggregate	750 Diesel	0.000311348	0.000311348	0.000311348	0.000311348	0.000311348	0.000311348	0.000311348	0.000311348	0.000311348	0.000311348	0.000311348	0	0	31.9001045
Los Angeles (SC)	2026 Pressure Equipment - Non-Rental Compressor	Aggregate	1000 Diesel	0.000211948	0.000211948	0.000211948	0.000211948	0.000211948	0.000211948	0.000211948	0.000211948	0.000211948	0.000211948	0.000211948	0	0	0.70270304
Los Angeles (SC)	2026 Pressure Equipment - Non-Rental Compressor	Aggregate	1500 Diesel	1.2470105	1.508885	0.000417957	0.000215559	0.000215559	0.000215559	0.000215559	0.000215559	0.000215559	0.000215559	0.000215559	0	0	45.6135355
Los Angeles (SC)	2026 Pressure Equipment - Non-Rental Compressor	Aggregate	2000 Diesel	0.000215559	0.000215559	0.000215559	0.000215559	0.000215559	0.000215559	0.000215559	0.000215559	0.000215559	0.000215559	0.000215559	0	0	140.816567
Los Angeles (SC)	2026 Pressure Equipment - Non-Rental Compressor	Aggregate	2500 Diesel	0.000215559	0.000215559	0.000215559	0.000215559	0.000215559	0.000215559	0.000215559	0.000215559	0.000215559	0.000215559	0.000215559	0	0	210.347811
Los Angeles (SC)	2026 Pressure Equipment - Non-Rental Compressor	Aggregate	3000 Diesel	0.000215559	0.000215559	0.000215559	0.000215559	0.000215559	0.000215559	0.000215559	0.000215559	0.000215559	0.000215559	0.000215559	0	0	395.97248
Los Angeles (SC)	2026 Pressure Equipment - Non-Rental Compressor	Aggregate	3500 Diesel	0.000215559	0.000215559	0.000215559	0.000215559	0.000215559	0.000215559	0.000215559	0.000215559	0.000215559	0.000215559	0.000215559	0	0	517.212815
Los Angeles (SC)	2026 Pressure Equipment - Non-Rental Compressor	Aggregate	4000 Diesel	0.000215559	0.000215559	0.000215559	0.000215559	0.000215559	0.000215559	0.000215559	0.000215559	0.000215559	0.000215559	0.000215559	0	0	676.749197
Los Angeles (SC)	2026 Pressure Equipment - Non-Rental Compressor	Aggregate	4500 Diesel	0.000215559	0.000215559	0.000215559	0.000215559	0.000215559	0.000215559	0.000215559	0.000215559	0.000215559	0.000215559	0.000215559	0	0	846.620121
Los Angeles (SC)	2026 Pressure Equipment - Non-Rental Compressor	Aggregate	5000 Diesel	0.000215559	0.000215559	0.000215559	0.000215559	0.000215559	0.000215559	0.000215559	0.000215559	0.000215559	0.000215559	0.000215559	0	0	1015.7114
Los Angeles (SC)	2026 Pressure Equipment - Non-Rental Compressor	Aggregate	5500 Diesel	0.000215559	0.000215559	0.000215559	0.00021										

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	Equipment Type	Horsepower HP	Gas			Diesel			Natural Gas		
			Fuel (Gal/Yr)	Population	Hrs/Yr	Fuel (Gal/Yr)	Population	Hrs/Yr	Fuel (Gal/Yr)	Population	Hrs/Yr
Air Compressors25	Air Compressors		25 176597.7673	623.4419421	0	0	30.5143419	0	0	0	0
Air Compressors50	Air Compressors		50 130115.2	118.69	57370.7	2.267973025	225975.15	272.21	221609.75	1.019698592	0
Air Compressors75	Air Compressors		75 0	0	0	0	0	0	0	0	0
Air Compressors100	Air Compressors		100 700500.7	384.8	186014.95	3.765830112	0	0	0	0	0
Air Compressors175	Air Compressors		175 8578.2	25.48	12512.2	6.855892469	0	0	0	0	0
Air Compressors300	Air Compressors		300 0	0	0	0	0	0	0	0	0
Air Compressors600	Air Compressors		600 0	0	0	0	0	0	0	0	0
Air Compressors750	Air Compressors		750 0	0	0	0	0	0	0	0	0
Air Compressors9999	Air Compressors		9999 0	0	0	0	0	0	0	0	0
Aerial Lifts25	Aerial Lifts		25 73686.44916	436.0546626	0	0	581.5164545	271.2312983	0	0	0
Aerial Lifts50	Aerial Lifts		50 206133.75	358.33	129480.1	1.59201105	175282.9918	915.9546848	214216.4138	0.81825192	0
Aerial Lifts75	Aerial Lifts		75 0	0	0	0	348511.4705	998.7460671	292191.1988	1.192751431	0
Aerial Lifts100	Aerial Lifts		100 369383.65	358.33	129480.1	2.852821785	69232.2822	172.4401899	49158.97593	1.408334508	0
Aerial Lifts175	Aerial Lifts		175 0	0	0	0	103126.7259	122.0971635	54717.5347	1.859215142	0
Aerial Lifts300	Aerial Lifts		300 0	0	0	0	2149.367908	1.446460705	586.768424	3.66305994	0
Aerial Lifts600	Aerial Lifts		600 0	0	0	0	1278.280619	0.578584282	217.0735622	5.888649019	0
Bore/Drill rigs25	Bore/Drill rigs		25 2487.231656	27.92662034	0	0	138.5378991	21.7966126	0	0	0
Bore/Drill rigs50	Bore/Drill rigs		50 1361.45	4.9	521.95	2.008991508	6034.241249	11.47301057	5417.953807	1.113749093	0
Bore/Drill rigs75	Bore/Drill rigs		75 0	0	0	0	2323.107099	26.72575385	12950.20871	1.79232864	0
Bore/Drill rigs100	Bore/Drill rigs		100 15403	22.52	2401.7	6.41337386	18001.92857	14.13330624	7257.309498	2.48052375	0
Bore/Drill rigs175	Bore/Drill rigs		175 5380.1	5.57	602.25	8.933333333	127309.3408	56.00535088	36309.28697	3.506247339	0
Bore/Drill rigs300	Bore/Drill rigs		300 0	0	0	0	152424.7532	43.81997407	27026.55689	5.639813973	0
Bore/Drill rigs600	Bore/Drill rigs		600 0	0	0	0	218840.8847	37.65232646	21217.71684	10.07668697	0
Bore/Drill rigs750	Bore/Drill rigs		750 0	0	0	0	90405.64561	9.796896249	5546.328036	16.3000899	0
Bore/Drill rigs9999	Bore/Drill rigs		9999 0	0	0	0	29817.45431	2.378550971	1386.176968	21.51056827	0
Cement and Mortar Mixers25	Cement and Mortar Mixers		25 1171.918285	16.98630257	0	0	39.86052855	15.43418397	0	0	0
Cement and Mortar Mixers50	Cement and Mortar Mixers		50 0	0	0	0	0	0	0	0	0
Cement and Mortar Mixers75	Cement and Mortar Mixers		75 0	0	0	0	0	0	0	0	0
Cement and Mortar Mixers100	Cement and Mortar Mixers		100 0	0	0	0	0	0	0	0	0
Cement and Mortar Mixers175	Cement and Mortar Mixers		175 0	0	0	0	0	0	0	0	0
Cement and Mortar Mixers300	Cement and Mortar Mixers		300 0	0	0	0	0	0	0	0	0
Cement and Mortar Mixers600	Cement and Mortar Mixers		600 0	0	0	0	0	0	0	0	0
Cement and Mortar Mixers750	Cement and Mortar Mixers		750 0	0	0	0	0	0	0	0	0
Cement and Mortar Mixers9999	Cement and Mortar Mixers		9999 0	0	0	0	0	0	0	0	0
Concrete/Industrial Saws25	Concrete/Industrial Saws		25 38879.09138	186.1614263	0	0	27.25729908	5.700555689	0	0	0
Concrete/Industrial Saws50	Concrete/Industrial Saws		50 30966.6	18.29	11165.35	2.773455378	9483.65	11.88	6883.9	1.379102226	0
Concrete/Industrial Saws75	Concrete/Industrial Saws		75 0	0	0	0	0	0	0	0	0
Concrete/Industrial Saws100	Concrete/Industrial Saws		100 30167.25	10.48	6398.45	4.71474672	0	0	0	0	0
Concrete/Industrial Saws175	Concrete/Industrial Saws		175 0	0	0	0	0	0	0	0	0
Concrete/Industrial Saws300	Concrete/Industrial Saws		300 0	0	0	0	0	0	0	0	0
Concrete/Industrial Saws600	Concrete/Industrial Saws		600 0	0	0	0	0	0	0	0	0
Concrete/Industrial Saws750	Concrete/Industrial Saws		750 0	0	0	0	0	0	0	0	0
Concrete/Industrial Saws9999	Concrete/Industrial Saws		9999 0	0	0	0	0	0	0	0	0
Cranes25	Cranes		25 0	0	0	0	444.4466776	0.279829526	44.86229563	9.906908939	0
Cranes50	Cranes		50 4555.2	5.57	2321.4	1.962264151	827.1948834	3.641011863	714.156458	1.158282578	0
Cranes75	Cranes		75 0	0	0	0	3504.393261	10.78020833	1884.033621	1.76288696	0
Cranes100	Cranes		100 15355.55	11.15	4635.5	3.312598425	864.727458	21.15321486	4119.284666	2.093743977	0
Cranes175	Cranes		175 989.15	0.42	182.5	5.42	66718.87251	95.12095352	25103.437	2.657758478	0
Cranes300	Cranes		300 0	0	0	0	205445.9693	213.9408309	54680.55456	3.75720347	0
Cranes600	Cranes		600 0	0	0	0	282900.2294	170.3550033	45312.4708	6.243319429	0
Cranes750	Cranes		750 0	0	0	0	42695.48216	19.73142495	4646.016483	9.404938456	0
Cranes9999	Cranes		9999 0	0	0	0	14761.12836	4.619424782	1122.335497	13.15215317	0
Crawler Tractors25	Crawler Tractors		25 0	0	0	0	0	0	0	0	0
Crawler Tractors50	Crawler Tractors		50 0	0	0	0	4045.361974	12.03650907	3287.928056	1.230368154	0
Crawler Tractors75	Crawler Tractors		75 0	0	0	0	24975.59331	47.72896651	14243.31839	1.753495968	0
Crawler Tractors100	Crawler Tractors		100 0	0	0	0	95043.4896	120.102708	42381.09131	2.243485796	0
Crawler Tractors175	Crawler Tractors		175 0	0	0	0	337148.1316	246.5945074	113477.999	2.97104403	0
Crawler Tractors300	Crawler Tractors		300 0	0	0	0	415954.307	199.7687539	86925.41567	4.785186287	0
Crawler Tractors600	Crawler Tractors		600 0	0	0	0	723407.19	199.6025277	87867.53277	8.249824447	0
Crawler Tractors750	Crawler Tractors		750 0	0	0	0	4693.931109	9.120445686	3159.068083	13.06921441	0
Crawler Tractors9999	Crawler Tractors		9999 0	0	0	0	73766.24783	10.79236622	4294.854599	17.17553019	0
Crushing/Proc. Equipment25	Crushing/Proc. Equipment		25 451.3506222	2.269430558	0	0	0	0	0	0	0
Crushing/Proc. Equipment50	Crushing/Proc. Equipment		50 0	0	0	0	0	0	0	0	0
Crushing/Proc. Equipment75	Crushing/Proc. Equipment		75 0	0	0	0	0	0	0	0	0
Crushing/Proc. Equipment100	Crushing/Proc. Equipment		100 0	0	0	0	0	0	0	0	0
Crushing/Proc. Equipment175	Crushing/Proc. Equipment		175 0	0	0	0	0	0	0	0	0
Crushing/Proc. Equipment300	Crushing/Proc. Equipment		300 0	0	0	0	0	0	0	0	0
Crushing/Proc. Equipment600	Crushing/Proc. Equipment		600 0	0	0	0	0	0	0	0	0
Crushing/Proc. Equipment750	Crushing/Proc. Equipment		750 0	0	0	0	0	0	0	0	0
