State Street Village

ENERGY ANALYSIS

CITY OF REDLANDS

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LIST OF ABBREVIATED TERMS

%	Percent
(1)	Reference
AQIA	State Street Village Air Quality Impact Analysis
BTU	British Thermal Unit
CCR	California Code of Regulations
CEC	California Energy Commission
CEQA	California Environmental Quality Act
CPUC	California Public Utilities Commission
CTA	core transport agents
EIA	Energy Information Administration
EMFAC	EMissions FACtor model
EPA	Environmental Protection Agency
FERC	Federal Energy Regulatory Commission
GHG	greenhouse gas
IEPR	Integrated Energy Policy Report
ISO	Independent Service Operator
ISTEA	Intermodal Surface Transportation Efficiency Act of 1991
LDA	light-duty-auto vehicles
MHDT	medium-heavy duty trucks
MMcfd	million cubic feet per day
MPOs	Metropolitan Planning Organizations
Project	State Street Village Project
PV	photovoltaic
RPS	California's Renewable Portfolio Standard
SB	Senate Bill
SCE	Southern California Edison
TEA-21	The Transportation Equity Act for the 21st Century
U.S.	United States
VMT	vehicle miles traveled

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EXECUTIVE SUMMARY

ES.1 SUMMARY OF FINDINGS

The results of this *State Street Village Energy Analysis* is summarized below based on the significance criteria in Section 3 of this report consistent with Appendix G of the 2019 California Environmental Quality Act (CEQA) Statute and Guidelines (*CEQA Guidelines*) (1). Table ES-1 shows the findings of significance for potential energy impacts under CEQA.

TABLE ES-1: SUMMARY OF CEQA SIGNIFICANCE FINDINGS

Analysis	Report Section	Significance Findings	
		Unmitigated	Mitigated
Energy Impact #1: Would the Project result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	4.6	*Less Than Significant*	*n/a*
Energy Impact #2: Would the Project conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	4.6	*Less Than Significant*	*n/a*

ES.2 PROJECT REQUIREMENTS

The Project would be required to comply with regulations imposed by the federal and state agencies that regulate energy use and consumption through various means and programs. Those that are directly and indirectly applicable to the Project and that would assist in the reduction of energy usage include:

Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA)

The Transportation Equity Act for the 21st Century (TEA-21)

Integrated Energy Policy Report (IEPR)

State of California Energy Plan

California Code Title 24, Part 6, Energy Efficiency Standards – Energy Code

California Code Title 24, Part 11, Green Building Standards - CalGreen

AB 1493 Pavley Regulations and Fuel Efficiency Standards

California's Renewable Portfolio Standard (RPS)

Clean Energy and Pollution Reduction Act of 2015 (SB 350)

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1 INTRODUCTION

This report presents the results of the energy analysis prepared by Urban Crossroads, Inc., for the proposed State Street Village Project (Project). The purpose of this report is to quantify anticipated energy demand associated with construction and operation of the proposed Project, determine if the usage of the energy is inefficient, atypical, or wasteful for the land use type.

1.1 SITE LOCATION

The proposed Project site is located on the west side of Eureka Street north and south of Citrus Avenue, as shown on Exhibit 1-A. For purposes of analysis the Project site hereafter may be described as Site A and Site B to differentiate between locations. Site A bordered on the north by Redlands Boulevard, on the west by Eureka Street, on the south by West Citrus Avenue, and Orange Street on the west. Site B is bordered by Eureka Street on the east, Citrus Avenue eon the north, Fourth Street on the west and a mix of commercial and residential uses to the south. The Project site (Sites A and B) is generally surrounded by commercial land uses, with the nearest residential land use approximately 46 feet to the south of Site B. Site A is designated Commercial (C), and Site B is designated Public/Institutional (P/I) on the City of Redlands General Plan Land Use Map.

1.2 PROJECT DESCRIPTION

The Project site is occupied by the Redlands Mall, which is currently vacant, in conjunction with a CVS Pharmacy, Union Bank, and Denny's restaurant (which were operational at the time the driveway counts were conducted for existing uses). Site A is proposed to be redeveloped with mixed-use buildings with housing over retail, restaurants, and other services. Specifically, the proposed uses include 700 multifamily residential units (within six 3 to 5 story buildings), and include live/work units with studio, one/two/three-bedroom plans, 39,478 square feet of retail space, 32,000 square feet of restaurant space, and 12,328 square feet of office space, and a 1,720 square foot rooftop restaurant[1]. A drug store of approximately 14,500 square feet with drive-through window for the pharmacy is planned for Site B on the south side of Citrus Avenue. The Project site plan is shown in Exhibit 1-B.

The Project is anticipated to generate a net total of approximately 5,584 two-way trips per day[2] with 770 AM peak hour trips and 536 PM peak hour trips (2). The Project is anticipated to be built out and occupied by the year 2026.

The Project would also include a Conditional Use Permit (CUP) to allow residential combined with non-residential uses in the C-3 zoning designation. The Project would include a Code text amendment of the existing C-3 zoning designation to allow utilizing the existing development standard for up to four (4) square feet of total floor area for each one square foot of total lot area, and not be required to use the R-3 residential density standard contained in RMC

[1] The energy demand estimates are based on a larger Project for Site A containing 723 multifamily residential units, 39,000 square feet of retail space, 32,000 square feet of restaurant space, 12,222 square feet of office space, and a 2,200 square foot rooftop restaurant. Thus, the emission estimates presented in this analysis are conservative and represent an over estimation of potential project emissions.

[2] The energy demand estimates are based on a trip generation of 5,584, however, the revised project will only generate 5,308 trips per day.

18.92.080(B)(1). The Project would include a General Plan Amendment to change the five parcels on the south side of Citrus Avenue from Public/Institutional to Commercial.

EXHIBIT 1-A: LOCATION MAP

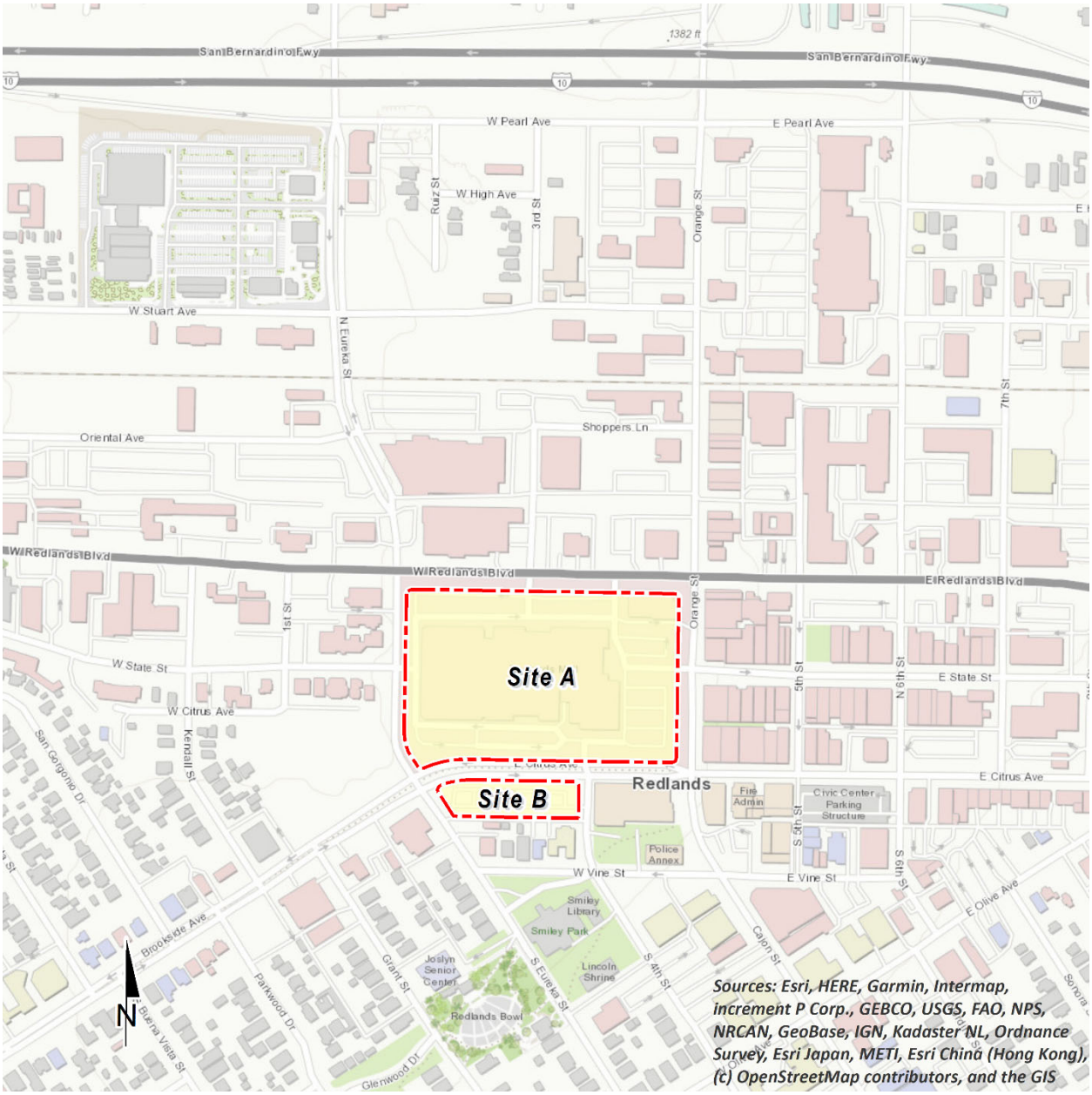
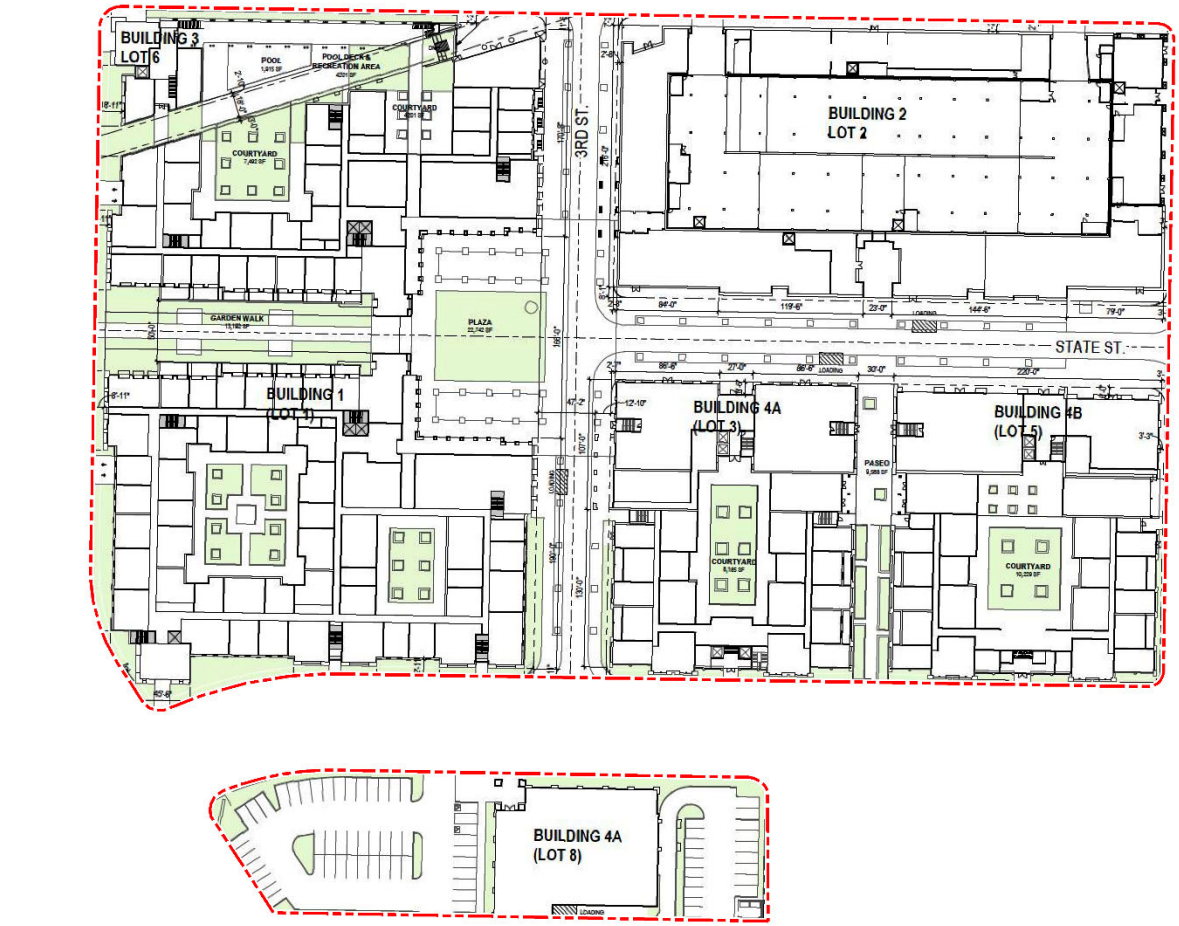