Crushing/Proc. Equipment9999	Crushing/Proc. Equipment		9999 0	0	0	0	0	0	0	0	0
Dumpers/Tenders25	Dumpers/Tenders		25 2883.763954	48.38153532	0	0	19.72231808	7.971642989	0	0	0
Dumpers/Tenders100	Dumpers/Tenders		100 1266.55	4.02	507.35	2.496402878	0	0	0	0	0
Excavators25	Excavators		25 0	0	0	0	150.2104247	12.63985262	56.25879424	2.669990118	0
Excavators50	Excavators		50 0	0	0	0	372142.1462	1045.600574	489348.8443	0.76708496	0
Excavators75	Excavators		75 0	0	0	0	293778.5119	432.4893378	222502.5538	1.320337708	0
Excavators100	Excavators		100 0	0	0	0	230440.5364	227.6679547	119541.7773	1.927698765	0
Excavators175	Excavators		175 0	0	0	0	1294709.351	646.9026589	460484.2881	2.811625465	0
Excavators300	Excavators		300 0	0	0	0	13871571.274	482.4013649	396613.6202	4.494784921	0
Excavators600	Excavators		600 0	0	0	0	1383918.738	335.9981965	223827.8923	7.167292093	0
Excavators750	Excavators		750 0	0	0	0	44984.29683	7.007450135	3728.021469	12.06653374	0
Excavators9999	Excavators		9999 0	0	0	0	223717.1156	13.01263245	7458.753871	29.99392653	0
Forklifts25	Forklifts		25 1388.835689	3.327732226	0	0	1.297279575	0.289292141	96.38528363	0.013459312	0
Forklifts50	Forklifts		50 34687.37	1199.48	2155062	1.609576443	65964.61152	444.0121038	159401.8143	681725	2834
Forklifts75	Forklifts		75 100	0	0	0	958699.3086	2784.766982	1134595.765	0.844969934	510676.1
Forklifts100	Forklifts		100 16041100.3	4257.63	7582462.55	2.115525856	649206.2076	1493.26478	592976.2692	1.094826625	42661156.2
Forklifts175	Forklifts		175 1120082.8	155.53	277082.45	4.042416977	2328510.584	2654.991621	1513204.786	1.538794091	3202017.25
Forklifts300	Forklifts		300 0	0	0	0	142154.8589	126.7727886	64846.3626	2.208267673	364.06
Forklifts600	Forklifts		600 0	0	0	0	42862.80274	23.85382217	11945.35597	3.999189455	655894.05
Forklifts750	Forklifts		750 0	0	0	0	3783.928545	1.007818712	474.405452	7.976148944	4.88191233
Forklifts9999	Forklifts		9999 0	0	0	0	56608.92382	5.789135545	2844.093878	19.90402787	0
Generator Sets25	Generator Sets		25 266792.1106	2626.945651	0	0	296223.3864	1109.194588	0	0	0
Generator Sets50	Generator Sets		50 997307.37	3905.07	448830.25	2.223501448	623609.7	1321.37	446062.85	1.395789181	0
Generator Sets75	Generator Sets		75 0	0	0	0	0	0	0	0	0
Generator Sets100	Generator Sets		100 449172.65	754.17	86621.8	5.185445812	0	0	0	0	0
Generator Sets175	Generator Sets		175 73587.65	71.27	8190.6	8.984402852	0	0	0	0	0
Generator Sets300	Generator Sets		300 0	0	0	0	0	0	0	0	0
Generator Sets600	Generator Sets		600 0	0	0	0	0	0	0	0	0
Generator Sets750	Generator Sets		750 0	0	0	0	0	0	0	0	0
Generator Sets9999	Generator Sets		9999 0	0	0	0	0	0	0	0	0
Graders25	Graders		25 0	0	0	0	0	0	0	0	0
Graders50	Graders		50 0	0	0	0	1236.267225	5.177056761	1364.014938	0.90634477	0
Graders75	Graders		75 0	0	0	0	4463.929722	9.944209399	2460.650504	1.814215864	0
Graders100	Graders		100 0	0	0	0	10678.49031	17.21791108	4622.138821	2.310291994	0
Graders175	Graders		175 0	0	0	0	159022.5997				

Model Output: OFFROAD2021 [v1.0.5] Emissions Inventory
Region Type: Sub-Area
Region: Los Angeles (SC)
Calendar Year: 2027
Scenario: All Adopted Rules - Exhaust
Vehicle Classification: OFFROAD2021 Equipment Types
Units: tons/day for Emissions, gallons/year for Fuel, hours/year for Activity, Horsepower-hours/year for Horsepower-hours

	Calendar Year	Vehicle Category	Model Year	Horsepower B	Fuel	HC_tpd	ROG_tpd	TOG_tpd	CO2_tpd	NOx_tpd	CO2_tpd	PM10_tpd	PM2.5_tpd	SOx_tpd	H3.1_tpd	Fuel Consumption	Activity	Total Population	Horsepower_Hrs_hyph
Los Angeles (S)	2027	Agricultural - Agricultural Tractors	Aggregate	100	Gasoline	2.07041E-09	2.5052E-09	2.98139E-09	3.21467E-08	7.43016E-09	1.02824E-06	7.74996E-11	7.11619E-11	1.39091E-12	8.38392E-12	0.00332406	1.971395	0.000106661	0.88933046
Los Angeles (S)	2027	Agricultural - Agricultural Tractors	Aggregate	100	Diesel	7.80932E-08	8.84428E-08	0.000105254	0.000712936	0.0006359	0.0117988E-08	4.67888E-08	4.30181E-08	1.07704E-06	9.65466E-07	3817.78841	93.1262747	2.02052217	131715.7496
Los Angeles (S)	2027	Agricultural - Agricultural Tractors	Aggregate	175	Gasoline	8.55183E-09	1.04747E-08	1.23148E-08	1.40325E-07	6.34584E-08	8.88881E-06	3.01561E-06	5.80731E-11	6.71937E-11	6.83947E-11	0.71872881	0.171661679	0.000461054	73556070.03
Los Angeles (S)	2027	Agricultural - Agricultural Tractors	Aggregate	175	Diesel	1.12029E-08	3.78783E-08	0.000291565	0.000493144	0.000493144	0.000291565	1.28931E-06	3.52092E-11	1.38707E-07	1.67445774	1.82867458	7.33716474	0.000674586	53876146.5
Los Angeles (S)	2027	Agricultural - Agricultural Tractors	Aggregate	25	Gasoline	1.64085E-07	1.95834E-07	2.36283E-07	2.18849E-06	3.70546E-06	6.21322E-06	3.8767E-09	3.56666E-09	5.17035E-11	5.06666E-11	0.20134623	8.28214119	0.000273478	53738165
Los Angeles (S)	2027	Agricultural - Agricultural Tractors	Aggregate	25	Diesel	1.14131E-08	1.38098E-08	1.64348E-08	4.32915E-08	3.16262E-08	0.00380510	1.90734E-06	3.61082E-08	1.306591E-08	1.296977E-08	16.919771	60.0584257	0.00001375	483150965
Los Angeles (S)	2027	Agricultural - Agricultural Tractors	Aggregate	50	Gasoline	1.74281E-08	0.000021088	2.50964E-08	0.000129442	0.000129442	0.06205133	5.22211E-06	5.08035E-06	5.17137E-07	5.15432E-07	22.927653	10.0273982	0.00001651	80793.41265
Los Angeles (S)	2027	Agricultural - Agricultural Tractors	Aggregate	50	Diesel	1.77043E-08	3.85623E-08	4.61815E-08	8.64961E-08	8.64961E-08	0.000129442	5.22211E-06	5.08035E-06	5.17137E-07	5.15432E-07	9.8210173	9.6	0.00000039	1.27308039
Los Angeles (S)	2027	Agricultural - Agricultural Tractors	Aggregate	50	Diesel	0.000100808	0.000217896	0.000259315	0.000309751	0.000503392	0.000701959	4.59632E-05	4.29811E-05	6.53723E-05	7.53452E-07	22.978500	102.236768	0.000012586	319252586
Los Angeles (S)	2027	Agricultural - Agricultural Tractors	Aggregate	600	Diesel	1.14002E-08	0.000013407	1.95555E-08	5.89042E-05	8.03328E-05	0.00845538	3.60302E-06	3.3399E-06	3.51416E-07	3.6499E-07	1250.828918	85.07130042	0.000060993	49703.6095
Los Angeles (S)	2027	Agricultural - Agricultural Tractors	Aggregate	75	Gasoline	1.44178E-09	1.74455E-09	2.07616E-09	2.47331E-08	5.10156E-09	7.3707E-07	5.5467E-11	5.1011E-11	6.67425E-12	6.6996E-12	0.02388677	0.05109268	0.000010564	634798272
Los Angeles (S)	2027	Agricultural - Agricultural Tractors	Aggregate	75	Diesel	0.0001171	0.000141704	0.000168689	0.000364178	0.00097463	0.08949611	0.69436E-05	5.60760E-05	8.19217E-07	7.70047E-07	29.575684	188.3901683	2.652325024	153753.1704
Los Angeles (S)	2027	Agricultural - ATVs	Aggregate	100	Gasoline	8.17538E-07	9.88212E-07	1.17726E-06	8.88329E-06	3.31306E-06	0.000270957	2.00925E-07	1.84851E-07	2.4318E-07	2.17675E-08	6.5569678	4.18233013	0.117379574	2772.165424
Los Angeles (S)	2027	Agricultural - ATVs	Aggregate	175	Gasoline	1.49216E-06	1.80551E-06	2.14871E-06	0.00001768	7.68141E-06	0.000519374	3.78836E-07	4.40115E-07	5.79129E-06	5.51681E-08	2.06999502	3.81069546	0.159761394	6602.294158
Los Angeles (S)	2027	Agricultural - ATVs	Aggregate	175	Diesel	1.86202E-08	2.25305E-08	2.68113E-08	4.25358E-07	1.64385E-07	7.74398E-05	6.6939E-09	6.10689E-07	7.07777E-10	6.33681E-08	0.21586878	0.140954667	0.001203103	120.104988
Los Angeles (S)	2027	Agricultural - ATVs	Aggregate	25	Gasoline	1.85102E-06	9.49972E-06	9.49972E-06	1.23148E-06	2.23148E-06	4.23612E-06	4.23612E-06	3.1775E-06	3.1775E-06	3.1775E-06	0.154721876	0.000000000	0.000000000	0.000000000
Los Angeles (S)	2027	Agricultural - ATVs	Aggregate	25	Diesel	1.80639E-06	2.18574E-06	2.60211E-06	1.87098E-05	1.83107E-05	0.000254649	1.15399E-07	6.58167E-07	2.6057E-08	2.33588E-08	9.62520021	36.18347928	0.278584964	3982.64184
Los Angeles (S)	2027	Agricultural - ATVs	Aggregate	25	Electric	0	0	0	0	0	0	0	0	0	0	0	0	0.521499751	0.136429766
Los Angeles (S)	2027	Agricultural - ATVs	Aggregate	50	Gasoline	2.52454E-06	3.04559E-06	3.63521E-06	0.000146721	6.16315E-06	0.000516323	8.8846E-07	3.75552E-07	4.70093E-08	4.42217E-08	3.4671802	15.8599966	0.57380388	5362.109108
Los Angeles (S)	2027	Agricultural - ATVs	Aggregate	50	Gasoline	5.04063E-06	5.04063E-06	5.04063E-06	5.04063E-06	5.04063E-06	5.04063E-06	5.04063E-06	5.04063E-06	5.04063E-06	5.04063E-06	5.04063E-06	5.04063E-06	5.04063E-06	0.558987318
Los Angeles (S)	2027	Agricultural - ATVs	Aggregate	75	Gasoline	4.98090E-07	4.98090E-07	5.88837E-07	2.26575E-05	1.12425E-06	0.000036533	7.03375E-07	5.31125E-06	7.62503E-09	30.1695384	1.07524397	0.000000000	0.000000000	
Los Angeles (S)	2027	Agricultural - Bale Wagons (Self Propelled)	Aggregate	175	Diesel	7.42338E-07	8.89237E-07	1.06897E-06	7.19306E-06	7.22478E-06	0.000117739	3.57767E-07	3.72768E-07	1.07455E-08	9.63266E-09	38.2904467	50.2341158	0.000100129	1460.669717
Los Angeles (S)	2027	Agricultural - Bale Wagons (Self Propelled)	Aggregate	300	Diesel	7.86348E-08	1.15231E-08	1.12332E-07	4.45466E-07	0.002898E-07	0.000176599	3.50138E-06	3.22277E-08	1.61079E-09	1.44317E-09	3.786403047	7.04302679	0.000144882	218.8273567
Los Angeles (S)	2027	Agricultural - Balers (Self Propelled)	Aggregate	25	Diesel	2.14858E-08	2.59871E-08	3.03936E-08	1.83846E-07	1.98994E-07	2.74432E-05	9.47134E-09	9.13638E-09	2.50376E-09	1.24567E-09	0.592538262	0.91082499	0.000511426	30.6295485
Los Angeles (S)	2027	Agricultural - Combine Harvesters	Aggregate	75	Diesel	2.18451E-07	2.65881E-07	3.19357E-07	2.23491E-06	2.23491E-06	0.000129442	5.22211E-06	5.08035E-06	5.17137E-07	5.15432E-07	10.719071	0.1792071	0.000000000	0.000000000
Los Angeles (S)	2027	Agricultural - Combine Harvesters	Aggregate	175	Diesel	1.96868E-08	8.79078E-08	1.03963E-07	4.07706E-07	7.3493E-07	0.00016141	3.20458E-08	2.98422E-08	1.47425E-09	3.32077E-09	0.820517613	3.71539397	0.000109179	225.6759042
Los Angeles (S)	2027	Agricultural - Combine Harvesters	Aggregate	600	Diesel	1.21267E-06	1.46734E-06	1.74625E-06	9.0986E-06	1.26259E-05	0.000393716	5.04506E-07	4.64166E-07	2.68297E-08	2.4031E-08	95.53680492	61.3086681	0.000138749	40.613496
Los Angeles (S)	2027	Agricultural - Combine Harvesters	Aggregate	750	Diesel	2.16423E-06	2.61871E-06	3.11469E-06	1.61474E-05	2.32329E-05	0.00521373	5.90942E-07	4.78467E-07	4.78982E-08	4.82097E-08	170.171044	61.3086681	0.0001429002	7314.734778
Los Angeles (S)	2027	Agricultural - Combine Harvesters	Aggregate	999	Diesel	2.16423E-06	2.61871E-06	3.11469E-06	1.61474E-05	2.32329E-05	0.00521373	5.90942E-07	4.78467E-07	4.78982E-08	4.82097E-08	170.171044	61.3086681	0.0001429002	7314.734778
Los Angeles (S)	2027	Agricultural - Construction Equipment	Aggregate	50	Gasoline	9.90712E-07	1.19876E-06	1.42653E-06	8.84758E-06	8.81653E-06	0.00143157	4.75776E-07	5.9577E-07	1.17027E-06	1.17227E-06	46.6253964	19.1097724	0.000000000	0.000000000
Los Angeles (S)	2027	Agricultural - Construction Equipment	Aggregate	175	Diesel	3.73441E-06	4.51846E-06	5.3774E-06	4.07717E-05	4.07408E-05	0.000251439	1.74396E-06	1.60444E-06	5.75363E-08	6.75191E-08	38.2904467	24.9689848	0.174932564	12798.01401
Los Angeles (S)	2027	Agricultural - Construction Equipment	Aggregate	300	Diesel	4.3897E-07	5.31154E-07	6.32117E-07	3.28297E-06	0.000000492	0.000906273	2.01716E-07	1.85579E-07	8.27643E-09	7.41577E-09	4.8173156	14.4659279	0.000221244	1405.632923
Los Angeles (S)	2027	Agricultural - Construction Equipment	Aggregate	50	Diesel	5.94208E-08	7.18992E-08	8.55508E-08	2.95627E-07	2.30717E-07	3.47635E-05	1.35985E-08	1.25106E-08	3.16231E-10	2.84475E-10	1.19084351	1.126581004	0.000113379	48.5026454
Los Angeles (S)	2027	Agricultural - Construction Equipment	Aggregate	600	Diesel	2.34509E-07	2.83456E-07	3.40157E-07	2.23991E-06	2.23991E-06	0.000129442	5.22211E-06	5.08035E-06	5.17137E-07	5.15432E-07	14.04898	8.5200444	0.000241735	30.0000000
Los Angeles (S)	2027	Agricultural - Construction Equipment	Aggregate	75	Diesel	1.72067E-07	2.08201E-07	2.47777E-07	1.34818E-06	1.59362E-06	0.00019176	5.85904E-06	6.97823E-08	2.00511E-09	1.70876E-09	7.148611	21.65382856	0.000951251	306.6193489
Los Angeles (S)	2027	Agricultural - Cotton Pickers	Aggregate	100	Diesel	1.25291E-07	1.84273E-07	2.1935E-07	1.142728E-06	1.58484E-06	0.000018678	6.39919E-08	5.83272E-08	3.3632E-09	3.01276E-09	11.9759017	5.15474945	0.000164592	514.7793888
Los Angeles (S)	2027	Agricultural - Forage & Silage Harvesters	Aggregate	600	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Los Angeles (S)	2027	Agricultural - Forage & Silage Harvesters	Aggregate	750	Diesel	5.18211E-06	6.27035E-06	7.46521E-06	4.1877E-06	5.4320E-06	0.000967	2.47712E-07	2.72904E-06	9.09792E-06	8.07388E-06	32.994174	9.14828155	0.000245560	1379.5521
Los Angeles (S)	2027	Agricultural - Forage & Silage Harvesters	Aggregate	999	Diesel	3.02715E-07	3.68286E-07	4.39127E-07	2.44598E-06	3.16246E-06	0.00051739	1.37924E-07	1.28464E-07	4.72344E-09	4.23395E-09	16.8920016	4.486889505	0.000956133	733.388746
Los Angeles (S)	2027	Agricultural - Forklifts	Aggregate	100	Diesel	0.88162E-07	9.78191E-07	1.16404E-06	7.16601E-06	6.29292E-06	0.000169635	6.60514E-07	4.23673E-07	1.06743E-08	9.57078E-09	38.0444554	44.2776594	0.025610754	1631.808362
Los Angeles (S)	2027	Agricultural - Forklifts	Aggregate	175	Diesel	1.44726E-07	1.75119E-07	2.08406E-07	1.50915E-06	1.38291E-06	0.000238438	6.29388E-08	5.79018E-08	2.38759E-08	2.113999E-08	4.00234814	4.11051104	0.000491042	460.691922
Los Angeles (S)	2027	Agricultural - Forklifts	Aggregate	175	Diesel	1.69866E-06	2.05358E-06	2.4407E-06	9.85326E-06	7.21158E-06	0.000137467	4.13545E-07	3.80416E-07	9.76959E-09	8.74838E-09	34.9140325	40.7642061	0.000598381	1497.698976
Los Angeles (S)	2027	Agricultural - Forklifts	Aggregate	75	Diesel	4.16062E-06	4.98329E-06	5.94208E-06	4.07717E-05	4.07408E-05	0.000129442	5.22211E-06	5.08035E-06	5.17137E-07	5.15432E-07	14.04898	8.5200444	0.000241735	30.0000000
Los Angeles (S)	2027	Agricultural - Hay Squeezers/Stack Retrieval	Aggregate	75	Diesel	1.76356E-08	8.68608E-08	1.03517E-07	7.46998E-07	7.4699E-07	0.000127877	3.11524E-08	2.86602E-08	1.16735E-09	1.04367E-09	4.15942809	7.60240027	0.000506711	188.39101
Los Angeles (S)	2027	Agricultural - Hay Squeezers/Stack Retrieval	Aggregate	300	Diesel	2.15494E-07	2.60815E-07	3.10391E-07	1.2211E-06	2.02110E-06	0.00048432	5.97898E-08	8.83006E-08	4.41544E-08	3.95787E-08	1.7244995	6.03380669	0.000416412	714.098663
Los Angeles (S)	2027	Agricultural - Hay Squeezers/Stack Retrieval	Aggregate	600	Diesel	1.42398E-07	1.72296E-08	2.05640E-08	1.06498E-07	1.48386E-07	3.45596E-05	9.51995E-09	5.45999E						

Los Angeles (US)	2027 Airport Ground Support - Misc - Baggage Tug	Aggregate	100 Nat Gas	0	0	0.00051283	0.413916974	0.043696757	9.37527247	0	0	0	520946.25	83665.3	100.68	8366530			
Los Angeles (US)	2027 Airport Ground Support - Misc - Belt Loader	Aggregate	100 Gasoline	0.00769189	0.000774263	0.00846374	0.584898069	0.044842378	13.5276893	0.000043183	0.000712627	0.000130696	0.0000191848	547831.4	192787.5	237.57	11567142		
Los Angeles (US)	2027 Airport Ground Support - Misc - Belt Loader	Aggregate	100 Gasoline	0.00769189	0.000774263	0.00846374	0.584898069	0.044842378	13.5276893	0.000043183	0.000712627	0.000130696	0.0000191848	547831.4	192787.5	237.57	11567142		
Los Angeles (US)	2027 Airport Ground Support - Misc - Bobtail	Aggregate	100 Gasoline	0.003823584	0.000316932	0.004027621	0.23285863	0.02235863	6.93509189	0.000048332	0.000363335	6.70027E-05	9.80122E-05	279776.15	53906.85	26.42	5390685		
Los Angeles (US)	2027 Airport Ground Support - Misc - Bobtail	Aggregate	100 Nat Gas	0	0	0.017866-06	0.006145108	0.00055799	0.170974584	0	0	0	0	93973.2	1525.7	0	152570		
Los Angeles (US)	2027 Airport Ground Support - Misc - Cargo Loader	Aggregate	100 Gasoline	0.002806709	0.002581611	0.003088613	0.212701185	0.01640343	4.964290484	0.000364122	0.000261515	0.000047962	7.03633E-05	208852.2	60633.8	84.18	4244366		
Los Angeles (US)	2027 Airport Ground Support - Misc - Cargo Loader	Aggregate	100 Nat Gas	0	0	0.000126814	0.005357139	0.005462203	1.053678635	0	0	0	0	58900.05	14775.2	14.3	1034264		
Los Angeles (US)	2027 Airport Ground Support - Misc - Cart Truck	Aggregate	300 Gasoline	0.07594229	0.06895749	0.083176689	0.75102426	0.372895118	84.34525137	0.005808754	0.004443236	0.00006363	0.001275241	3640181.5	702934.3	230.18	66778048		
Los Angeles (US)	2027 Airport Ground Support - Misc - Cargo Tractor	Aggregate	175 Nat Gas	0	0	4.31737E-05	0.039446501	0.003991821	1.504836292	0	0	0	0	81212.5	8796.5	56.4	1368755.4		
Los Angeles (US)	2027 Airport Ground Support - Misc - Cart	Aggregate	15 Gasoline	6.12428E-05	6.18552E-05	6.73938E-06	0.033460138	3.73727E-05	1.33853E-07	0.10134E-07	5.371E-08	7.41398E-08	210.8208686	0	0	4.89629469	0		
Los Angeles (US)	2027 Airport Ground Support - Misc - Catering Truck	Aggregate	300 Gasoline	0.095619774	0.008848268	0.010589575	0.569214369	0.0365529	0.05365529	0.000935131	0.000201518	0.000112866	0.0000183858	524045.1	55133.25	54.22	11241669.68		
Los Angeles (US)	2027 Airport Ground Support - Misc - Catering Truck	Aggregate	300 Nat Gas	0	0	4.25435E-05	0.025872714	0.002879481	0.98948249	0	0	0	0	53766.1	455.55	10.07	932607.75		
Los Angeles (US)	2027 Airport Ground Support - Misc - Deicer	Aggregate	100 Gasoline	2.14822E-05	1.97594E-05	2.36398E-06	0.00082851	0.000321055	0.54335937	3.79011E-06	2.86364E-06	1.37791E-07	0	208E-05	259.35	11.97	24100.55		
Los Angeles (US)	2027 Airport Ground Support - Misc - Forklift	Aggregate	50 Gasoline	0.002903903	0.00267101	0.003195568	0.270918564	0.00645352	2.0453839	0.000414021	0.000106549	2.48706E-05	3.29056E-05	93929.1	57651.75	79.25	2882587.75		