EXHIBIT 1-B: SITE PLAN



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2 EXISTING CONDITIONS

This section provides an overview of the existing energy conditions in the Project region.

2.1 OVERVIEW

The most recent data for California's estimated total energy consumption and natural gas consumption is from 2018, released by the United States (U.S.) Energy Information Administration's (EIA) California State Profile and Energy Estimates in 2020 and included (3):

- Approximately 7,900 trillion British Thermal Unit (BTU) of energy was consumed;
- Approximately 3,444 trillion BTU of petroleum;
- Approximately 2,210 trillion BTU of natural gas;
- Approximately 33.3 trillion BTU coal (3)

The California Energy Commission's (CEC) Transportation Energy Demand Forecast 2019-2030 was released in order to support the 2020 Integrated Energy Policy Report. The Transportation energy Demand Forecast 2019-2030 lays out graphs and data supporting their projections of California's future transportation energy demand. The projected inputs consider expected variable changes in fuel prices, income, population, and other variables. Predictions regarding fuel demand included:

Gasoline demand in the transportation sector is expected to decline from approximately 15.5 billion gallons in 2019 to between 12.3 billion and 12.7 billion gallons in 2030 (4)

Diesel demand in the transportation sector is expected to rise, increasing from approximately 3.9 billion diesel gallons in 2019 to approximately 4.3 billion in 2030 (4)

- Data from the Department of Energy states that approximately 4 billion gallons of diesel fuel were consumed in 2019 (5)

The most recent data provided by the EIA for energy use in California by demand sector is from 2019 and is reported as follows:

Approximately 39.4% transportation;

Approximately 23.1% industrial;

Approximately 18.7% residential; and

Approximately 18.8% commercial (6)

In 2020, total system electric generation for California was 277,704 gigawatt hours (GWh). California's massive electricity in-state generation system generated approximately 200,475 GWh which accounted for approximately 72.2% of the electricity it uses; the rest was imported from the Pacific Northwest (8.6%) and the U.S. Southwest (19.2%) (7). Natural gas is the main source for electricity generation at 34.23% of the total in-state electric generation system power as shown in Table 2-1. Renewables account for 31.7% of the total electrical system power.

TABLE 2-1: TOTAL ELECTRICITY SYSTEM POWER (CALIFORNIA 2020)

Fuel Type	California In-State Generation (GWh)	Percent of California In-State Generation	Northwest Imports (GWh)	Southwest Imports (GWh)	Total California Energy Mix (GWh)	Total California Power Mix
Coal	248	0.12%	219	7,765	8,233	2.96%
Natural Gas	86,136	42.97%	62	8,859	95,057	34.23%
Oil	36	0.02%	0	0	36	0.01%
Other	411	0.20%	0	11	422	0.15%
Nuclear	16,163	8.06%	39	8,743	24,945	8.98%
Large Hydro	33,145	16.53%	6,387	1,071	40,603	14.62%
Unspecified	0	0.00%	6,609	13,767	20,376	7.34%
Non-Renewables and Unspecified Totals	136,139	67.91%	13,315	40,218	189,672	68.30%
Biomass	5,851	2.92%	903	33	6,787	2.44%
Geothermal	10,943	5.46%	99	2,218	13,260	4.77%
Small Hydro	5,349	2.67%	292	4	5,646	2.03%
Solar	28,513	14.22%	282	5,295	34,090	12.28%
Wind	13,680	6.82%	9,038	5,531	28,249	10.17%
Renewables Totals	64,336	32.09%	10,615	13,081	88,032	31.70%
Total	200,475	100.00%	23,930	53,299	277,704	100.00%

Source: https://www.energy.ca.gov/almanac/electricity_data/total_system_power.html

An updated summary of, and context for energy consumption and energy demands within the State is presented in "U.S. Energy Information Administration, California State Profile and Energy Estimates, Quick Facts" excerpted below:

- California was the seventh-largest producer of crude oil among the 50 states in 2019, and, as of January 2020, it ranked third in oil refining capacity.
- California is the largest consumer of jet fuel among the 50 states and accounted for 17% of the nation's jet fuel consumption in 2019 (8).
- California's total energy consumption is second highest in the nation, but, in 2018, the state's per capita energy consumption was the fourth-lowest, due in part to its mild climate and its energy efficiency programs (9).
- In 2019, California ranked first in the nation as a producer of electricity from solar, geothermal, and biomass resources and fourth in the nation in conventional hydroelectric power generation.
- In 2019, California was the fourth-largest electricity producer in the nation, but the state was also the nation's largest importer of electricity and received about 28% of its electricity supply from generating facilities outside of California, including imports from Mexico (10).

As indicated above, California is one of the nation's leading energy-producing states, and California's per capita energy use is among the nation's most efficient. Given the nature of the

Project, the remainder of this discussion will focus on the three sources of energy that are most relevant to the Project—namely, electricity, natural gas, and transportation fuel for vehicle trips associated with the uses planned for the Project.

2.2 ELECTRICITY

The usage associated with electricity use were calculated using the California Emissions Estimator Model (CalEEMod) Version 2020.4.0. The Southern California region's electricity reliability has been of concern for the past several years due to the planned retirement of aging facilities that depend upon once-through cooling technologies, as well as the June 2013 retirement of the San Onofre Nuclear Generating Station (San Onofre). While the once-through cooling phase-out has been ongoing since the May 2010 adoption of the State Water Resources Control Board's once-through cooling policy, the retirement of San Onofre complicated the situation. California Independent Service Operator (ISO) studies revealed the extent to which the South California Air Basin and the San Diego Air Basin region were vulnerable to low-voltage and post-transient voltage instability concerns. A preliminary plan to address these issues was detailed in the 2013 Integrative Energy Policy Report (IEPR) after a collaborative process with other energy agencies, utilities, and air districts (11). Similarly, the 2020 IEPR's identifies broad strategies that are aimed at maintaining electricity system reliability.

Electricity is currently provided to the Project by Southern California Edison (SCE). SCE provides electric power to more than 15 million persons in 15 counties and in 180 incorporated cities, within a service area encompassing approximately 50,000 square miles. Based on SCE's 2018 Power Content Label Mix, SCE derives electricity from varied energy resources including: fossil fuels, hydroelectric generators, nuclear power plants, geothermal power plants, solar power generation, and wind farms. SCE also purchases from independent power producers and utilities, including out-of-state suppliers (12).

California's electricity industry is an organization of traditional utilities, private generating companies, and state agencies, each with a variety of roles and responsibilities to ensure that electrical power is provided to consumers. The California Independent Service Operator ISO is a nonprofit public benefit corporation and is the impartial operator of the State's wholesale power grid and is charged with maintaining grid reliability, and to direct uninterrupted electrical energy supplies to California's homes and communities. While utilities still own transmission assets, the ISO routes electrical power along these assets, maximizing the use of the transmission system and its power generation resources. The ISO matches buyers and sellers of electricity to ensure that enough power is available to meet demand. To these ends, every five minutes the ISO forecasts electrical demands, accounts for operating reserves, and assigns the lowest cost power plant unit to meet demands while ensuring adequate system transmission capacities and capabilities (13).

Part of the ISO's charge is to plan and coordinate grid enhancements to ensure that electrical power is provided to California consumers. To this end, transmission file annual transmission expansion/modification plans to accommodate the State's growing electrical needs. The ISO reviews and either approves or denies the proposed additions. In addition, and perhaps most importantly, the ISO works with other areas in the western United States electrical grid to ensure

that adequate power supplies are available to the State. In this manner, continuing reliable and affordable electrical power is assured to existing and new consumers throughout the State.

Table 2-2 identifies SCE's specific proportional shares of electricity sources in 2019. As indicated in Table 2-2, the 2019 SCE Power Mix has renewable energy at 35.1% of the overall energy resources. Geothermal resources are at 5.9%, wind power is at 11.5%, large hydroelectric sources are at 7.9%, solar energy is at 16%, and coal is at 0%. (14).

TABLE 2-2: SCE 2019 POWER CONTENT MIX

Energy Resources	2019 SCE Power Mix
Eligible Renewable	**35.1%**
Biomass & waste	0.6%
Geothermal	5.9%
Small Hydroelectric	1.0%
Solar	16.0%
Wind	11.5%
Coal	**0%**
Large Hydroelectric	**7.9%**
Natural Gas	**16.1%**
Nuclear	**8.2%**
Other	**0.1%**
Unspecified Sources of power*	32.6%
Total	**100%**

* "Unspecified sources of power" means electricity from transactions that are not traceable to specific generation sources.

2.3 NATURAL GAS

The following summary of natural gas customers & volumes, supplies, delivery of supplies, storage, service options, and operations is excerpted from information provided by the California Public Utilities Commission (CPUC).

> *"The CPUC regulates natural gas utility service for approximately 10.8 million customers that receive natural gas from Pacific Gas and Electric (PG&E), Southern California Gas (SoCalGas), San Diego Gas & Electric (SDG&E), Southwest Gas, and several smaller natural gas utilities. The CPUC also regulates independent storage operators: Lodi Gas Storage, Wild Goose Storage, Central Valley Storage and Gill Ranch Storage.*
>
> *California's natural gas utilities provide service to over 11 million gas meters. SoCalGas and PG&E provide service to about 5.9 million and 4.3 million customers, respectively, while SDG&E provides service to over 800, 000 customers. In 2018, California gas utilities*

forecasted that they would deliver about 4740 million cubic feet per day (MMcfd) of gas to their customers, on average, under normal weather conditions.

The overwhelming majority of natural gas utility customers in California are residential and small commercials customers, referred to as "core" customers. Larger volume gas customers, like electric generators and industrial customers, are called "noncore" customers. Although very small in number relative to core customers, noncore customers consume about 65% of the natural gas delivered by the state's natural gas utilities, while core customers consume about 35%.

A significant amount of gas (about 19%, or 1131 MMcfd, of the total forecasted California consumption in 2018) is also directly delivered to some California large volume consumers, without being transported over the regulated utility pipeline system. Those customers, referred to as "bypass" customers, take service directly from interstate pipelines or directly from California producers.

SDG&E and Southwest Gas' southern division are wholesale customers of SoCalGas, i.e., they receive deliveries of gas from SoCalGas and in turn deliver that gas to their own customers. (Southwest Gas also provides natural gas distribution service in the Lake Tahoe area.) Similarly, West Coast Gas, a small gas utility, is a wholesale customer of PG&E. Some other wholesale customers are municipalities like the cities of Palo Alto, Long Beach, and Vernon, which are not regulated by the CPUC.

Natural gas from out-of-state production basins is delivered into California via the interstate natural gas pipeline system. The major interstate pipelines that deliver out-of-state natural gas to California gas utilities are Gas Transmission Northwest Pipeline, Kern River Pipeline, Transwestern Pipeline, El Paso Pipeline, Ruby Pipeline, Mojave Pipeline, and Tuscarora. Another pipeline, the North Baja - Baja Norte Pipeline takes gas off the El Paso Pipeline at the California/Arizona border, and delivers that gas through California into Mexico. While the Federal Energy Regulatory Commission (FERC) regulates the transportation of natural gas on the interstate pipelines, and authorizes rates for that service, the California Public Utilities Commission may participate in FERC regulatory proceedings to represent the interests of California natural gas consumers.

The gas transported to California gas utilities via the interstate pipelines, as well as some of the California-produced gas, is delivered into the PG&E and SoCalGas intrastate natural gas transmission pipelines systems (commonly referred to as California's "backbone" pipeline system). Natural gas on the utilities' backbone pipeline systems is then delivered to the local transmission and distribution pipeline systems, or to natural gas storage fields. Some large volume noncore customers take natural gas delivery directly off the high-pressure backbone and local transmission pipeline systems, while core customers and other noncore customers take delivery off the utilities' distribution pipeline systems. The state's natural gas utilities operate over 100,000 miles of transmission and distribution pipelines, and thousands more miles of service lines.

Bypass customers take most of their deliveries directly off the Kern/Mojave pipeline system, but they also take a significant amount of gas from California production.

PG&E and SoCalGas own and operate several natural gas storage fields that are located within their service territories in northern and southern California, respectively. These storage fields, and four independently owned storage utilities - Lodi Gas Storage, Wild Goose Storage, Central Valley Storage, and Gill Ranch Storage - help meet peak seasonal and daily natural gas demand and allow California natural gas customers to secure natural gas supplies more efficiently. PG&E is a 25% owner of the Gill Ranch Storage field. These storage fields provide a significant amount of infrastructure capacity to help meet California's natural gas requirements, and without these storage fields, California would need much more pipeline capacity in order to meet peak gas requirements.

Prior to the late 1980s, California regulated utilities provided virtually all natural gas services to all their customers. Since then, the Commission has gradually restructured the California gas industry in order to give customers more options while assuring regulatory protections for those customers that wish to, or are required to, continue receiving utility-provided services.

The option to purchase natural gas from independent suppliers is one of the results of this restructuring process. Although the regulated utilities procure natural gas supplies for most core customers, core customers have the option to purchase natural gas from independent natural gas marketers, called "core transport agents" (CTA). Contact information for core transport agents can be found on the utilities' web sites. Noncore customers, on the other hand, make natural gas supply arrangements directly with producers or with marketers.

Another option resulting from the restructuring process occurred in 1993, when the Commission removed the utilities' storage service responsibility for noncore customers, along with the cost of this service from noncore customers' transportation rates. The Commission also encouraged the development of independent storage fields, and in subsequent years, all the independent storage fields in California were established. Noncore customers and marketers may now take storage service from the utility or from an independent storage provider (if available), and pay for that service, or may opt to take no storage service at all. For core customers, the Commission assures that the utility has adequate storage capacity set aside to meet core requirements, and core customers pay for that service.

In a 1997 decision, the Commission adopted PG&E's "Gas Accord", which unbundled PG&E's backbone transmission costs from noncore transportation rates. This decision gave customers and marketers the opportunity to obtain pipeline capacity rights on PG&E's backbone transmission pipeline system, if desired, and pay for that service at rates authorized by the Commission. The Gas Accord also required PG&E to set aside a certain amount of backbone transmission capacity in order to deliver gas to its core customers. Subsequent Commission decisions modified and extended the initial terms of the Gas Accord. The "Gas Accord" framework is still in place today for PG&E's backbone

and storage rates and services and is now simply referred to as PG&E Gas Transmission and Storage (GT&S).

In a 2006 decision, the Commission adopted a similar gas transmission framework for Southern California, called the "firm access rights" system. SoCalGas and SDG&E implemented the firm access rights system in 2008, and it is now referred to as the backbone transmission system framework. As under the PG&E backbone transmission system, SoCalGas backbone transmission costs are unbundled from noncore transportation rates. Noncore customers and marketers may obtain, and pay for, firm backbone transmission capacity at various receipt points on the SoCalGas system. A certain amount of backbone transmission capacity is obtained for core customers to assure meeting their requirements.

Many if not most noncore customers now use a marketer to provide for several of the services formerly provided by the utility. That is, a noncore customer may simply arrange for a marketer to procure its supplies, and obtain any needed storage and backbone transmission capacity, in order to assure that it will receive its needed deliveries of natural gas supplies. Core customers still mainly rely on the utilities for procurement service, but they have the option to take procurement service from a CTA. Backbone transmission and storage capacity is either set aside or obtained for core customers in amounts to assure very high levels of service.

In order properly operate their natural gas transmission pipeline and storage systems, PG&E and SoCalGas must balance the amount of gas received into the pipeline system and delivered to customers or to storage fields. Some of these utilities' storage capacity is dedicated to this service, and under most circumstances, customers do not need to precisely match their deliveries with their consumption. However, when too much or too little gas is expected to be delivered into the utilities' systems, relative to the amount being consumed, the utilities require customers to more precisely match up their deliveries with their consumption. And, if customers do not meet certain delivery requirements, they could face financial penalties. The utilities do not profit from these financial penalties - the amounts are then returned to customers as a whole. If the utilities find that they are unable to deliver all the gas that is expected to be consumed, they may even call for a curtailment of some gas deliveries. These curtailments are typically required for just the largest, noncore customers. It has been many years since there has been a significant curtailment of core customers in California." (15)

As indicated in the preceding discussions, natural gas is available from a variety of in-state and out-of-state sources and is provided throughout the state in response to market supply and demand. Complementing available natural gas resources, biogas may soon be available via existing delivery systems, thereby increasing the availability and reliability of resources in total. The CPUC oversees utility purchases and transmission of natural gas to ensure reliable and affordable natural gas deliveries to existing and new consumers throughout the State.

Based on information provided by the Project applicant, no natural gas will be used as a result of the Project, and as such use of natural gas is not considered in the analysis.

2.4 TRANSPORTATION ENERGY RESOURCES

The Project would generate additional vehicle trips with resulting consumption of energy resources, predominantly gasoline and diesel fuel. In February 2021, the Department of Motor Vehicles identified 35.8 million registered vehicles in California (16), and those vehicles consume an estimated 17.8 billion gallons of fuel each year[3]. Gasoline (and other vehicle fuels) are commercially provided commodities and would be available to the Project patrons and employees via commercial outlets.

California's on-road transportation system includes 394,383 land miles, more than 27.5 million passenger vehicles and light trucks, and almost 8.1 million medium- and heavy-duty vehicles (16). While gasoline consumption has been declining since 2008 it is still by far the dominant fuel. Petroleum comprises about 91% of all transportation energy use, excluding fuel consumed for aviation and most marine vessels (17). Nearly 17.8 billion gallons of on-highway fuel are burned each year, including 14.6 billion gallons of gasoline (including ethanol) and 3.2 billion gallons of diesel fuel (including biodiesel and renewable diesel). In 2019, Californians also used 194 million cubic feet of natural gas as a transportation fuel (18), or the equivalent of 183 billion gallons of gasoline.

[3] Fuel consumptions estimated utilizing information from EMFAC2017.

3 REGULATORY BACKGROUND

Federal and state agencies regulate energy use and consumption through various means and programs. On the federal level, the United States (U.S.) Department of Transportation, the United States Department of Energy, and the U.S. Environmental Protection Agency (EPA) are three federal agencies with substantial influence over energy policies and programs. On the state level, the CPUC and the CEC are two agencies with authority over different aspects of energy. Relevant federal and state energy-related laws and plans are summarized below.

3.1 FEDERAL REGULATIONS

3.1.1 INTERMODAL SURFACE TRANSPORTATION EFFICIENCY ACT OF 1991 (ISTEA)

The ISTEA promoted the development of inter-modal transportation systems to maximize mobility as well as address national and local interests in air quality and energy. ISTEA contained factors that Metropolitan Planning Organizations (MPOs) were to address in developing transportation plans and programs, including some energy-related factors. To meet the new ISTEA requirements, MPOs adopted explicit policies defining the social, economic, energy, and environmental values guiding transportation decisions.

3.1.2 THE TRANSPORTATION EQUITY ACT FOR THE 21ST CENTURY (TEA-21)

The TEA-21 was signed into law in 1998 and builds upon the initiatives established in the ISTEA legislation, discussed above. TEA-21 authorizes highway, highway safety, transit, and other efficient surface transportation programs. TEA-21 continues the program structure established for highways and transit under ISTEA, such as flexibility in the use of funds, emphasis on measures to improve the environment, and focus on a strong planning process as the foundation of good transportation decisions. TEA-21 also provides for investment in research and its application to maximize the performance of the transportation system through, for example, deployment of Intelligent Transportation Systems, to help improve operations and management of transportation systems and vehicle safety.

3.2 CALIFORNIA REGULATIONS

3.2.1 INTEGRATED ENERGY POLICY REPORT (IEPR)

Senate Bill 1389 (Bowen, Chapter 568, Statutes of 2002) requires the CEC to prepare a biennial integrated energy policy report that assesses major energy trends and issues facing the state's electricity, natural gas, and transportation fuel sectors and provides policy recommendations to conserve resources; protect the environment; ensure reliable, secure, and diverse energy supplies; enhance the state's economy; and protect public health and safety (Public Resources Code § 25301a]). The Energy Commission prepares these assessments and associated policy recommendations every two years, with updates in alternate years, as part of the Integrated Energy Policy Report.

The 2020 IEPR was adopted March 23, 2021, and continues to work towards improving electricity, natural gas, and transportation fuel energy use in California. The 2020 IEPR focuses on a variety of topics such as including the environmental performance of the electricity generation system, landscape-scale planning, the response to the gas leak at the Aliso Canyon natural gas storage facility, transportation fuel supply reliability issues, updates on Southern California electricity reliability, methane leakage, climate adaptation activities for the energy sector, climate and sea level rise scenarios, and the California Energy Demand Forecast (19). The 2021 IEPR is currently in progress but is not anticipated to be adopted until early 2022.

3.2.2 State of California Energy Plan

The CEC is responsible for preparing the State Energy Plan, which identifies emerging trends related to energy supply, demand, conservation, public health and safety, and the maintenance of a healthy economy. The Plan calls for the state to assist in the transformation of the transportation system to improve air quality, reduce congestion, and increase the efficient use of fuel supplies with the least environmental and energy costs. To further this policy, the plan identifies several strategies, including assistance to public agencies and fleet operators and encouragement of urban designs that reduce vehicle miles traveled (VMT) and accommodate pedestrian and bicycle access.