Los Angeles (US)	2027 Airport Ground Support - Misc - Forklift	Aggregate	50 Nat Gas	0	0	0.000189574	0.051028118	0.013798898	4.122778205	0.000366654	0	0	0	21792E-06	134896.7	185.45	744883.5		
Los Angeles (US)	2027 Airport Ground Support - Misc - Fuel Truck	Aggregate	175 Gasoline	0.0000209	1.92388E-05	2.29992E-06	0.002605546	0.000255134	0.00827647	5.94144E-06	4.48909E-06	8.23303E-07	1.15209E-06	32868.12	1120.55	50.86	146571.5		
Los Angeles (US)	2027 Airport Ground Support - Misc - Fuel Truck	Aggregate	175 Nat Gas	0	0	0.00053723	0.000696907	0.00070344	1.030970741	0.00037246	0	0	0	14158.35	3650	6.46	51100		
Los Angeles (US)	2027 Airport Ground Support - Misc - Generator	Aggregate	100 Gasoline	0.000710219	0.00065326	0.000781553	0.0554154	0.003115868	0.689872651	0.80965E-06	5.69566E-06	0.10305E-05	29488.35	3529.55	5.92	377661.85			
Los Angeles (US)	2027 Airport Ground Support - Misc - Ground Power Unit	Aggregate	175 Gasoline	0.004679524	0.004304226	0.005149531	0.477655347	0.04247623	1.379033682	0.00098862	0.000746958	0.000136993	0.000192926	550708.35	53888.6	67.55	8083290		
Los Angeles (US)	2027 Airport Ground Support - Misc - Hydrant Truck	Aggregate	175 Gasoline	0.009168548	0.00843323	0.010089428	0.46166227	0.042806649	9.427137498	0.000675825	0.000510624	8.00271E-05	0.00013033	385443.65	48734.8	31.85	591278.12		
Los Angeles (US)	2027 Airport Ground Support - Misc - Lav Cart	Aggregate	15 Gasoline	6.7158E-05	6.7117E-05	7.38898E-05	0.003795962	0.00040925	1.4838E-06	1.4681E-07	1.10923E-07	5.89078E-08	8.13144E-08	231.24005	0	0	5.3702333		
Los Angeles (US)	2027 Airport Ground Support - Misc - Lav Truck	Aggregate	175 Gasoline	0.000251407	0.002374378	0.002804678	0.135227718	0.01595601	4.838413274	0.000348672	0.000262081	4.80658E-05	0.0000444	19489.4	6544.5	53.49	8507785		
Los Angeles (US)	2027 Airport Ground Support - Misc - Lav Truck	Aggregate	175 Nat Gas	0	0	4.02555E-06	0.002919207	0.000288381	0.010169422	0	0	0	0	5471.35	1522.05	3.94	178866.5		
Los Angeles (US)	2027 Airport Ground Support - Misc - Lift	Aggregate	100 Gasoline	0.003277638	0.003014771	0.00360684	0.208723463	0.017553457	0.000532438	0.000266287	0	0	0	4.88372E-07	7.15038E-05	204108	43223.3	114.75	4322330
Los Angeles (US)	2027 Airport Ground Support - Misc - Lift	Aggregate	100 Nat Gas	0	0	8.36029E-06	0.005296449	0.000508441	0.149620023	0	0	0	0	8201.55	1460	4.32	146000		
Los Angeles (US)	2027 Airport Ground Support - Misc - Maint. Truck	Aggregate	175 Gasoline	0.0028072	0.001841693	0.00207135	0.00616544	0.0005299	0.51665464	0.000263563	0	0	5.18232E-07	7.30856E-05	20823.953	37.8429	0	468613	
Los Angeles (US)	2027 Airport Ground Support - Misc - Other	Aggregate	50 Gasoline	0.001978164	0.001813915	0.002176849	0.154644688	0.004235853	1.52984259	0.000105466	7.96857E-05	1.86002E-05	2.35993E-05	67364.4	25860.25	141.1	1293012.5		
Los Angeles (US)	2027 Airport Ground Support - Misc - Other	Aggregate	50 Nat Gas	0	0	0.000146854	0.023366943	0.006617936	1.383324773	0	0	0	0	73839.5	27145.05	26.67	135752.5		
Los Angeles (US)	2027 Airport Ground Support - Misc - Passenger Stand	Aggregate	175 Gasoline	0.000677303	0.000622884	0.000745331	0.068297836	0.006639582	2.05203302	0.000147109	0.000111149	0.000018161	2.86527E-05	81789.2	12216.55	65.07	15289240.95		
Los Angeles (US)	2027 Airport Ground Support - Misc - Passenger Stand	Aggregate	175 Nat Gas	0	0	1.22008E-07	0.003136774	1.41748E-05	0.005067639	0	0	0	0	302.95	18.25	2.35	3011.25		
Los Angeles (US)	2027 Airport Ground Support - Misc - Service Truck	Aggregate	100 Gasoline	0.011837229	0.010887249	0.013034519	0.07524516	0.00316402	0.000132824	0.000100356	0.00018405	0.00025494	0.00025494	27775.22	22614.6	23.84	47274848		
Los Angeles (US)	2027 Airport Ground Support - Misc - Service Truck	Aggregate	300 Nat Gas	0	0	0.000151644	0.088884402	0.007539321	2.51378252	0	0	0	0	137681.65	34269.85	26.34	6168573		
Los Angeles (US)	2027 Airport Ground Support - Misc - Sweeper	Aggregate	100 Gasoline	9.22211E-05	8.48259E-05	0.000101485	0.005813588	0.00497735	1.144482056	0.00136E-05	7.6119E-06	1.19286E-06	24.0205E-06	5829.05	2263	6.28	120617.9		
Los Angeles (US)	2027 Airport Ground Support - Misc - Sweeper	Aggregate	50 Nat Gas	0	0	1.29009E-06	0.000367158	0.000102111	0.030626003	0	0	0	0	1616.95	653.35	2.37	29400.75		
Los Angeles (US)	2027 Airport Ground Support - Misc - Water Truck	Aggregate	100 Gasoline	0.000136401	0.000112514	0.000116173	0.000215761	0.000598156	2.51607E-05	1.9103E-05	3.4856E-06	4.91014E-06	14016	5146.5	0	0	771975		
Los Angeles (US)	2027 Airport Ground Support - Misc - Water Truck	Aggregate	9.16007E-05	0.000108337	0.000131595	0.000142645	0.000977152	0.039087741	7.17163E-05	0.000061747	2.26494E-06	0	0	7760.5531	4646.63477	9.40422	138542.9892		
Los Angeles (US)	2027 Airport Ground Support - Other	Aggregate	175 Diesel	0.000289881	0.000350756	0.000417429	0.00573148	0.002032049	0.968871992	8.68447E-05	7.98971E-05	9.17794E-06	0	31483.66443	14287.5578	20.2378542	627057.0676		
Los Angeles (US)	2027 Airport Ground Support - Other	Aggregate	300 Diesel	0.000553058	0.000669175	0.000796374	0.00486554	0.004142494	1.758501008	0.000319275	0.000176801	1.66423E-05	0	57089.15076	17411.5768	24.37244685	1150378.731		
Los Angeles (US)	2027 Airport Ground Support - Other	Aggregate	50 Diesel	0.000350155	0.000423687	0.000504223	0.032812819	0.002789908	0.040237928	0.00015327	0.000100101	3.98217E-06	0	13660.29635	21235.74276	47.8763099	241362.2084		
Los Angeles (US)	2027 Airport Ground Support - Other	Aggregate	600 Diesel	0.000837025	0.000645809	0.000904296	0.002249307	0.002117383	0.009780741	8.84518E-05	9.05757E-05	1.43018E-05	0	8900.38588	8280.40034	2.38142	97255.74034		
Los Angeles (US)	2027 Airport Ground Support - Other	Aggregate	75 Diesel	0.000314787	0.000380892	0.000453293	0.003812625	0.003812625	0.000124207	0.00011427	0.00011427	0.00011427	0	21800.17702	17200.5004	37.16859266	365290.3141		
Los Angeles (US)	2027 Airport Ground Support - Other	Aggregate	750 Diesel	3.98040E-05	4.76502E-05	5.67077E-05	0.000293728	0.000315441	0.155404173	1.13188E-05	1.21291E-05	0	0	5049.885712	467.325039	0.825428	100106.9061		
Los Angeles (US)	2027 Airport Ground Support - Other	Aggregate	9999 Diesel	0.00021486	0.000267998	0.00031894	0.000246568	0.004444356	1.03824876	9.75125E-05	8.97151E-05	9.83512E-06	0	33738.04587	719.66588	1.23842	6680947.407		
Los Angeles (US)	2027 Airport Ground Support - Passenger Stand	Aggregate	175 Diesel	1.07462E-05	1.54026E-05	1.55004E-06	0.00013945	7.52601E-05	0.000707055	3.74956E-06	4.84495E-06	2.9082E-07	0	997.8111202	431.890903	0.825428	19780.6336		
Los Angeles (US)	2027 Airport Ground Support - Passenger Stand	Aggregate	300 Diesel	0.00021486	0.000267998	0.00031894	0.000246568	0.004444356	1.03824876	9.75125E-05	8.97151E-05	9.83512E-06	0	33738.04587	719.66588	1.23842	6680947.407		
Los Angeles (US)	2027 Airport Ground Support - Passenger Stand	Aggregate	50 Diesel	4.47935E-05	5.42032E-05	6.45025E-05	0.00052149	0.000417064	0.000123804	1.24823E-05	1.14837E-05	7.78028E-07	0	2668.91379	2497.800748	6.19871837	38769.74369		
Los Angeles (US)	2027 Airport Ground Support - Passenger Stand	Aggregate	75 Diesel	7.53184E-05	9.13772E-05	0.000108746	0.000151455	0.000911336	0.183249662	1.95602E-05	1.79594E-05	1.73589E-06	0	5954.739484	4336.938435	8.68277087	93681.78078		
Los Angeles (US)	2027 Cargo Handling Equipment - Port AGV	Aggregate	25 Electric	0	0	0	0	0	0	0	0	0	0	0	0	0	104118619	0	
Los Angeles (US)	2027 Cargo Handling Equipment - Port Container Handling Equipment	Aggregate	175 Diesel	0.001667757	0.001290932	0.00153628	0.022144142	0.006113761	3.279032753	0.000323592	0.000287752	3.10805E-06	7.3511E-08	106656.0535	34755.9146	12.5020586	0		
Los Angeles (US)	2027 Cargo Handling Equipment - Port Container Handling Equipment	Aggregate	25 Electric	0	0	0	0	0	0	0	0	0	0	0	0	0	1.92506286	0	
Los Angeles (US)	2027 Cargo Handling Equipment - Port Container Handling Equipment	Aggregate	300 Diesel	0.018312714	0.022605887	0.08543271	0.113773864	38.15307229	0.005277984	0.000361818	8.55344E-07	1240996.231	150598.8284	91.39618878	0	0	0	0	
Los Angeles (US)	2027 Cargo Handling Equipment - Port Container Handling Equipment	Aggregate	600 Diesel	0.014156334	0.012321181	0.203851852	0.770892683	0.703842002	358.4735913	0.035219957	0.032401848	0.000399375	0.830666E-06	11659988.28	1047452.724	478.2649879	0		
Los Angeles (US)	2027 Cargo Handling Equipment - Port Container Handling Equipment	Aggregate	750 Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	1.25202586	0	
Los Angeles (US)	2027 Cargo Handling Equipment - Port Container Handling Equipment	Aggregate	9999 Diesel	0.000891023	0.000980007	0.0116624	0.005808284	0.015777208	2.489312346	0.00054658	0.000								