3.2.3 California Code Title 24, Part 6, Energy Efficiency Standards

California Code of Regulations (CCR) Title 24 Part 6: California's Energy Efficiency Standards for Residential and Nonresidential Buildings (Energy Code), was first adopted in 1978 in response to a legislative mandate to reduce California's energy consumption. The standards are updated periodically to allow consideration and possible incorporation of new energy efficient technologies and methods. Energy efficient buildings require less electricity; therefore, increased energy efficiency reduces fossil fuel consumption and decreases greenhouse gas (GHG) emissions. The 2019 version of Title 24 was adopted by the CEC and became effective on January 1, 2020. The 2019 Energy Code is applicable to building permit applications submitted on or after January 1, 2020. The 2019 Energy Code requires solar PV systems for new homes, establishes requirements for newly constructed healthcare facilities, encourages demand responsive technologies for residential buildings, and updates indoor and outdoor lighting standards for nonresidential buildings. The CEC anticipates that single-family homes built with the 2019 standards use approximately 7% less energy compared to the residential homes built under the 2016 Energy Code. Nonresidential buildings are approximately 30% less energy due to lighting upgrades compared to the 2016 Energy Code (20).

3.2.4 AB 1493 Pavley Regulations and Fuel Efficiency Standards

California AB 1493, enacted on July 22, 2002, required CARB to develop and adopt regulations that reduce GHGs emitted by passenger vehicles and light duty trucks. Under this legislation, CARB adopted regulations to reduce GHG emissions from non-commercial passenger vehicles (cars and light-duty trucks). Although aimed at reducing GHG emissions, specifically, a co-benefit of the Pavley standards is an improvement in fuel efficiency and consequently a reduction in fuel consumption.

3.2.5 CALIFORNIA'S RENEWABLE PORTFOLIO STANDARD (RPS)

First established in 2002 under Senate Bill (SB) 1078, California's Renewable Portfolio Standards (RPS) requires retail sellers of electric services to increase procurement from eligible renewable resources to 33% of total retail sales by 2020 (21).

3.2.6 CLEAN ENERGY AND POLLUTION REDUCTION ACT OF 2015 (SB 350)

In October 2015, the legislature approved, and the Governor signed SB 350, which reaffirms California's commitment to reducing its GHG emissions and addressing climate change. Key provisions include an increase in the renewables portfolio standard (RPS), higher energy efficiency requirements for buildings, initial strategies towards a regional electricity grid, and improved infrastructure for electric vehicle charging stations. Specifically, SB 350 requires the following to reduce statewide GHG emissions:

Increase the amount of electricity procured from renewable energy sources from 33% to 50% by 2030, with interim targets of 40% by 2024, and 25% by 2027.

Double the energy efficiency in existing buildings by 2030. This target will be achieved through the California Public Utility Commission (CPUC), the California Energy Commission (CEC), and local publicly owned utilities.

Reorganize the Independent System Operator (ISO) to develop more regional electrify transmission markets and to improve accessibility in these markets, which will facilitate the growth of renewable energy markets in the western United States (California Leginfo 2015).

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4 PROJECT ENERGY DEMANDS AND ENERGY EFFICIENCY MEASURES

4.1 EVALUATION CRITERIA

In compliance with Appendix G of the *State CEQA Guidelines* (1), this report analyzes the Project's anticipated energy use during construction and operations to determine if the Project would:

- Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during Project construction or operation; or
- Conflict with or obstruct a state or local plan for renewable energy or energy efficiency

4.2 METHODOLOGY

Appendix F of the *State CEQA Guidelines* (22), provides some guidance for assessing these criteria, which implies that the means of achieving the goal of energy conservation includes decreasing overall per capita energy consumption; decreasing reliance on fossil fuels such as coal, natural gas, and oil; and increasing reliance on renewable energy sources. Additionally, the CEQA Guidelines state "[a] lead agency may consider the extent to which an energy source serving the project has already undergone environmental review that adequately analyzed and mitigated the effects of energy production."

Information from the CalEEMod Version 2020.4.0 outputs for the *State Street Village Air Quality Impact Analysis* (Urban Crossroads, Inc.) (AQIA) (23) was utilized in this analysis, detailing Project related construction equipment, transportation energy demands, and facility energy demands.

4.2.1 CALEEMOD

In June 2021, the SCAQMD, in conjunction with the California Air Pollution Control Officers Association and other California air districts, released the latest version of the CalEEMod Version 2020.4.0. The purpose of this model is to calculate construction-source and operational-source criteria pollutants and GHG emissions from direct and indirect sources as well as energy usage. (24). Accordingly, the latest version of CalEEMod has been used to determine the proposed Project's anticipated transportation and facility energy demands. Output from the annual CalEEMod runs is provided in Appendix 4.1.

4.2.2 EMISSION FACTORS MODEL

On August 19, 2019, the EPA approved the 2017 version of the EMissions FACtor model (EMFAC) web database for use in State Implementation Plan and transportation conformity analyses. EMFAC2017 is a mathematical model that was developed to calculate emission rates, fuel consumption, VMT from motor vehicles that operate on highways, freeways, and local roads in California and is commonly used by the CARB to project changes in future emissions from on-road mobile sources (25). This energy study utilizes the different fuel types for each vehicle class from the annual EMFAC2017 emission inventory in order to derive the average vehicle fuel economy which is then used to determine the estimated annual fuel consumption associated with vehicle usage during Project construction and operational activities. For purposes of

analysis, the 2022 and 2026 analysis years were utilized to determine the average vehicle fuel economy for construction and operation the Project.

4.3 CONSTRUCTION ENERGY DEMANDS

4.3.1 CONSTRUCTION POWER COST AND ELECTRICITY USAGE

The focus within this section is the energy implications of the construction process, specifically the power cost from on-site electricity consumption during construction of the proposed Project.

CONSTRUCTION DURATION

Construction is expected to commence in November 2022 and will last through December 2026. The construction schedule utilized in the analysis, shown in Table 4-1, represents a "worst-case" analysis scenario. Should construction occur any time after the respective dates, impacts would be reduced since emission factors for construction decrease as time passes due to emission regulations becoming more stringent[4]. The duration of construction activity and associated equipment represents a reasonable approximation of the expected construction fleet as required per *CEQA Guidelines* (1). The duration of construction activity was based on an estimated schedule provided by the Project applicant and an opening year of 2026..

TABLE 4-1: CONSTRUCTION DURATION

Phase Name	Start Date	End Date	Days
Demolition	11/1/2022	2/24/2023	84
Site Preparation	12/5/2022	5/26/2023	125
Grading	1/2/2023	6/30/2023	130
Building Construction	3/6/2023	6/26/2026	865
Paving	1/5/2026	6/26/2026	125
Architectural Coating	1/5/2026	6/26/2026	125

Source: CalEEMod, Appendix 4.1.

Based on the *2021 National Construction Estimator*, Richard Pray (2021) (26), the typical power cost per 1,000 sf of construction per month is estimated to be $2.37. Based on the Project plans, the proposed Project includes the development of approximately 742,703 sf residential land uses, 97,478 square feet of commercial (office and retail) space, and 339,786 square feet of parking. Based on information provided in the AQIA, construction activities are anticipated to occur over the course of 43 months (23). Based on Table 4-2, the total power cost of the on-site electricity usage during the construction of the Project is estimated to be approximately $120,499.

[4] As shown in the CalEEMod User's Guide, Section 4.3 "OFFROAD Equipment" as the analysis year increases, emission factors for the same equipment pieces decrease due to the natural turnover of older equipment being replaced by newer less polluting equipment and new regulatory requirements.

TABLE 4-2: CONSTRUCTION POWER COST

Land Use	Power Cost (per 1,000 SF of building per month of construction)	Total Building Size (1,000 SF)	Construction Duration (months)	Total Project Construction Power Cost
Apartments	$2.37	742.703	43	$75,688.86
Retail	$2.37	39.000	43	$3,974.49
Pharmacy	$2.37	14.500	43	$1,477.70
Quality Restaurant	$2.37	2.200	43	$224.20
Sit-Down Restaurant	$2.37	16.000	43	$1,630.56
Fast-Food Restaurant	$2.37	16.000	43	$1,630.56
Office	$2.37	12.220	43	$1,245.34
Enclosed Parking with Elevator	$2.37	339.786	43	$34,627.59
TOTAL PROJECT CONSTRUCTION COST				***$120,499.30***

The SCE's general service rate schedule were used to determine the Project's electrical usage. As of June 1, 2021, SCE's general service rate is $0.11 per kilowatt hours (kWh) of electricity for residential services (27). As shown on Table 4-3, the total electricity usage from on-site Project construction related activities is estimated to be approximately 1,095,448 kWh.

TABLE 4-3: CONSTRUCTION ELECTRICITY USAGE

Land Use	Cost per kWh	Total Project Construction Electricity Usage (kWh)
Apartments	$0.11	688,081
Retail	$0.11	36,132
Pharmacy	$0.11	13,434
Quality Restaurant	$0.11	2,038
Sit-Down Restaurant	$0.11	14,823
Fast-Food Restaurant	$0.11	14,823
Office	$0.11	11,321
Enclosed Parking with Elevator	$0.11	314,796
TOTAL PROJECT CONSTRUCTION ELECTRICTY USAGE (kWh)		***1,095,448***

4.3.2 CONSTRUCTION EQUIPMENT FUEL ESTIMATES

Fuel consumed by construction equipment would be the primary energy resource expended over the course of Project construction.

CONSTRUCTION EQUIPMENT

Consistent with industry standards and typical construction practices, each piece of equipment listed in Table 4-4 will operate up to a total of eight (8) hours per day, or more than two-thirds of

the period during which construction activities are allowed pursuant to the code. It should be noted that most pieces of equipment would likely operate for fewer hours per day. A summary of construction equipment assumptions by phase is provided at Table 4-4.

TABLE 4-4: CONSTRUCTION EQUIPMENT ASSUMPTIONS

Phase Name	Equipment	Amount	Hours Per Day
Demolition	Concrete/Industrial Saws	2	8
	Excavators	5	8
	Rubber Tired Dozers	3	8
Site Preparation	Crawler Tractors	4	8
	Rubber Tired Dozers	3	8
Grading	Crawler Tractors	2	8
	Excavators	3	8
	Graders	1	8
	Rubber Tired Dozers	1	8
	Scrapers	2	8
Building Construction	Cranes	1	8
	Forklifts	3	8
	Generator Sets	1	8
	Tractors/Loaders/Backhoes	3	8
	Welders	1	8
Paving	Pavers	2	8
	Paving Equipment	2	8
	Rollers	2	8
Architectural Coating	Air Compressors	1	8

Source: CalEEMod, Appendix 4.1

Project construction activity timeline estimates, construction equipment schedules, equipment power ratings, load factors, and associated fuel consumption estimates are presented in Table 4-5. Eight-hour daily use of all equipment is assumed. The aggregate fuel consumption rate for all equipment is estimated at 18.5 horsepower hour per gallon (hp-hr-gal.), obtained from CARB 2018 Emissions Factors Tables and cited fuel consumption rate factors presented in Table D-24 of the Moyer guidelines (28).

Calculations assume all construction equipment is diesel-powered consistent with industry standards. Diesel fuel would be supplied by existing commercial fuel providers serving the County. As presented in Table 4-5, Project construction activities would consume an estimated 329,564 gallons of diesel fuel. Project construction would represent a “single-event” diesel fuel demand and would not require on-going or permanent commitment of diesel fuel resources for this purpose.

TABLE 4-5: CONSTRUCTION EQUIPMENT FUEL CONSUMPTION ESTIMATES

Activity/Duration	Duration (Days)	Equipment	HP Rating	Quantity	Usage Hours	Load Factor	HP-hrs/day	Total Fuel Consumption (gal. diesel fuel)
Demolition	84	Concrete/Industrial Saws	81	2	8	0.73	946	4,296
		Excavators	158	5	8	0.38	2,402	10,905
		Rubber Tired Dozers	247	3	8	0.40	2,371	10,767
Site Preparation	125	Crawler Tractors	97	4	8	0.37	1,148	7,760
		Rubber Tired Dozers	247	3	8	0.40	2,371	16,022
Grading	130	Crawler Tractors	97	2	8	0.37	574	4,035
		Excavators	158	3	8	0.38	1,441	10,126
		Graders	187	1	8	0.41	613	4,310
		Rubber Tired Dozers	247	1	8	0.40	790	5,554
Building Construction	865	Scrapers	367	2	8	0.48	2,819	131,787
		Cranes	231	1	8	0.29	536	25,058
		Forklifts	89	3	8	0.20	427	19,974
		Generator Sets	84	1	8	0.74	497	23,251
		Tractors/Loaders/Backhoes	97	3	8	0.37	861	40,274
Paving	125	Welders	46	1	8	0.45	166	1,119
		Pavers	130	2	8	0.42	874	5,903
		Paving Equipment	132	2	8	0.36	760	5,137
Architectural Coating	125	Rollers	80	2	8	0.38	486	3,286
CONSTRUCTION FUEL DEMAND (GALLONS DIESEL FUEL)								***329,564***

4.3.3 CONSTRUCTION TRIPS AND VMT

The worker trips identified in Table 4-6 are based on CalEEMod standard generation factors and demolition and soil hauling information was provided by the Project applicant.

TABLE 4-6: CONSTRUCTION TRIPS AND VMT

Phase Name	Worker Trips / Day	Vendor Trips / Day	Hauling Trips / Day	Worker Trip Length	Vendor Trip Length	Hauling Trip Length
Site Preparation	30	0	2,274	14.7	6.9	20
Grading	18	0	0	14.7	6.9	20
Building Construction	23	0	6,125	14.7	6.9	20
Paving	767	176	0	14.7	6.9	20
Architectural Coating	15	0	0	14.7	6.9	20

Source: CalEEMod, Appendix 4.1.

4.3.4 CONSTRUCTION WORKER FUEL ESTIMATES

With respect to estimated VMT for the Project, the construction worker trips would generate an estimated 10,175,561 VMT during the 43 months of construction (23). Based on CalEEMod methodology, emissions from construction worker trips are generated by light-duty-auto vehicles (LDA), light-duty-trucks 1 (LDT1[5]), and light-duty-trucks 2 (LDT2[6]). Based on EMFAC2017 vehicle population data for Year 2022, 70.7% of these vehicles would be LDA, 7.2% would be LDT1, and 22.1% would be LDT2. Data regarding Project related construction worker trips were based on EMFAC2017 inputs utilized within the AQIA.

Vehicle fuel efficiencies for LDA, LDT1, and LDT2 were estimated using information generated by EMFAC2017. EMFAC2017 is a mathematical model that was developed to calculate emission rates, fuel consumption, and VMT from motor vehicles that operate on highways, freeways, and local roads in California and is commonly used by the CARB to project changes in future emissions from on-road mobile sources (25). EMFAC2017 was run for the LDA, LDT1, and LDT2 vehicle class within the San Bernardino-South Coast sub-area for the 2022 calendar year. Data from EMFAC2017 is shown in Appendix 4.2. Using the static year 2022 is considered conservative for estimating construction worker fuel consumption as it does not account for fuel efficiency improvements each year.

As generated by EMFAC2017, an aggregated fuel economy of LDAs ranging from model year 1981 to model year 2026 are estimated to have a fuel efficiency of 31.93 miles per gallon (mpg). Table 4-7 provides an estimated annual fuel consumption resulting from LDAs related to the Project construction worker trips. Based on Table 4-7, it is estimated that 225,122 gallons of fuel will be consumed related to construction worker trips during full construction of the Project.

[5] Vehicles under the LDT1 category have a gross vehicle weight rating (GVWR) of less than 6,000 lbs. and equivalent test weight (ETW) of less than or equal to 3,750 lbs.

[6] Vehicles under the LDT2 category have a GVWR of less than 6,000 lbs. and ETW between 3,751 lbs. and 5,750 lbs.

TABLE 4-7: CONSTRUCTION WORKER FUEL CONSUMPTION ESTIMATES (LDA)

Construction Activity	Duration (Days)	Worker Trips/ Day	Trip Length (miles)	Vehicle Miles Traveled	Average Vehicle Fuel Economy (mpg)	Estimated Fuel Consumption (gallons)
Demolition	84	21	14.7	26,169	31.93	820
Site Preparation	125	13	14.7	23,365	31.93	732
Grading	130	16	14.7	31,049	31.93	972
Building Construction	865	542	14.7	6,889,534	31.93	215,769
Paving	125	11	14.7	19,471	31.93	610
Architectural Coating	125	108	14.7	198,600	31.93	6,220
TOTAL CONSTRUCTION WORKER (LDA) FUEL CONSUMPTION						***225,122***

The EMFAC2017 aggregated fuel economy of LDT1s ranging from model year 1981 to model year 2026 are estimated to have a fuel efficiency 26.79 mpg. Table 4-8 provides an estimated annual fuel consumption resulting from LDT1s related to the Project construction worker trips. Based on Table 4-8, it is estimated that 27,249 gallons of fuel will be consumed related to construction worker trips during full construction of the Project.

TABLE 4-8: CONSTRUCTION WORKER FUEL CONSUMPTION ESTIMATES (LDT1)

Construction Activity	Duration (Days)	Worker Trips / Day	Trip Length (miles)	Vehicle Miles Traveled	Average Vehicle Fuel Economy (mpg)	Estimated Fuel Consumption (gallons)
Demolition	84	2	14.7	2,658	26.79	99
Site Preparation	125	1	14.7	2,373	26.79	89
Grading	130	2	14.7	3,153	26.79	118
Building Construction	865	55	14.7	699,664	26.79	26,117
Paving	125	1	14.7	1,977	26.79	74
Architectural Coating	125	11	14.7	20,169	26.79	753
TOTAL CONSTRUCTION WORKER (LDT2) FUEL CONSUMPTION						***27,249***

The EMFAC2017 aggregated fuel economy of LDT2s ranging from model year 1981 to model year 2026 are estimated to have a fuel efficiency of 25.15 mpg. Table 4-9 provides an estimated annual fuel consumption resulting from LDT2s related to the Project construction worker trips. Based on Table 4-9, it is estimated that 89,774 gallons of fuel will be consumed related to construction worker trips during full construction of the Project.

TABLE 4-9: CONSTRUCTION WORKER FUEL CONSUMPTION ESTIMATES (LDT2)

Construction Activity	Duration (Days)	Worker Trips / Day	Trip Length (miles)	Vehicle Miles Traveled	Average Vehicle Fuel Economy (mpg)	Estimated Fuel Consumption (gallons)
Demolition	84	7	14.7	8,218	25.15	327
Site Preparation	125	4	14.7	7,337	25.15	292
Grading	130	5	14.7	9,751	25.15	388
Building Construction	865	170	14.7	2,163,590	25.15	86,044
Paving	125	3	14.7	6,115	25.15	243
Architectural Coating	125	34	14.7	62,368	25.15	2,480
TOTAL CONSTRUCTION WORKER (LDT1) FUEL CONSUMPTION						***89,774***

It should be noted that construction worker trips would represent a "single-event" gasoline fuel demand and would not require on-going or permanent commitment of fuel resources for this purpose.

4.3.5 CONSTRUCTION VENDOR AND HAULING FUEL ESTIMATES

Construction vendor trips (vehicles that deliver materials to the site during construction) are estimated to generate 158,769 VMT and hauling is anticipated to generate in 122,500 VMT along area roadways for the Project over the duration of construction activity (29). Based on the CalEEMod User Manual, vehicles associated with vendor trips are limited to medium-heavy duty trucks (MHDT) and heavy-heavy duty trucks (HHDT) (30). Similar to LDA, LDT1, and LDT fuel estimates, vehicle fuel efficiencies for MHDTs and HHDTs for vending trips were estimated using information generated within EMFAC2017. For debris and soil hauling all trucks were assumed to be HHDT constituent with CalEEMod standard settings. EMFAC2017 was run for the MHDT and HHDT vehicle classes within the California sub-area for the 2022 calendar year. Data from EMFAC2017 is shown in Appendix 4.2.

As generated by EMFAC2017, an aggregated fuel economy of MHDTs ranging from model year 1981 to model year 2026 are estimated to have a fuel efficiency of 10.08 mpg. Based on Table 4-10, it is estimated that 7,832 gallons of fuel will be consumed related to construction vendor trips (MHDTs) during full construction of the Project.

TABLE 4-10: CONSTRUCTION VENDOR FUEL CONSUMPTION ESTIMATES (MHDT)

Construction Activity	Duration (Days)	Vendor Trips / Day	Trip Length (miles)	Vehicle Miles Traveled	Average Vehicle Fuel Economy (mpg)	Estimated Fuel Consumption (gallons)
2020						
Grading	130	88	6.9	78,936	10.08	7,832
TOTAL CONSTRUCTION VENDOR (MHDT) FUEL CONSUMPTION						***7,832***

Tables 4-11 shows the estimated fuel economy of HHDTs accessing the Project site. As generated by EMFAC2017, an aggregated fuel economy of HHDTs ranging from model year 1981 to model year 2026 are estimated to have a fuel efficiency of 6.33 mpg. Based on Tables 4-11, fuel consumption from construction vendor trips (HHDTs) will total approximately 12,613 gallons.

TABLE 4-11: CONSTRUCTION VENDOR FUEL CONSUMPTION ESTIMATES (HHDT)

Construction Activity	Duration (Days)	Vendor Trips / Day	Trip Length (miles)	Vehicle Miles Traveled	Average Vehicle Fuel Economy (mpg)	Estimated Fuel Consumption (gallons)
2020						
Grading	130	89	6.9	79,833	6.33	12,613
TOTAL CONSTRUCTION VENDOR (HHDT) FUEL CONSUMPTION						***12,613***

As generated by EMFAC2017, HHDTs are estimated to have a fuel efficiency of 6.33 mpg in 2022. Based on Table 4-12, it is estimated that 26,539 gallons of fuel will be consumed related to construction vendor trips (MHDTs) during full construction of the Project.

TABLE 4-12: CONSTRUCTION HAULING FUEL CONSUMPTION ESTIMATES (HHDT)

Construction Activity	Duration (Days)	Hauling Trips / Day	Trip Length (miles)	Vehicle Miles Traveled	Average Vehicle Fuel Economy (mpg)	Estimated Fuel Consumption (gallons)
2020						
Demolition	84	27	20	45,480	6.33	7,185
Grading	130	47	20	122,500	6.33	19,354
TOTAL CONSTRUCTION HAULING (HHDT) FUEL CONSUMPTION						***26,539***

It should be noted that Project construction vendor trips would represent a "single-event" diesel fuel demand and would not require on-going or permanent commitment of diesel fuel resources for this purpose.