Los Angeles (SC)	2027 Commercial Harbor Craft - AE - Tugboat-Push/Tow	Aggregate	25 Diesel	6.05825E-05	7.33048E-05	8.72388E-05	0.000204656	0.000914896	0.0087464319	1.90194E-05	1.81826E-05	0	0	2879.783725	5927.208883	6.088333015	41842.46656
Los Angeles (SC)	2027 Commercial Harbor Craft - AE - Tugboat-Push/Tow	Aggregate	300 Diesel	0.00049113	0.000594267	0.000707227	0.001904025	0.000788626	0.024889348	0.000185339	0.000217184	0	0	30678.0056	6746.895671	5.641666999	566271.1455
Los Angeles (SC)	2027 Commercial Harbor Craft - AE - Tugboat-Push/Tow	Aggregate	75 Diesel	0.00034975	0.000431462	0.000519475	0.00034975	0.000431462	0.000519475	0.00034975	0.000431462	0	0	1380.37444	2848.20308	5.541657124	185537.6214
Los Angeles (SC)	2027 Commercial Harbor Craft - AE - Tugboat-Push/Tow	Aggregate	75 Diesel	0.000178326	0.000215774	0.000256789	0.000569539	0.000325665	0.26972972	0.81022E-05	0.00005546	0	0	8890.682278	8208.725369	5.000000029	157235.6818
Los Angeles (SC)	2027 Commercial Harbor Craft - AE - Work Boat	Aggregate	100 Diesel	0.000103048	0.000124688	0.000148388	0.000158287	0.00158287	0.00158287	0.000516705	0.000066001	0	0	5383.427207	2863.610915	4.000000004	90364.10607
Los Angeles (SC)	2027 Commercial Harbor Craft - AE - Work Boat	Aggregate	175 Diesel	0.00028564	0.000344323	0.000409772	0.001536086	0.00481289	0.001536086	0.001459878	0.000139555	0	0	19096.79643	7159.027239	10.000000003	344978.883
Los Angeles (SC)	2027 Commercial Harbor Craft - AE - Work Boat	Aggregate	25 Diesel	5.04286E-05	6.10868E-05	7.26171E-05	0.0002143	0.00057887	0.000577575	2.58445E-05	2.47063E-05	0	0	2134.504406	8639.53059	12.000000001	32152.13618
Los Angeles (SC)	2027 Commercial Harbor Craft - AE - Work Boat	Aggregate	300 Diesel	0.00042408	0.000511114	0.000606268	0.00249324	0.00700528	0.026061979	0.000244093	0.000233521	0	0	2516.91741	6540.519698	9.136045009	136154.6049
Los Angeles (SC)	2027 Commercial Harbor Craft - AE - Work Boat	Aggregate	50 Diesel	0.000451271	0.000175656	0.000200964	0.000617929	0.001808194	0.188548084	0.765158E-05	7.34931E-05	0	0	6643.810848	8736.926332	12.20406092	100404.696
Los Angeles (SC)	2027 Commercial Harbor Craft - AE - Work Boat	Aggregate	600 Diesel	0.00111235	0.001345944	0.001601784	0.005105428	0.016490878	0.14824547	0.000486756	0.000465339	0	0	61602.80642	10022.61368	13.999999998	113642.302
Los Angeles (SC)	2027 Commercial Harbor Craft - AE - Work Boat	Aggregate	75 Diesel	0.000387921	0.000469384	0.000538606	0.001419015	0.004394541	0.000184542	0.000176422	0	0	14070.78541	12934.94676	18.06802295	251821.104	
Los Angeles (SC)	2027 Commercial Harbor Craft - AE - Work Boat	Aggregate	800 Diesel	0.00164126	0.001985244	0.002365414	0.00146877	0.0021159949	0.399155067	0.000709485	0.000670008	0	0	140715.4654	12267.74142	17.11645518	2596268.479
Los Angeles (SC)	2027 Commercial Harbor Craft - AE - Work Boat	Aggregate	9999 Diesel	0.00078399	0.0010649073	0.001356315	0.002475663	0.007745073	0.119584805	0.000121723	0.000289663	0	0	64646.78145	2147.708183	3	99546.2084
Los Angeles (SC)	2027 Commercial Harbor Craft - ME - Commercial Fishing	Aggregate	175 Diesel	0.000576873	0.000698016	0.000830696	0.002471266	0.00889302	0.07427442	0.000227158	0.000217163	0	0	26048.33501	12130.3532	12.166980801	477235.01
Los Angeles (SC)	2027 Commercial Harbor Craft - ME - Commercial Fishing	Aggregate	300 Diesel	0.003105093	0.004713334	0.01201396	0.004728566	0.00131619	0.00131619	0.00131619	0.001081827	0	0	149368.975	45115.12339	45.25108702	2753285.378
Los Angeles (SC)	2027 Commercial Harbor Craft - ME - Commercial Fishing	Aggregate	600 Diesel	0.009874023	0.011947567	0.014218593	0.037070775	0.157424301	16.9238878	0.003647526	0.003487095	0	0	576467.6815	10290.324	103.2525415	1062529.4
Los Angeles (SC)	2027 Commercial Harbor Craft - ME - Commercial Fishing	Aggregate	75 Diesel	0.000105667	0.000127857	0.000157381	0.000353549	0.000772388	0.057272245	1.05494E-05	4.80437E-05	0	0	1590.82043	1993.991089	0.000000032	32302.61786
Los Angeles (SC)	2027 Commercial Harbor Craft - ME - Commercial Fishing	Aggregate	800 Diesel	0.001650442	0.002000513	0.002658612	0.005720258	0.005593926	0.005593926	0.000557934	0.000557934	0	0	15920.5523	16700.03724	16.750363	2875387.37
Los Angeles (SC)	2027 Commercial Harbor Craft - ME - Commercial Fishing	Aggregate	9999 Diesel	0.000280475	0.000339375	0.000403884	0.001198296	0.006517851	0.803541119	0.67935E-05	6.67226E-05	0	0	28290.1966	1993.991089	2	53837.7169
Los Angeles (SC)	2027 Commercial Harbor Craft - ME - Commercial Passenger Fishing	Aggregate	100 Diesel	2.33979E-05	2.83115E-05	0.00033693	0.00113844	0.000389398	0.045630584	1.67662E-05	1.60285E-05	0	0	1554.285712	1193.051002	1.000000017	27487.89372
Los Angeles (SC)	2027 Commercial Harbor Craft - ME - Commercial Passenger Fishing	Aggregate	175 Diesel	8.44010E-05	0.00012126	0.000121538	0.000295588	0.001446367	0.159989077	5.62940E-06	5.38136E-06	0	0	5242.693488	2386.102051	2	92771.64577
Los Angeles (SC)	2027 Commercial Harbor Craft - ME - Commercial Passenger Fishing	Aggregate	300 Diesel	0.001755447	0.002142333	0.00252813	0.006429509	0.031697209	3.476871705	0.000536866	0.000513977	0	0	171609.408	32342.62441	27.10912715	1170895.365
Los Angeles (SC)	2027 Commercial Harbor Craft - ME - Commercial Passenger Fishing	Aggregate	600 Diesel	0.010925673	0.013220065	0.01573297	0.037769966	0.183332493	0.87320237	0.002204887	0.002107872	0	0	629875.1362	95600.37367	103.0010009	1162639.85
Los Angeles (SC)	2027 Commercial Harbor Craft - ME - Commercial Passenger Fishing	Aggregate	800 Diesel	0.019227278	0.023263488	0.02768713	0.09582484	0.332586234	0.9685933	0.0082227	0.000786991	0	0	168055.1157	17135.12978	14.362445	31121.6215
Los Angeles (SC)	2027 Commercial Harbor Craft - ME - Crew/Supply	Aggregate	300 Diesel	0.000821689	0.000999424	0.00118322	0.003241698	0.020231287	2.53056617	0.000315377	0.000301501	0	0	86197.0742	22225.42724	19.21334607	1588058.918
Los Angeles (SC)	2027 Commercial Harbor Craft - ME - Crew/Supply	Aggregate	600 Diesel	0.002358949	0.002999497	0.003644614	0.010545639	0.042464614	0.10545639	0.00043355	0.00043355	0	0	651869.1373	83506.15114	46.820019524	10643247.46
Los Angeles (SC)	2027 Commercial Harbor Craft - ME - Crew/Supply	Aggregate	800 Diesel	0.003157855	0.003821004	0.004547311	0.01461187	0.073902183	11.96928125	0.001102571	0.001054058	0	0	404543.2185	47471.37019	27.82001002	7462201.196
Los Angeles (SC)	2027 Commercial Harbor Craft - ME - Crew/Supply	Aggregate	9999 Diesel	0.005134056	0.006212208	0.007393041	0.020480526	0.1183925	0.02099547	0.000297167	0.000297167	0	0	458889.5938	20234.3002	13.00000052	8549194.592
Los Angeles (SC)	2027 Commercial Harbor Craft - ME - Excursion	Aggregate	100 Diesel	5.23031E-06	6.32867E-06	7.53164E-06	2.81335E-05	0.000126084	0.019170439	3.83906E-06	3.67014E-06	0	0	652.990501	543.2153521	2.55121297	11716.88172
Los Angeles (SC)	2027 Commercial Harbor Craft - ME - Excursion	Aggregate	175 Diesel	0.000636938	0.000770694	0.00091719	0.002557009	0.016357788	2392815027	0.00167043	0.001056993	0	0	80397.12033	38598.26092	47.91284302	1424963.168
Los Angeles (SC)	2027 Commercial Harbor Craft - ME - Excursion	Aggregate	300 Diesel	0.002401649	0.002941356	0.003588894	0.009249134	0.026019347	0.001001937	0.000101937	0.000101937	0	0	361648.6241	25225.90004	25.61648621	3126574.198
Los Angeles (SC)	2027 Commercial Harbor Craft - ME - Excursion	Aggregate	600 Diesel	0.002985045	0.003611904	0.004298465	0.011550017	0.073045115	9.77410944	0.000808879	0.000773288	0	0	328561.6251	58405.84144	76.02406404	6076580.183
Los Angeles (SC)	2027 Commercial Harbor Craft - ME - Excursion	Aggregate	800 Diesel	0.01126619	0.01605208	0.020110331	0.05973901	0.32145883	0.002529996	0.000506676	0.000506676	0	0	173006.651	18449.89095	27.51213102	3203474.069
Los Angeles (SC)	2027 Commercial Harbor Craft - ME - Excursion	Aggregate	9999 Diesel	0.000295306	0.00035732	0.000425241	0.003726522	0.00821234	3.344903267	0.000214303	0.000204874	0	0	113935.2928	7602.335449	7.102406052	2244106.868
Los Angeles (SC)	2027 Commercial Harbor Craft - ME - Ferry-Catamaran	Aggregate	9999 Diesel	0.02712145	0.03471245	0.04271765	0.175730522	0.671781356	0.002144852	0.000144852	0.000144852	0	0	1071562.1	28465.37441	8202829.768	21098942.63
Los Angeles (SC)	2027 Commercial Harbor Craft - ME - Ferry-Monohull	Aggregate	75 Diesel	0.0002792E-05	1.54507E-05	1.83876E-05	0.000428045	0.0044006	0.0044006	0.0044006	0.0044006	0	0	557.900212	1131.04422	3	9026.97168
Los Angeles (SC)	2027 Commercial Harbor Craft - ME - Ferry-Monohull	Aggregate	600 Diesel	0.000900413	0.01093856	0.01301779	0.00150417	0.017659788	0.908401885	0.764014E-05	0.73098E-05	0	0	35631.425	4654.672363	2	65775.2973