4.3.6 CONSTRUCTION ENERGY EFFICIENCY/CONSERVATION MEASURES

Starting in 2014, CARB adopted the nation's first regulation aimed at cleaning up off-road construction equipment such as bulldozers, graders, and backhoes. These requirements ensure fleets gradually turnover the oldest and dirtiest equipment to newer, cleaner models and prevent fleets from adding older, dirtier equipment. As such, the equipment used for Project construction would conform to CARB regulations and California emissions standards. It should also be noted that there are no unusual Project characteristics or construction processes that would require the use of equipment that would be more energy intensive than is used for comparable activities; or equipment that would not conform to current emissions standards (and related fuel efficiencies). Equipment employed in construction of the Project would therefore not result in inefficient wasteful, or unnecessary consumption of fuel.

Construction contractors would be required to comply with applicable CARB regulation regarding retrofitting, repowering, or replacement of diesel off-road construction equipment. Additionally, CARB has adopted the Airborne Toxic Control Measure to limit heavy-duty diesel motor vehicle idling in order to reduce public exposure to diesel particulate matter and other Toxic Air Contaminants. Compliance with anti-idling and emissions regulations would result in a more efficient use of construction-related energy and the minimization or elimination of wasteful or unnecessary consumption of energy. Idling restrictions and the use of newer engines and equipment would result in less fuel combustion and energy consumption.

Additional construction-source energy efficiencies would occur due to required California regulations and best available control measures. For example, CCR Title 13, Motor Vehicles, section 2449(d)(3) Idling, limits idling times of construction vehicles to no more than five minutes, thereby precluding unnecessary and wasteful consumption of fuel due to unproductive idling of construction equipment. Section 2449(d)(3) requires that "grading plans shall reference the requirement that a sign shall be posted on-site stating that construction workers need to shut off engines at or before five minutes of idling." In this manner, construction equipment operators are required to be informed that engines are to be turned off at or prior to five minutes of idling. Enforcement of idling limitations is realized through periodic site inspections conducted by County building officials, and/or in response to citizen complaints.

A full analysis related to the energy needed to form construction materials is not included in this analysis due to a lack of detailed Project-specific information on construction materials. At this time, an analysis of the energy needed to create Project-related construction materials would be extremely speculative and thus has not been prepared.

In general, the construction processes promote conservation and efficient use of energy by reducing raw materials demands, with related reduction in energy demands associated with raw materials extraction, transportation, processing, and refinement. Use of materials in bulk reduces energy demands associated with preparation and transport of construction materials as well as the transport and disposal of construction waste and solid waste in general, with corollary reduced demands on area landfill capacities and energy consumed by waste transport and landfill operations.

4.4 Operational Energy Demands

Energy consumption in support of or related to Project operations would include transportation energy demands (energy consumed by passenger car and truck vehicles accessing the Project site) and facilities energy demands (energy consumed by building operations and site maintenance activities).

4.4.1 Transportation Energy Demands

Energy that would be consumed by Project-generated traffic is a function of total VMT and estimated vehicle fuel economies of vehicles accessing the Project site. As shown in Table 4-13, the Project will result in 4,191,506 annual VMT and an estimated annual fuel consumption of 146,977 gallons of fuel.

TABLE 4-13: TOTAL PROJECT-GENERATED TRAFFIC ANNUAL FUEL CONSUMPTION

Vehicle Type	Annual Miles Traveled	Average Vehicle Fuel Economy (mpg)	Estimated Annual Fuel Consumption (gallons)
LDA	2,267,156	36.03	62,932
LDT1	263,009	30.05	8,753
LDT2	780,215	28.99	26,909
MDV	535,612	23.38	22,914
LHD1	99,624	14.58	6,834
LHD2	27,706	14.79	1,873
MHD	51,694	10.89	4,746
HHD	38,583	7.03	5,489
OBUS	3,424	6.89	497
UBUS	2,058	4.73	435
MCY	104,201	36.90	2,824
SBUS	3,160	8.48	373
MH	15,064	6.28	2,398
Total (All Vehicles)	**4,191,506**	**NA**	**146,977**

4.4.2 FACILITY ENERGY DEMANDS

Project building operations activities would result in the consumption of natural gas and electricity. Natural gas would be supplied to the Project by SoCalGas; electricity would be supplied to the Project by SCE. As previously stated, the analysis herein assumes compliance with the 2019 Title 24 Standards. Annual natural gas and electricity demands of the Project are summarized in Table 4-14 and provided in Appendices 4.1.

4.4.3 OPERATIONAL ENERGY EFFICIENCY/CONSERVATION MEASURES

Energy efficiency/energy conservation attributes of the Project would be complemented by increasingly stringent state and federal regulatory actions addressing vehicle fuel economies and vehicle emissions standards; and enhanced building/utilities energy efficiencies mandated under California building codes (e.g., Title24, California Green Building Standards Code).

ENHANCED VEHICLE FUEL EFFICIENCIES

Project annual fuel consumption estimates presented previously in Table 4-13 represent likely potential maximums that would occur for the Project. Under subsequent future conditions, average fuel economies of vehicles accessing the Project site can be expected to improve as older, less fuel-efficient vehicles are removed from circulation, and in response to fuel economy and emissions standards imposed on newer vehicles entering the circulation system.

TABLE 4-14: PROJECT ANNUAL OPERATIONAL ENERGY DEMAND SUMMARY

Natural Gas Demand	kBTU/year
Apartments	9,447,140
Retail	63,570
Pharmacy	23,635
Quality Restaurant	506,726
Sit-Down Restaurant	3,685,280
Fast-Food Restaurant	3,685,280
Office	126,009
Enclosed Parking with Elevator	0
TOTAL PROJECT NATURAL GAS DEMAND	***10,041,071***

Electricity Demand	kWh/year
Apartments	2,783,080
Retail	509,730
Pharmacy	189,515
Quality Restaurant	95,194
Sit-Down Restaurant	692,320
Fast-Food Restaurant	692,320
Office	152,775
Enclosed Parking with Elevator	2,733,054
TOTAL PROJECT ELECTRICITY DEMAND	***3,577,519***

kBTU – kilo-British Thermal Units
kWh – Kilo Watt Hours

Enhanced fuel economies realized pursuant to federal and state regulatory actions, and related transition of vehicles to alternative energy sources (e.g., electricity, natural gas, biofuels, hydrogen cells) would likely decrease future gasoline fuel demands per VMT. Location of the Project proximate to regional and local roadway systems tends to reduce VMT within the region, acting to reduce regional vehicle energy demands.

4.5 SUMMARY

4.5.1 CONSTRUCTION ENERGY DEMANDS

The estimated power cost of on-site electricity usage during the construction of the Project is assumed to be approximately $120,499.30. Additionally, based on the assumed power cost, it is estimated that the total electricity usage during construction, after full Project build-out, is calculated to be approximately 1,095,448 kWh.

Construction equipment used by the Project would result in single event consumption of approximately 329,564 gallons of diesel fuel. Construction equipment use of fuel would not be atypical for the type of construction proposed because there are no aspects of the Project's

proposed construction process that are unusual or energy-intensive, and Project construction equipment would conform to the applicable CARB emissions standards, acting to promote equipment fuel efficiencies.

CCR Title 13, Title 13, Motor Vehicles, section 2449(d)(3) Idling, limits idling times of construction vehicles to no more than 5 minutes, thereby precluding unnecessary and wasteful consumption of fuel due to unproductive idling of construction equipment. BACMs inform construction equipment operators of this requirement. Enforcement of idling limitations is realized through periodic site inspections conducted by County building officials, and/or in response to citizen complaints.

Construction worker trips for full construction of the Project would result in the estimated fuel consumption of 342,146 gallons of fuel. Additionally, fuel consumption from construction vendor and hauling trips (MHDTs and HHDTs) will total approximately 46,984 gallons. Diesel fuel would be supplied by regional commercial vendors. Indirectly, construction energy efficiencies and energy conservation would be achieved using bulk purchases, transport and use of construction materials. The 2020 IEPR released by the CEC has shown that fuel efficiencies are getting better within on and off-road vehicle engines due to more stringent government requirements (19). As supported by the preceding discussions, Project construction energy consumption would not be considered inefficient, wasteful, or otherwise unnecessary.

4.5.2 Operational Energy Demands

Transportation Energy Demands

Annual vehicular trips and related VMT generated by the operation of the Project would result in a fuel demand of 146,977 gallons of fuel.

Fuel would be provided by current and future commercial vendors. Trip generation and VMT generated by the Project are consistent with other mixed residential and commercial uses of similar scale and configuration, as reflected respectively in the Institute of Transportation Engineers Trip Generation Manual (10th Ed., 2017); and CalEEMod. As such, Project operations would not result in excessive and wasteful vehicle trips and VMT, nor excess and wasteful vehicle energy consumption compared to other residential developments of similar size.

In addition, enhanced fuel economies realized pursuant to federal and state regulatory actions, and related transition of vehicles to alternative energy sources (e.g., electricity, natural gas, biofuels, hydrogen cells) would likely decrease future gasoline fuel demands per VMT in the future. Location of the Project proximate to regional and local roadway systems tends to reduce VMT within the region, acting to reduce regional vehicle energy demands. The Project would implement sidewalks, facilitating and encouraging pedestrian access. Facilitating pedestrian and bicycle access would reduce VMT and associated energy consumption. In compliance with the California Green Building Standards Code and City requirements, the Project would promote the use of bicycles as an alternative mean of transportation by providing short-term and/or long-term bicycle parking accommodations. As supported by the preceding discussions, Project transportation energy consumption would not be considered inefficient, wasteful, or otherwise unnecessary.

FACILITY ENERGY DEMANDS

Project facility operational energy demands are estimated at: 10,041,071 kBTU/year of natural gas; and 3,577,519 kWh/year of electricity. Natural gas would be supplied to the Project by SoCalGas; electricity would be supplied by SCE. The Project proposes conventional residences, retail spaces, and offices that reflect contemporary energy efficient/energy conserving designs and operational programs. The Project does not propose uses that are inherently energy intensive and the energy demands in total would be comparable to other mixed use developments of similar scale and configuration.

Lastly, the Project will comply with the applicable Title 24 standards. Compliance itself with applicable Title 24 standards will ensure that the Project energy demands would not be inefficient, wasteful, or otherwise unnecessary.

4.6 ENERGY FINDINGS AND RECOMMENDATIONS

4.6.1 ENERGY IMPACT 1

Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation.

As supported by the preceding analyses, Project construction and operations would not result in the inefficient, wasteful, or unnecessary consumption of energy. The Project would therefore not cause or result in the need for additional energy producing or transmission facilities. The Project would not engage in wasteful or inefficient uses of energy and aims to achieve energy conservations goals within the State of California.

4.6.2 ENERGY IMPACT 2

Conflict with or obstruct a state or local plan for renewable energy or energy efficiency.

The Project's consistency with the applicable state and local plans is discussed below.

CONSISTENCY WITH ISTEA

Transportation and access to the Project site is provided by the local and regional roadway systems. The Project would not interfere with, nor otherwise obstruct intermodal transportation plans or projects that may be realized pursuant to the ISTEA because Southern California Association of Governments is not planning for intermodal facilities on or through the Project site.