Los Angeles (SC)	2027 Commercial Harbor Craft - ME - Ferry-Monohull	Aggregate	9999 Diesel	0.006798171	0.008225787	0.009789367	0.035316617	0.129666675	0.001397135	0.00184611	0.00184611	0	0	832353.9717	25593.22195	12.00000078	16397897.58
Los Angeles (SC)	2027 Commercial Harbor Craft - ME - Ferry-Short Run	Aggregate	300 Diesel	0	0	0	0	0	0	0	0	0	0	0	0	2.000000031	386271.9851
Los Angeles (SC)	2027 Commercial Harbor Craft - ME - Ferry-Short Run	Aggregate	800 Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0.000000032	202349.734
Los Angeles (SC)	2027 Commercial Harbor Craft - ME - Pilot Boat	Aggregate	600 Diesel	0.000292005	0.00353278	0.004204893	0.004293229	0.04073017	2.312306225	0.000281675	0.000269281	0	0	89233.85481	9977.882812	4	1647499.467
Los Angeles (SC)	2027 Commercial Harbor Craft - ME - Pilot Boat	Aggregate	800 Diesel	0.000773712	0.000936192	0.001114446	0.00349093	0.012977424	2.397554035	0.00054587	0.00054587	0	0	95892.33604	6808.412324	3.000000097	177006.408
Los Angeles (SC)	2027 Commercial Harbor Craft - ME - Research Boat	Aggregate	300 Diesel	0.00014426	0.000174554	0.000207734	0.000474091	0.000209537	0.212101198	0.00041916	0.0004138E-05	0	0	7534.523416	1913.677711	1.999999999	139076.5273
Los Angeles (SC)	2027 Commercial Harbor Craft - ME - Research Boat	Aggregate	600 Diesel	0.001332613	0.001612704	0.001912951	0.004729963	0.01894485	1.954720075	0.000393681	0.00037636	0	0	66571.88377	9568.28817	9.999999976	122818.4362
Los Angeles (SC)	2027 Commercial Harbor Craft - ME - Research Boat	Aggregate	800 Diesel	0.002180718	0.002659248	0.003192449	0.006728121	0.026502184	0.000518814	0.000518814	0.000518814	0	0	66168.80564	9568.28817	9.999999976	122818.4362
Los Angeles (SC)	2027 Commercial Harbor Craft - ME - Research Boat	Aggregate	9999 Diesel	0.003511599	0.004319457	0.005194577	0.01418629	0.135581595	0.000335701	0.000302091	0.000302091	0	0	41682.95667	7173.451796	0.8125	87886.4575
Los Angeles (SC)	2027 Commercial Harbor Craft - ME - Tugboat-ATB	Aggregate	9999 Diesel	0.00475993	0.006045952	0.007165431	0.047620848	0.17451915	36.11740836	0.000299945	0.000286744	0	0	1191557.454	10657.9097	7.999999999	23457185.08
Los Angeles (SC)	2027 Commercial Harbor Craft - ME - Tugboat/Ship Assist	Aggregate	300 Diesel	4.88987E-05	5.92778E-05	7.05425E-05	0.00115831	0.001207025	0.09133574	2.52541E-05	2.41429E-05	0	0	33634.86306	1493.634582	1.999999971	62082.92169
Los Angeles (SC)	2027 Commercial Harbor Craft - ME - Tugboat/Ship Assist	Aggregate	600 Diesel	0.000157384	0.000196199	0.000235693	0.000593354	0.002401337	0.01024951	0.000102495	0.000102495	0	0	546464.591	25225.90004	25.61648621	3126574.198
Los Angeles (SC)	2027 Commercial Harbor Craft - ME - Tugboat-Push/Tow	Aggregate	175 Diesel	6.77387E-05	8.19638E-05	9.75437E-05	0.000179984	0.001495373	0.134131534	3.76285E-05	3.57928E-05	0	0	4575.036934	1615.001526	2.000000036	80911.5969
Los Angeles (SC)	2027 Commercial Harbor Craft - ME - Tugboat-Push/Tow	Aggregate	300 Diesel	0.000589468	0.000713256	0.000848834	0.001478738	0.012162778	0.994567286	0.000148124	0.000141606	0	0	33054.40664</			

Los Angeles (SC)	2027 Construction and Mining - Misc - Rough Terrain Forklifts	Aggregate	50 Gasoline	0.00025785	0.00023717	0.000283748	0.021033894	0.000356667	0.129151996	8.90326E-06	6.72718E-06	1.570255E-06	2.16353E-06	6175.8	1839.6	4.48	86461.2
Los Angeles (SC)	2027 Construction and Mining - Misc - Rubber Tired Loaders	Aggregate	100 Gasoline	0.001599711	0.000174144	0.001760385	0.009076885	0.004033206	0.000120296	9.00860E-06	1.66694E-05	2.48422E-05	70912.2	18969.05	37.03	1365771.6	
Los Angeles (SC)	2027 Construction and Mining - Misc - Rubber Tired Loaders	Aggregate	15 Gasoline	0	0	0	0	0	0	0	0	0	0	0	0	0.36188404	
Los Angeles (SC)	2027 Construction and Mining - Misc - Rubber Tired Loaders	Aggregate	2 Gasoline	0	0	0	0	0	0	0	0	0	0	0	0	0.36188404	
Los Angeles (SC)	2027 Construction and Mining - Misc - Rubber Tired Loaders	Aggregate	25 Gasoline	0	0	0	0	0	0	0	0	0	0	0	0	0.36188404	
Los Angeles (SC)	2027 Construction and Mining - Misc - Rubber Tired Loaders	Aggregate	25 Diesel	0.000072122	8.68551E-05	0.000103806	0.000296449	0.000548857	0.000793452	1.84574E-05	1.39456E-05	6.48676E-09	25.80842954	0	0	3.249800014	
Los Angeles (SC)	2027 Construction and Mining - Misc - Rubber Tired Loaders	Aggregate	5 Gasoline	0	0	0	0	0	0	0	0	0	0	0	0	0.36188404	
Los Angeles (SC)	2027 Construction and Mining - Misc - Rubber Tired Loaders	Aggregate	5 Gasoline	0.000301744	0.000377736	0.000323388	0.006865728	0.00013094	0.145997808	0.000010365	7.60441E-06	1.75700E-06	1.51137E-06	7186.8	2854.1	5.56	
Los Angeles (SC)	2027 Construction and Mining - Misc - Signal Boards	Aggregate	15 Gasoline	0.00104422	0.001054662	0.0011491	0.03544439	0.00077291	1.39832E-06	0.00045312	0.000342358	5.65144E-07	7.8011E-07	2213.36717	0	96.84271166	
Los Angeles (SC)	2027 Construction and Mining - Misc - Signal Boards	Aggregate	15 Diesel	0.005844702	0.000729891	0.003847756	0.004023995	0.00169774	0.00154823	0.00169774	0.00095877	6.89953E-07	2745.06706	0	0	25.94744431	
Los Angeles (SC)	2027 Construction and Mining - Misc - Signal Boards	Aggregate	5 Gasoline	5.65288E-05	0.000057092	6.22042E-05	0.00150735	2.53878E-05	5.66726E-08	7.14067E-07	5.39524E-07	2.47208E-06	3.41243E-08	95.70532488	0	3.802114558	
Los Angeles (SC)	2027 Construction and Mining - Misc - Signal Boards	Aggregate	1 Diesel	0.000070267	8.63252E-05	0.00011184	0.000746043	0.129159763	0.000521713	0.04597E-05	1.62739E-06	1.05688E-06	4201.15	2540.4	0	3998.8	
Los Angeles (SC)	2027 Construction and Mining - Misc - Skid Steel Loaders	Aggregate	100 Gasoline	0.00194066	0.00130723	0.001553309	0.07654797	0.000393062	0.000412126	0.0000161519	2.96044E-05	4.2272E-05	10544.3	22279.5	0	100161.4159	
Los Angeles (SC)	2027 Construction and Mining - Misc - Skid Steel Loaders	Aggregate	15 Gasoline	0.000387144	0.000393016	0.000426028	0.011234466	0.000283646	4.43198E-07	0.000143596	0.000108495	1.80532E-07	2.492E-07	708.7420814	0	5.670602556	
Los Angeles (SC)	2027 Construction and Mining - Misc - Skid Steel Loaders	Aggregate	2 Gasoline	0	0	0	0	0	0	0	0	0	0	0	0	0.429605442	
Los Angeles (SC)	2027 Construction and Mining - Misc - Skid Steel Loaders	Aggregate	25 Gasoline	0.03340005	0.03374011	0.03676132	0.10067301	0.021643704	0.00003731	0.01208842	0.000133474	1.60722E-05	2.21856E-05	63174.6192	0	351.7474614	
Los Angeles (SC)	2027 Construction and Mining - Misc - Skid Steel Loaders	Aggregate	175 Diesel	0.0201463857	0.020212533	0.02896501	0.028668657	0.153167478	0.021333839	0.005182764	0.003915863	2.10061E-06	1.80949E-06	7199.275002	0	1276.55389	
Los Angeles (SC)	2027 Construction and Mining - Misc - Skid Steel Loaders	Aggregate	5 Gasoline	0	0	0	0	0	0	0	0	0	0	0	0	0.429605442	
Los Angeles (SC)	2027 Construction and Mining - Misc - Skid Steel Loaders	Aggregate	50 Gasoline	0.002471541	0.002273323	0.00271978	0.193778469	0.003859383	0.207281009	0.000142847	0.000107929	2.51927E-05	3.16256E-05	90275.45	47190.85	152.11	
Los Angeles (SC)	2027 Construction and Mining - Misc - Surfacing Equipment	Aggregate	15 Gasoline	0.05236988	0.052889648	0.057625574	1.387384232	0.038735742	5.474138E-05	0.01736332	0.013400784	2.25426E-05	3.11172E-05	88132.48652	0	920.117908	
Los Angeles (SC)	2027 Construction and Mining - Misc - Surfacing Equipment	Aggregate	25 Gasoline	0.00179453	0.001812474	0.001974477	0.04780143	0.001162466	1.7694E-06	0.00057373	0.000434996	7.74282E-07	1.06531E-06	3035.28071	0	12.57575949	
Los Angeles (SC)	2027 Construction and Mining - Misc - Surfacing Equipment	Aggregate	5 Gasoline	0.00551413	0.005465242	0.005954042	0.12184395	0.000439676	4.58104E-06	0.00057723	4.36144E-05	2.04128E-06	2.81772E-06	7845.731316	0	309.8489886	
Los Angeles (SC)	2027 Construction and Mining - Misc - Tamper/Rammers	Aggregate	15 Gasoline	0.005572596	0.005628322	0.006132302	0.21061066	0.000428976	9.50064E-06	0.000378706	0.000232574	3.48917E-06	4.81634E-06	13386.10704	0	745.353508	
Los Angeles (SC)	2027 Construction and Mining - Misc - Tractors/Loaders/Backhoes	Aggregate	100 Gasoline	0.001003026	0.000922584	0.00103769	0.070518625	0.002561603	1.208814526	8.42815E-05	6.36739E-05	1.16788E-05	1.75409E-05	50070.7	17096.6	1170785.8	
Los Angeles (SC)	2027 Construction and Mining - Misc - Tractors/Loaders/Backhoes	Aggregate	15 Gasoline	0	0	0	0	0	0	0	0	0	0	0	0	0.914517404	
Los Angeles (SC)	2027 Construction and Mining - Misc - Tractors/Loaders/Backhoes	Aggregate	2 Gasoline	0	0	0	0	0	0	0	0	0	0	0	0	0.914517404	
Los Angeles (SC)	2027 Construction and Mining - Misc - Tractors/Loaders/Backhoes	Aggregate	25 Gasoline	0	0	0	0	0	0	0	0	0	0	0	0	0.914517404	
Los Angeles (SC)	2027 Construction and Mining - Misc - Tractors/Loaders/Backhoes	Aggregate	25 Diesel	0.001883503	0.00226544	0.002707566	0.00732275	0.014315812	0.020695587	0.000481423	0.000363742	1.96415E-07	1.69194E-07	673.1666228	0	91.90179529	