CONSISTENCY WITH TEA-21

The Project site is located near major transportation corridors with proximate access to the Interstate freeway system. The site selected for the Project facilitates access acts to reduce vehicle miles traveled, takes advantage of existing infrastructure systems, and promotes land use compatibilities through collocation of similar uses. The Project supports the strong planning processes emphasized under TEA-21. The Project is therefore consistent with, and would not otherwise interfere with, nor obstruct implementation of TEA-21.

CONSISTENCY WITH IEPR

Electricity may be provided to the Project by SCE. SCE's *Clean Power and Electrification Pathway* white paper builds on existing state programs and policies. As such, the Project is consistent with, and would not otherwise interfere with, nor obstruct implementation the goals presented in the 2020 IEPR.

CONSISTENCY WITH STATE OF CALIFORNIA ENERGY PLAN

The Project site is located proximate to transportation corridors with access to the Interstate freeway system. The site selected for the Project is infill and facilitates access and takes advantage of existing infrastructure systems. The Project therefore supports urban design and planning processes identified under the State of California Energy Plan, is consistent with, and would not otherwise interfere with, nor obstruct implementation of the State of California Energy Plan.

CONSISTENCY WITH CALIFORNIA CODE TITLE 24, PART 6, ENERGY EFFICIENCY STANDARDS

The 2019 version of Title 24 was adopted by the California Energy Commission (CEC) and became effective on January 1, 2020. It should be noted that the analysis herein assumes compliance with the 2019 Title 24 Energy Efficiency Standards, which are incorporated into CalEEMod.

CONSISTENCY WITH AB 1493

AB 1493 is not applicable to the Project as it is a statewide measure establishing vehicle emissions standards. No feature of the Project would interfere with implementation of the requirements under AB 1493.

CONSISTENCY WITH RPS

California's Renewable Portfolio Standard is not applicable to the Project as it is a statewide measure that establishes a renewable energy mix. No feature of the Project would interfere with implementation of the requirements under RPS.

CONSISTENCY WITH SB 350

The proposed Project would use energy from SCE, which have committed to diversify their portfolio of energy sources by increasing energy from wind and solar sources. No feature of the Project would interfere with implementation of SB 350. Additionally, the Project would be designed and constructed to implement the energy efficiency measures for new residential developments and would include several measures designed to reduce energy consumption.

As shown above, the Project would not conflict with any of the state or local plans. As such, a less than significant impact is expected.

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6 CERTIFICATIONS

The contents of this energy analysis report represent an accurate depiction of the environmental impacts associated with the proposed State Street Village. The information contained in this energy analysis report is based on the best available data at the time of preparation. If you have any questions, please contact me directly at (619) 778-1971.

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EDUCATION

Bachelor of Science in Urban and Regional Planning
California Polytechnic State University, Pomona • June 2000

PROFESSIONAL AFFILIATIONS

ASA – Acoustical Society of America
APA – American Planning Association
AWMA – Air and Waste Management Association

PROFESSIONAL CERTIFICATIONS``

HARP Model Training – Bluescape Environmental • 2004
Air Dispersion Modeling – Lakes Environmental • 2008

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APPENDIX 4.1:

CALEEMOD PROJECT ANNUAL EMISSIONS MODEL OUTPUTS

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State Street Village - South Coast AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

State Street Village

South Coast AQMD Air District, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	12.22	1000sqft	0.28	12,222.00	0
Enclosed Parking with Elevator	612.00	Space	0.00	244,800.00	0
Enclosed Parking with Elevator	412.00	Space	0.00	164,800.00	0
Enclosed Parking with Elevator	232.00	Space	0.00	92,800.00	0
Fast Food Restaurant w/o Drive Thru	16.00	1000sqft	0.37	16,000.00	0
High Turnover (Sit Down Restaurant)	16.00	1000sqft	0.37	16,000.00	0
Quality Restaurant	2.20	1000sqft	0.05	2,200.00	0
Apartments Mid Rise	723.00	Dwelling Unit	9.95	723,000.00	2068
Free-Standing Discount Superstore	14.50	1000sqft	0.33	14,500.00	0
Strip Mall	39.00	1000sqft	0.90	39,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	31
Climate Zone	9			**Operational Year**	2026
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	390.98	**CH4 Intensity (lb/MWhr)**	0.033	**N2O Intensity (lb/MWhr)**	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Based on a total acerage of 12.25 parking all undergrpound

Construction Phase - Based on Project Applicant and Contractor

State Street Village - South Coast AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Off-road Equipment - 8-hour work day

Off-road Equipment - 8-hour work day

Off-road Equipment - Increased equipmnet for schedule

Off-road Equipment - Tractors/Backhoe/Loaders removed and replaced with crawler tractrors of same hp and load factor to account for dust generation, increased equipment due to schedule

Off-road Equipment -

Off-road Equipment - Tractors/Backhoe/Loaders removed and replaced with crawler tractrors of same hp and load factor to account for dust generation

Trips and VMT -

Demolition -

Grading -

Architectural Coating -

Vehicle Trips - Based on TIA

Woodstoves - Per applicant no fire places or wood stoves

Area Coating -

Water And Wastewater - 20% indoor water reduction to account for CalGreen require pluming fixtures flow rates, which are 20% less than the 2000 data in CalEEMod

Construction Off-road Equipment Mitigation - Rule 403 water 3x daily and trackout/street sweeping

Fleet Mix -

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	CleanPavedRoadPercentReduction	0	46
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	6.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	5.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	6.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstructionPhase	NumDays	20.00	84.00

State Street Village - South Coast AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblConstructionPhase	NumDays	10.00	125.00
tblConstructionPhase	NumDays	30.00	130.00
tblConstructionPhase	NumDays	300.00	865.00
tblConstructionPhase	NumDays	20.00	125.00
tblConstructionPhase	NumDays	20.00	125.00
tblFireplaces	NumberGas	614.55	0.00
tblFireplaces	NumberNoFireplace	72.30	723.00
tblFireplaces	NumberWood	36.15	0.00
tblGrading	MaterialExported	0.00	49,000.00
tblLandUse	LandUseSquareFeet	12,220.00	12,222.00
tblLandUse	LotAcreage	2.09	0.00
tblLandUse	LotAcreage	3.71	0.00
tblLandUse	LotAcreage	5.51	0.00
tblLandUse	LotAcreage	19.03	9.95
tblOffRoadEquipment	HorsePower	212.00	97.00
tblOffRoadEquipment	HorsePower	212.00	97.00
tblOffRoadEquipment	LoadFactor	0.43	0.37
tblOffRoadEquipment	LoadFactor	0.43	0.37
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	5.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	3.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	3.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblVehicleTrips	ST_TR	4.91	0.56
tblVehicleTrips	ST_TR	696.00	79.66
tblVehicleTrips	ST_TR	63.94	15.74
tblVehicleTrips	ST_TR	2.21	0.26

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleTrips	ST_TR	122.40	14.05
tblVehicleTrips	ST_TR	90.04	10.25
tblVehicleTrips	ST_TR	42.04	8.76
tblVehicleTrips	SU_TR	4.09	0.47
tblVehicleTrips	SU_TR	500.00	57.22
tblVehicleTrips	SU_TR	55.96	13.78
tblVehicleTrips	SU_TR	0.70	0.08
tblVehicleTrips	SU_TR	142.64	16.37
tblVehicleTrips	SU_TR	71.97	8.19
tblVehicleTrips	SU_TR	20.43	4.26
tblVehicleTrips	WD_TR	5.44	0.62
tblVehicleTrips	WD_TR	346.23	39.63
tblVehicleTrips	WD_TR	50.70	12.48
tblVehicleTrips	WD_TR	9.74	1.15
tblVehicleTrips	WD_TR	112.18	12.88
tblVehicleTrips	WD_TR	83.84	9.55
tblVehicleTrips	WD_TR	44.32	9.23
tblWater	IndoorWaterUseRate	47,106,360.52	37,685,088.42
tblWater	IndoorWaterUseRate	4,856,539.40	3,885,231.52
tblWater	IndoorWaterUseRate	1,074,051.56	859,241.25
tblWater	IndoorWaterUseRate	2,171,906.40	1,737,525.12
tblWater	IndoorWaterUseRate	4,856,539.40	3,885,231.52
tblWater	IndoorWaterUseRate	667,774.17	534,219.34
tblWater	IndoorWaterUseRate	2,888,828.34	2,311,062.67
tblWoodstoves	NumberCatalytic	36.15	0.00
tblWoodstoves	NumberNoncatalytic	36.15	0.00

2.0 Emissions Summary

State Street Village - South Coast AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2022	0.1389	1.3922	1.0147	2.2300e-003	0.5610	0.0673	0.6283	0.1491	0.0625	0.2116	0.0000	199.8861	199.8861	0.0464	5.9000e-003	202.8028
2023	0.9842	8.0206	8.7851	0.0243	3.0869	0.3435	3.4304	1.1101	0.3183	1.4284	0.0000	2,223.9708	2,223.9708	0.3179	0.1003	2,261.8172
2024	0.5225	2.9872	5.6536	0.0171	1.2478	0.0970	1.3447	0.3347	0.0910	0.4258	0.0000	1,584.6323	1,584.6323	0.1127	0.0793	1,611.0921
2025	0.4873	2.8118	5.4138	0.0166	1.2430	0.0843	1.3273	0.3334	0.0792	0.4126	0.0000	1,550.5429	1,550.5429	0.1100	0.0767	1,576.1457
2026	3.1228	2.0067	3.8941	0.0105	0.7200	0.0719	0.7920	0.1928	0.0673	0.2601	0.0000	973.2367	973.2367	0.0961	0.0382	987.0182
Maximum	**3.1228**	**8.0206**	**8.7851**	**0.0243**	**3.0869**	**0.3435**	**3.4304**	**1.1101**	**0.3183**	**1.4284**	**0.0000**	**2,223.9708**	**2,223.9708**	**0.3179**	**0.1003**	**2,261.8172**

State Street Village - South Coast AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.1 Overall Construction

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2022	0.0769	1.0315	1.1174	2.2300e-003	0.2235	0.0448	0.2682	0.0596	0.0436	0.1032	0.0000	199.8859	199.8859	0.0464	5.9000e-003	202.8026
2023	0.7254	6.9395	9.4055	0.0243	1.4523	0.2694	1.7217	0.5097	0.2604	0.7700	0.0000	2,223.9697	2,223.9697	0.3179	0.1003	2,261.8161
2024	0.5225	2.9872	5.6536	0.0171	0.7608	0.0970	0.8578	0.2152	0.0910	0.3062	0.0000	1,584.6319	1,584.6319	0.1127	0.0793	1,611.0917
2025	0.4873	2.8118	5.4138	0.0166	0.7579	0.0843	0.8423	0.2144	0.0792	0.2936	0.0000	1,550.5425	1,550.5425	0.1100	0.0767	1,576.1453
2026	3.1228	2.0067	3.8941	0.0105	0.4381	0.0719	0.5100	0.1236	0.0673	0.1909	0.0000	973.2364	973.2364	0.0961	0.0382	987.0178
Maximum	**3.1228**	**6.9395**	**9.4055**	**0.0243**	**1.4523**	**0.2694**	**1.7217**	**0.5097**	**0.2604**	**0.7700**	**0.0000**	**2,223.9697**	**2,223.9697**	**0.3179**	**0.1003**	**2,261.8161**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**6.10**	**8.37**	**-2.92**	**0.00**	**47.04**	**14.56**	**44.17**	**47.06**	**12.42**	**39.24**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	**11-1-2022**	**1-31-2023**	2.9006	2.1876
2	**2-1-2023**	**4-30-2023**	3.6522	2.9168
3	**5-1-2023**	**7-31-2023**	2.3206	2.0279
4	**8-1-2023**	**10-31-2023**	0.9197	0.9197
5	**11-1-2023**	**1-31-2024**	0.9167	0.9167
6	**2-1-2024**	**4-30-2024**	0.8597	0.8597
7	**5-1-2024**	**7-31-2024**	0.8660	0.8660