Los Angeles (SC)	2027 Construction and Mining - Misc - Tractors/Loaders/Backhoes	Aggregate	5 Gasoline	0	0	0	0	0	0	0	0	0	0	0	0	0.914517404	
Los Angeles (SC)	2027 Construction and Mining - Misc - Trenchers	Aggregate	100 Gasoline	0.001258744	0.001157792	0.00138571	0.063540516	0.003241061	1.38059693	9.62585E-05	7.72787E-05	1.33385E-05	1.96866E-05	56195.4	13556.1	33.66	
Los Angeles (SC)	2027 Construction and Mining - Misc - Trenchers	Aggregate	15 Diesel	0.001469174	0.01438663	0.01617588	0.475997128	0.0187145E-05	0.000617845	0.000459769	0.000134608	7.60064E-05	1.04017E-05	2981.733636	0	217.3070592	
Los Angeles (SC)	2027 Construction and Mining - Misc - Trenchers	Aggregate	15 Diesel	0.000534639	0.000643053	0.000768552	0.003373086	0.004027057	0.00719877	0.000141623	0.000107004	7.32669E-08	6.31128E-08	251.1026774	0	77.22976169	
Los Angeles (SC)	2027 Construction and Mining - Misc - Trenchers	Aggregate	2 Gasoline	0	0	0	0	0	0	0	0	0	0	0	0	0.24064512	
Los Angeles (SC)	2027 Construction and Mining - Misc - Trenchers	Aggregate	25 Gasoline	0.02525928	0.025508469	0.027792608	0.8223325	0.016368392	0.306888E-05	0.00909432	0.00748266	1.30894E-05	1.80682E-05	51485.42156	0	168.245489	
Los Angeles (SC)	2027 Construction and Mining - Misc - Trenchers	Aggregate	25 Diesel	0.001833393	0.002051689	0.002635532	0.007525662	0.013934947	0.002414992	0.000468815	0.000354065	1.9191E-07	1.64693E-07	65.2513337	0	161.555028	
Los Angeles (SC)	2027 Construction and Mining - Misc - Trenchers	Aggregate	5 Gasoline	0	0	0	0	0	0	0	0	0	0	0	0	0.24064512	
Los Angeles (SC)	2027 Construction and Mining - Misc - Trenchers	Aggregate	50 Gasoline	0.003769643	0.003467318	0.00414862	0.306064024	0.005241374	1.912429238	0.000131841	9.96133E-05	2.32517E-05	0.000031921	91111.8	40821.6	101.49	
Los Angeles (SC)	2027 Construction and Mining - Nurse Rig Other	Aggregate	175 Diesel	1.55512E-06	1.88177E-06	2.23938E-06	2.56837E-05	1.47697E-05	0.004434298	1.11603E-06	1.02675E-06	4.20052E-08	0	144.0932816	79.34575949	0.139914763	
Los Angeles (SC)	2027 Construction and Mining - Off-Highway Tractors	Aggregate	100 Diesel	0.00765651	0.000994388	0.001102538	0.010061583	0.00718367	1.62377029	0.000540888	0.000497617	1.53817E-05	0	52764.68852	25395.6211	0.401591305	
Los Angeles (SC)	2027 Construction and Mining - Off-Highway Tractors	Aggregate	300 Diesel	0.001393308	0.001620562	0.001912689	0.009132369	0.009471772	3.938482036	0.000441007	0.000405727	3.73085E-05	0	127981.6697	27483.26075	0.257200426	
Los Angeles (SC)	2027 Construction and Mining - Off-Highway Tractors	Aggregate	50 Diesel	0.002048112	0.002478215	0.00294821	0.016472591	0.013226964	1.969151794	0.000618868	0.000569359	1.86534E-06	0	63987.9311	68727.00744	0.112531366	
Los Angeles (SC)	2027 Construction and Mining - Off-Highway Tractors	Aggregate	600 Diesel	0.003088186	0.003737076	0.00444988	0.020306119	0.015221626	10.35897364	0.000730276	0.000671854	9.88334E-05	0	337490.7758	41327.59274	0.482187801	
Los Angeles (SC)	2027 Construction and Mining - Off-Highway Tractors	Aggregate	75 Diesel	0.001012646	0.001225302	0.001458211	0.010419813	0.010649794	1.71264255	0.000426201	0.001039013	1.62344E-05	0	55652.02705	37100.31717	0.753638959	
Los Angeles (SC)	2027 Construction and Mining - Off-Highway Tractors	Aggregate	750 Diesel	0.000013904	0.000008814	0.0000056814	0.000003919	0.00000360127	7.86869E-05	2.19463E-06	2.19463E-06	2.19463E-06	0	21946.31927	21946.31927	2.538858419	
Los Angeles (SC)	2027 Construction and Mining - Off-Highway Tractors	Aggregate	9999 Diesel	0.000205308	0.000248423	0.000295643	0.001353693	0.003107193	0.717013377	7.12041E-05	6.55077E-05	7.17104E-06	0	24509.28716	370.201155	0.908821272	
Los Angeles (SC)	2027 Construction and Mining - Off-Highway Trucks	Aggregate	100 Diesel	1.94278E-05	2.35077E-05	2.79761E-05	0.00026951	0.004521238	1.16175E-05	0.00688184	0.014724E-07	0	0	1446.72819	795.3513867	1.25923867	
Los Angeles (SC)	2027 Construction and Mining - Off-Highway Trucks	Aggregate	175 Diesel	0.000804167	0.000973041	0.0011518	0.01621403	0.006117773	2.281233259	0.000324123	0.000298193	2.16097E-05	0	72418.08511	24590.3636	27.14821228	
Los Angeles (SC)	2027 Construction and Mining - Off-Highway Trucks	Aggregate	300 Diesel	0.001366249	0.001594567	0.001924386	0.005405467	0.003149673	1.540835467	0.000171729	0.000134088	5.03394E-05	0	12705.41539	2073.44937	0.530935515	
Los Angeles (SC)	2027 Construction and Mining - Off-Highway Trucks	Aggregate	50 Diesel	7.03777E-05	0.000085157	0.000101344	0.000668278	0.000574992	0.083454009	0.00023955	2.20386E-05	7.95044E-07	0	2711.85257	4526.00428	7.275567676	
Los Angeles (SC)	2027 Construction and Mining - Off-Highway Trucks	Aggregate	600 Diesel	0.010497435	0.013249179	0.01576718	0.082191895	0.055025829	38.86438328	0.02548383	0.02034513	0.003068155	0	126290.9415	153431.2205	184.850707	
Los Angeles (SC)	2027 Construction and Mining - Off-Highway Trucks	Aggregate	75 Diesel	5.25566E-05	6.33993E-05	7.56815E-05	0.000598491	0.000557998	1.16758E-05	1.79795E-05	1.65577E-05	6.92986E-07	0	3303.39105	1974.75165	3.638561760	
Los Angeles (SC)	2027 Construction and Mining - Off-Highway Trucks	Aggregate	750 Diesel	0.00133896	0.001620142	0.001928103	0.011051975	0.009974828	4.83287617	0.00046573	0.00028476	4.57804E-06	0	157043.5478	1370.69564	0.241432988	
Los Angeles (SC)	2027 Construction and Mining - Off-Highway Trucks	Aggregate	9999 Diesel	0.000121835	0.000146148	0.000171902	0.000114831	0.000159293	0.000139052	0.000162801	0.000162801	0.000162801	0	41.9013411	2797.02555	1.164602121	
Los Angeles (SC)	2027 Construction and Mining - Other Construction Equipment	Aggregate	100 Diesel	0.000597307	0.000727242	0.000860213	0.00896747	0.006808185	1.955538169	0.00047516	0.000411714	1.50195E-05	0	51522.33943	25691.23672	72.65652942	
Los Angeles (SC)	2027 Construction and Mining - Other Construction Equipment	Aggregate	175 Diesel	0.001535084	0.001857451	0.00221052	0.03287027	0.013569205	4.992089896	0.000572321	0.000392508	1.27499774	0	162218.835	57019.02749	313995.05	
Los Angeles (SC)	2027 Construction and Mining - Other Construction Equipment	Aggregate	300 Diesel	0.001392934	0.001685451	0.002028585	0.011242465	0.01241103	4.72973802	0.00057784	0.000532146	4.48039E-05	0	136939.662	30646.2039	79.57848678	
Los Angeles (SC)	2027 Construction and Mining - Other Construction Equipment	Aggregate	600 Diesel	0.000368001	0.004401582	0.0052387											

Los Angeles (SC)	2027 Light Commercial - Misc - Gas Compressors	Aggregate	50	Nat Gas	0	0	0.00039545	0.07006282	0.01436294	4.7712616	0	0	0	0	0	253510.75	74153.4	0	2372908.8	8.72
Los Angeles (SC)	2027 Light Commercial - Misc - Gas Compressors	Aggregate	600	Nat Gas	0	0	0.000651766	0.36893515	0.030989719	10.12823	0	0	0	0	0	0	555730.75	17301	2.03	5847738
Los Angeles (SC)	2027 Light Commercial - Misc - Generator Sets	Aggregate	100	Nat Gas	0.00561836	0.005198558	0.00062195	0.265077345	0.014366681	11.4356689	0.00079732	0.000604241	0.000110485	0.000015736	0.000015736	0.000015736	440917.65	86621.8	0	1789660.6
Los Angeles (SC)	2027 Light Commercial - Misc - Generator Sets	Aggregate	100	Nat Gas	0	0	0.2768346	0.02333963	0.000210298	0.741446518	0	0	0	0	0	0	40347.1	5645.3	0	36.15
Los Angeles (SC)	2027 Light Commercial - Misc - Generator Sets	Aggregate	15	Gasoline	0.686453146	0.693317678	0.755399814	38.28431011	0.354599142	97.3056323	0.00123066	0.00166146	0.00123066	0.00123066	0.00123066	0.00123066	5962485.13	0	0	136994.98
Los Angeles (SC)	2027 Light Commercial - Misc - Generator Sets	Aggregate	15	Diesel	0.006274559	0.007546914	0.009019779	0.043800302	0.053052851	0.001491972	0.001974669	0.000059078	0.000059078	0.000059078	0.000059078	0.000059078	235049.5033	0	0	1516.478852
Los Angeles (SC)	2027 Light Commercial - Misc - Generator Sets	Aggregate	175	Gasoline	0.000580831	0.000534248	0.000391919	0.000235286	0.000644748	1.8484921	0.00032517	0.000194428	1.84828E-05	2.57795E-05	2.57795E-05	2.57795E-05	75887.65	8190.6	0	71.27
Los Angeles (SC)	2027 Light Commercial - Misc - Generator Sets	Aggregate	175	Gasoline	0.000234409	0.000231141	0.000200714	0.027959599	0.000291709	0.000128004	0	0	0	0	0	0	58317.9	5347.25	0	706963.3
Los Angeles (SC)	2027 Light Commercial - Misc - Generator Sets	Aggregate	2	Gasoline	2.109462859	2.130557488	2.321335199	36.15052229	0.611849317	78.45400626	0.002496867	0.003304678	0.001390773	0.001919782	0.001919782	5319488.055	0	0	330739.2983	
Los Angeles (SC)	2027 Light Commercial - Misc - Generator Sets	Aggregate	2	Electric	0	0	0	0	0	0	0	0	0	0	0	0	0	0	98981.1951	
Los Angeles (SC)	2027 Light Commercial - Misc - Generator Sets	Aggregate	25	Gasoline	0.02411932	0.024382807	0.02656631	2.269375586	0.0113706437	3.501570028	4.37188E-05	5.78623E-05	6.78534E-05	9.36629E-05	266752.1106	0	0	0	2626.945661	
Los Angeles (SC)	2027 Light Commercial - Misc - Generator Sets	Aggregate	25	Diesel	0.00128866	0.010977612	0.013120017	0.037417295	0.069607116	9.107064141	0.00486241	0.002467378	0.00486241	0.00486241	0.00486241	0.00486241	296223.3664	0	0	1109.194588
Los Angeles (SC)	2027 Light Commercial - Misc - Generator Sets	Aggregate	5	Gasoline	0.197658971	0.19965546	0.219511531	9.20724765	0.044573106	19.42054019	0.000239369	0.000432383	0.00034272	0.000432383	0.000432383	0.000432383	128974.456	0	0	7570.86506
Los Angeles (SC)	2027 Light Commercial - Misc - Generator Sets	Aggregate	50	Gasoline	0.028188848	0.025928103	0.031020108	2.012466911	0.059840476	23.0878774	0.001591658	0.001202586	0.000280707	0.000349538	997307.75	448530.25	3905.07	0	0	14325968
Los Angeles (SC)	2027 Light Commercial - Misc - Generator Sets	Aggregate	50	Diesel	0.009003306	0.010714357	0.012964372	0.12296665	0.108946709	19.1414545	0.002289275	0.002106133	0.000156629	0.000156629	622609.7	446062.85	1321.37	0	0	14720074.05
Los Angeles (SC)	2027 Light Commercial - Misc - Pressure Washers	Aggregate	15	Gasoline	0.24049383	0.251584769	0.274112566	18.26375966	0.125953931	35.63854088	0.000454809	0.000041952	0.000613459	0.000055084	2432105.812	0	0	0	86067.11855	
Los Angeles (SC)	2027 Light Commercial - Misc - Pressure Washers	Aggregate	15	Diesel	5.96513E-05	7.117474E-05	8.57497E-05	0.001469716	0.0005054366	0.0687774042	1.41689E-05	1.87529E-05	5.62353E-07	1.87529E-05	2236.997493	0	0	0	70.2188441	
Los Angeles (SC)	2027 Light Commercial - Misc - Pressure Washers	Aggregate	15	Electric	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15.93	
Los Angeles (SC)	2027 Light Commercial - Misc - Pressure Washers	Aggregate	2	Gasoline	0.00014654	0.000148005	0.000161258	0.003052557	4.95004E-05	0.00687893	8.30525E-08	1.09922E-07	1.17081E-07	1.61616E-07	454.5517183	0	0	0	58.89426187	
Los Angeles (SC)	2027 Light Commercial - Misc - Pressure Washers	Aggregate	2	Electric	0	0	0	0	0	0	0	0	0	0	0	0	0	0	111.7029534	
Los Angeles (SC)	2027 Light Commercial - Misc - Pressure Washers	Aggregate	25	Gasoline	0.00391404	0.003953181	0.004307164	0.320400201	0.013906919	0.625200418	7.97826E-07	1.05599E-05	1.08218E-05	1.49381E-05	42606.81596	0	0	0	534.8234963	
Los Angeles (SC)	2027 Light Commercial - Misc - Pressure Washers	Aggregate	25	Diesel	2.30853E-05	2.77666E-05	3.31855E-05	0.000094724	0.000125997	0.023308858	4.68901E-06	0.00001491	1.88594E-07	6.20604E-06	750.345694	0	0	0	16.15539407	
Los Angeles (SC)	2027 Light Commercial - Misc - Pressure Washers	Aggregate	25	Electric	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10.41383442	
Los Angeles (SC)	2027 Light Commercial - Misc - Pressure Washers	Aggregate	5	Gasoline	0.462897455	0.467526429	0.500390411	23.30150176	0.188664134	52.51157556	0.000633996	0.000893112	0.000864709	0.001193621	3384521.65	0	0	0	210642.4747	
Los Angeles (SC)	2027 Light Commercial - Misc - Pressure Washers	Aggregate	5	Electric	0	0	0	0	0	0	0	0	0	0	0	0	0	0	399551.0241	
Los Angeles (SC)	2027 Light Commercial - Misc - Pressure Washers	Aggregate	50	Gasoline	0.000258083	0.000284787	0.000306409	0.000245007	0.000233755	0.284214E-05	1.61155E-06	1.27616E-06	3.50359E-06	10001.40223	0	0	0	0	116664.6	
Los Angeles (SC)	2027 Light Commercial - Misc - Pressure Washers	Aggregate	50	Diesel	2.97171E-05	3.53717E-05	4.27993E-05	0.000505601	0.000505242	0.092016513	8.80388E-06	8.09957E-06	1.1613E-06	7.52945E-07	2993.45917	0	0	0	174484.6	
Los Angeles (SC)	2027 Light Commercial - Misc - Pumps	Aggregate	100	Gasoline	0.006624629	0.006093334	0.00729	0.357795007	0.017061811	13.1050155	0.000931713	0.000609361	0.000126613	0.000181456	517967.85	87315.3	395.55	0	0	8120322.29
Los Angeles (SC)	2027 Light Commercial - Misc - Pumps	Aggregate	15	Gasoline	0.087477413	0.07953519	0.086657058	0.149558878	0.043815531	11.7239811	0.00145382	0.000192147	0.000191316	0.000263838	749345.4489	0	0	0	18912.9168	
Los Angeles (SC)	2027 Light Commercial - Misc - Pumps	Aggregate	15	Diesel	0.004584322	0.005513931	0.006590306	0.028525591	0.034581095	4.708590873	0.000794612	0.001289928	4.44878E-05	8.84945E-05	15315.2553	0	0	0	11818.97488	
Los Angeles (SC)	2027 Light Commercial - Misc - Pumps	Aggregate	175	Gasoline	0.000218917	0.0002178917	0.0002178917	0.0002178917	0.0002178917	0.0002178917	0.0002178917	0.0002178917	0.0002178917	0.0002178917	0.0002178917	0.0002178917	0.0002178917	0.0002178917	0	3780.35
Los Angeles (SC)	2027 Light Commercial - Misc - Pumps	Aggregate	2	Gasoline	0.036711461	0.037078577	0.040398725	0.343731146	0.002172078	1.01758939	9.91513E-06	0.000013123	1.65907E-05	2.29012E-05	62878.05359	0	0	0	6855.109027	
Los Angeles (SC)	2027 Light Commercial - Misc - Pumps	Aggregate	2	Electric	0	0	0	0	0	0	0	0	0	0	0	0	0	0	538424.8306	
Los Angeles (SC)	2027 Light Commercial - Misc - Pumps	Aggregate	25	Gasoline	0.000584798	0.000590646	0.000643534	0.042410999	0.000416517	0.09654777	1.20704E-06	1.59756E-06	1.56643E-06	2.16226E-06	6162.857578	0	0	0	62.97832713	
Los Angeles (SC)	2027 Light Commercial - Misc - Pumps	Aggregate	25	Diesel	0.00247213	0.002535363	0.002675166	0.000779822	0.002795905	0.000779822	0.000779822	0.000779822	0.000779822	0.000779822	0.000779822	0.000779822	119723.0289	0	0	345.170983
Los Angeles (SC)	2027 Light Commercial - Misc - Pumps	Aggregate	5	Gasoline	0.0606771	0.061283942	0.066722426	0.002900128	0.002900128	6.737434702	4.7475E-05	8.80906E-05	0.000144051	0.000144237	0.000144237	0.000144237	0.000144237	0.000144237	0	20765.9546
Los Angeles (SC)	2027 Light Commercial - Misc - Pumps	Aggregate	50	Gasoline	0.004455967	0.004088491	0.004892516	0.359451811	0.006849915	3.485649166	0.00204297	0.000181558	4.23791E-05	5.39105E-05	153887.65	68893.75	312.1	0	0	2135706.25
Los Angeles (SC)	2027 Light Commercial - Misc - Pumps	Aggregate	50	Diesel	0.005820422	0.006692783	0.006831407	0.075538659	0.004622179	11.21266092	0.001429023	0.00134701	0.000141455	0.00009175	364711.65	232848.1	578.81	0	0	8615379.7
Los Angeles (SC)	2027 Light Commercial - Misc - Welders	Aggregate	100	Gasoline	0.007156441	0.006582495	0.007875227	0.334180241	0.019640549	19.9794606	0.000754685	0.000077837	0.000106073	0.000152824	436237.05	131483.95	622.88	0	0	9208765.1
Los Angeles (SC)	2027 Light Commercial - Misc - Welders	Aggregate	15	Gasoline	0.395231749	0.393915883	0.449696614	22.47293138	0.171751738	41.9737465	0.000763138	0.001012775	0.000101275	0.000101275	2992709.994	0	0	0	61782.51491	
Los Angeles (SC)	2027 Light Commercial - Misc - Welders	Aggregate	15	Diesel	0.002764497	0.003325082	0.003790049	0.01720298	0.020854091	2.893685127	0.00050786	0.000777785	2.69566E-05	2.32155E-05	92365.78678	0	0	0	514.8778481	
Los Angeles (SC)	2027 Light Commercial - Misc - Welders	Aggregate	15	Electric	0	0	0	0	0	0	0	0	0	0	0	0	0	0	264264.8461	
Los Angeles (SC)	2027 Light Commercial - Misc - Welders	Aggregate	175	Gasoline	0.000686607	0.000631541	0.000755569	0.046073705	0.002693426	1.366973093	9.79974E-05	7.40425E-05	1.35794E-05	1.91073E-05	54541.95	9066.6	43.62	0	0	1178658
Los Angeles (SC)	2027 Light Commercial - Misc - Welders	Aggregate	25	Diesel	0.004856578	0.005515562	0.006251985	0.018466406	0.013465365	4.35318988	0.000424266	0.001223249	4.30100E-05	3.70495E-05	147406.1163	0	0	0	453.245368	
Los Angeles (SC)	2027 Light Commercial - Misc - Welders	Aggregate	50	Gasoline	0.010365014	0.00953214	0.00953214	0.00953214	0.00953214	0.00953214	0.00953214	0.00953214	0.00953214	0.00953214	0.00953214	0.00953214	0.00953214	0.00953214	0	20.01098
Los Angeles (SC)	2027 Light Commercial - Misc - Welders	Aggregate	50	Diesel	0.020693576	0.024627184	0.026598645	0.246586566	0.151044089	31.88641479	0.00546413	0.001249536	0.000401316	0.000260917	1037162.1	878306.35	1360.63	0	0	4059590.21
Los Angeles (SC)	2027 Locomotive - In-Haul	Aggregate	0	148312	0.179	0.214	1.055	4.317	0	0.097	0.089	0.004	0.003	0	0	0	0	0	0	
Los Angeles (SC)	2027 Locomotive - Passenger	Aggregate	0	0.018611866	0.000139	0.000165	0.25844317	0.412359863	0	0.00756643	0.00699622	0.000719966	0.000815928	0	0	0	0	0	0	
Los Angeles (SC)	2027 Locomotive - Short-Haul	Aggregate	0	0.00927919	0.000024907	0.000024907	0.000024907	0.000024907	0.000024907	0.000024907	0.000024907	0.000024907	0.000024907	0.000024907	0.000024907	0.000024907	0.000024907	0.000024907	0	
Los Angeles (SC)	2027 Locomotive - Switcher	Aggregate	0	0.130327854	0.000123771	0.000147297	0.349161383	2.03951439	0	0.043739009	0.040232344	0.001174407	0.001045626	0	0	0	0	0	0	
Los Angeles (SC)	2027 Military Tactical Support - Misc - A/C Unit	Aggregate	100	Diesel	4.33793E-05	5.16249E-05	6.24661E-05	0.00108456	0.000592432	0.17075679	1.81922E-05	1.67369E-05	2.0358E-06	1.44						