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

8	**8-1-2024**	**10-31-2024**	0.8725	0.8725
9	**11-1-2024**	**1-31-2025**	0.8684	0.8684
10	**2-1-2025**	**4-30-2025**	0.8021	0.8021
11	**5-1-2025**	**7-31-2025**	0.8169	0.8169
12	**8-1-2025**	**10-31-2025**	0.8231	0.8231
13	**11-1-2025**	**1-31-2026**	1.3790	1.3790
14	**2-1-2026**	**4-30-2026**	2.5951	2.5951
15	**5-1-2026**	**7-31-2026**	1.6539	1.6539
		Highest	3.6522	2.9168

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	3.5109	0.0860	7.4663	4.0000e-004		0.0414	0.0414		0.0414	0.0414	0.0000	12.2130	12.2130	0.0118	0.0000	12.5068
Energy	0.0946	0.8319	0.5184	5.1600e-003		0.0653	0.0653		0.0653	0.0653	0.0000	2,327.6816	2,327.6816	0.1354	0.0314	2,340.4231
Mobile	0.7454	0.7753	6.7258	0.0141	1.5781	0.0105	1.5886	0.4212	9.7900e-003	0.4310	0.0000	1,341.7183	1,341.7183	0.0945	0.0630	1,362.8387
Waste						0.0000	0.0000		0.0000	0.0000	167.2564	0.0000	167.2564	9.8846	0.0000	414.3707
Water						0.0000	0.0000		0.0000	0.0000	16.1475	184.7608	200.9082	1.6741	0.0411	254.9938
Total	**4.3508**	**1.6932**	**14.7104**	**0.0196**	**1.5781**	**0.1173**	**1.6953**	**0.4212**	**0.1165**	**0.5377**	**183.4039**	**3,866.3736**	**4,049.7775**	**11.8003**	**0.1354**	**4,385.1330**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	3.5109	0.0860	7.4663	4.0000e-004		0.0414	0.0414		0.0414	0.0414	0.0000	12.2130	12.2130	0.0118	0.0000	12.5068
Energy	0.0946	0.8319	0.5184	5.1600e-003		0.0653	0.0653		0.0653	0.0653	0.0000	2,327.6816	2,327.6816	0.1354	0.0314	2,340.4231
Mobile	0.7454	0.7753	6.7258	0.0141	1.5781	0.0105	1.5886	0.4212	9.7900e-003	0.4310	0.0000	1,341.7183	1,341.7183	0.0945	0.0630	1,362.8387
Waste						0.0000	0.0000		0.0000	0.0000	167.2564	0.0000	167.2564	9.8846	0.0000	414.3707
Water						0.0000	0.0000		0.0000	0.0000	16.1475	184.7608	200.9082	1.6741	0.0411	254.9938
Total	**4.3508**	**1.6932**	**14.7104**	**0.0196**	**1.5781**	**0.1173**	**1.6953**	**0.4212**	**0.1165**	**0.5377**	**183.4039**	**3,866.3736**	**4,049.7775**	**11.8003**	**0.1354**	**4,385.1330**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	11/1/2022	2/24/2023	5	84	
2	Site Preparation	Site Preparation	12/5/2022	5/26/2023	5	125	
3	Grading	Grading	1/2/2023	6/30/2023	5	130	

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

4	Building Construction	Building Construction	3/6/2023	6/26/2026	5	865	
5	Paving	Paving	1/5/2026	6/26/2026	5	125	
6	Architectural Coating	Architectural Coating	1/5/2026	6/26/2026	5	125	

Acres of Grading (Site Preparation Phase): 437.5

Acres of Grading (Grading Phase): 520

Acres of Paving: 0

Residential Indoor: 1,464,075; Residential Outdoor: 488,025; Non-Residential Indoor: 149,883; Non-Residential Outdoor: 49,961; Striped Parking Area: 30,144 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	2	8.00	81	0.73
Demolition	Excavators	5	8.00	158	0.38
Demolition	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Crawler Tractors	4	8.00	97	0.37
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Grading	Crawler Tractors	2	8.00	97	0.37
Grading	Excavators	3	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Building Construction	Cranes	1	8.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	8.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	12	30.00	0.00	2,274.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	9	23.00	0.00	6,125.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	767.00	176.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	153.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Water Exposed Area

Clean Paved Roads

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Demolition - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1289	0.0000	0.1289	0.0195	0.0000	0.0195	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0933	0.8991	0.7557	1.4100e-003		0.0436	0.0436		0.0406	0.0406	0.0000	123.0716	123.0716	0.0334	0.0000	123.9077
Total	**0.0933**	**0.8991**	**0.7557**	**1.4100e-003**	**0.1289**	**0.0436**	**0.1725**	**0.0195**	**0.0406**	**0.0602**	**0.0000**	**123.0716**	**123.0716**	**0.0334**	**0.0000**	**123.9077**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	2.4900e-003	0.0979	0.0224	3.6000e-004	0.0103	7.8000e-004	0.0110	2.8100e-003	7.4000e-004	3.5600e-003	0.0000	35.8724	35.8724	1.9300e-003	5.6900e-003	37.6176
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.2200e-003	1.7900e-003	0.0234	6.0000e-005	7.2400e-003	4.0000e-005	7.2900e-003	1.9200e-003	4.0000e-005	1.9600e-003	0.0000	5.8927	5.8927	1.6000e-004	1.6000e-004	5.9438
Total	**4.7100e-003**	**0.0997**	**0.0458**	**4.2000e-004**	**0.0175**	**8.2000e-004**	**0.0183**	**4.7300e-003**	**7.8000e-004**	**5.5200e-003**	**0.0000**	**41.7651**	**41.7651**	**2.0900e-003**	**5.8500e-003**	**43.5614**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Demolition - 2022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0503	0.0000	0.0503	7.6100e-003	0.0000	7.6100e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0576	0.7051	0.8428	1.4100e-003		0.0325	0.0325		0.0316	0.0316	0.0000	123.0715	123.0715	0.0334	0.0000	123.9076
Total	**0.0576**	**0.7051**	**0.8428**	**1.4100e-003**	**0.0503**	**0.0325**	**0.0828**	**7.6100e-003**	**0.0316**	**0.0392**	**0.0000**	**123.0715**	**123.0715**	**0.0334**	**0.0000**	**123.9076**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	2.4900e-003	0.0979	0.0224	3.6000e-004	6.7100e-003	7.8000e-004	7.4800e-003	1.9400e-003	7.4000e-004	2.6900e-003	0.0000	35.8724	35.8724	1.9300e-003	5.6900e-003	37.6176
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.2200e-003	1.7900e-003	0.0234	6.0000e-005	4.3500e-003	4.0000e-005	4.4000e-003	1.2100e-003	4.0000e-005	1.2500e-003	0.0000	5.8927	5.8927	1.6000e-004	1.6000e-004	5.9438
Total	**4.7100e-003**	**0.0997**	**0.0458**	**4.2000e-004**	**0.0111**	**8.2000e-004**	**0.0119**	**3.1500e-003**	**7.8000e-004**	**3.9400e-003**	**0.0000**	**41.7651**	**41.7651**	**2.0900e-003**	**5.8500e-003**	**43.5614**

State Street Village - South Coast AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Demolition - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1172	0.0000	0.1172	0.0177	0.0000	0.0177	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0733	0.6859	0.6585	1.2800e-003		0.0320	0.0320		0.0298	0.0298	0.0000	111.8897	111.8897	0.0303	0.0000	112.6469
Total	**0.0733**	**0.6859**	**0.6585**	**1.2800e-003**	**0.1172**	**0.0320**	**0.1492**	**0.0177**	**0.0298**	**0.0476**	**0.0000**	**111.8897**	**111.8897**	**0.0303**	**0.0000**	**112.6469**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.1300e-003	0.0687	0.0185	3.1000e-004	9.3200e-003	4.9000e-004	9.8100e-003	2.5600e-003	4.7000e-004	3.0300e-003	0.0000	30.8831	30.8831	1.7100e-003	4.9100e-003	32.3881
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.8700e-003	1.4400e-003	0.0196	6.0000e-005	6.5800e-003	4.0000e-005	6.6200e-003	1.7500e-003	3.0000e-005	1.7800e-003	0.0000	5.2161	5.2161	1.3000e-004	1.3000e-004	5.2589
Total	**3.0000e-003**	**0.0702**	**0.0381**	**3.7000e-004**	**0.0159**	**5.3000e-004**	**0.0164**	**4.3100e-003**	**5.0000e-004**	**4.8100e-003**	**0.0000**	**36.0992**	**36.0992**	**1.8400e-003**	**5.0400e-003**	**37.6470**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Demolition - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0457	0.0000	0.0457	6.9200e-003	0.0000	6.9200e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0485	0.5970	0.7589	1.2800e-003		0.0268	0.0268		0.0261	0.0261	0.0000	111.8895	111.8895	0.0303	0.0000	112.6468
Total	**0.0485**	**0.5970**	**0.7589**	**1.2800e-003**	**0.0457**	**0.0268**	**0.0725**	**6.9200e-003**	**0.0261**	**0.0330**	**0.0000**	**111.8895**	**111.8895**	**0.0303**	**0.0000**	**112.6468**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.1300e-003	0.0687	0.0185	3.1000e-004	6.1000e-003	4.9000e-004	6.5900e-003	1.7700e-003	4.7000e-004	2.2400e-003	0.0000	30.8831	30.8831	1.7100e-003	4.9100e-003	32.3881
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.8700e-003	1.4400e-003	0.0196	6.0000e-005	3.9600e-003	4.0000e-005	4.0000e-003	1.1000e-003	3.0000e-005	1.1400e-003	0.0000	5.2161	5.2161	1.3000e-004	1.3000e-004	5.2589
Total	**3.0000e-003**	**0.0702**	**0.0381**	**3.7000e-004**	**0.0101**	**5.3000e-004**	**0.0106**	**2.8700e-003**	**5.0000e-004**	**3.3800e-003**	**0.0000**	**36.0992**	**36.0992**	**1.8400e-003**	**5.0400e-003**	**37.6470**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Site Preparation - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.4127	0.0000	0.4127	0.1244	0.0000	0.1244	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0403	0.3930	0.2068	3.8000e-004		0.0229	0.0229		0.0210	0.0210	0.0000	33.4423	33.4423	0.0108	0.0000	33.7127
Total	**0.0403**	**0.3930**	**0.2068**	**3.8000e-004**	**0.4127**	**0.0229**	**0.4355**	**0.1244**	**0.0210**	**0.1454**	**0.0000**	**33.4423**	**33.4423**	**0.0108**	**0.0000**	**33.7127**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.0000e-004	4.9000e-004	6.3900e-003	2.0000e-005	1.9700e-003	1.0000e-005	1.9900e-003	5.2000e-004	1.0000e-005	5.4000e-004	0.0000	1.6071	1.6071	4.0000e-005	4.0000e-005	1.6210
Total	**6.0000e-004**	**4.9000e-004**	**6.3900e-003**	**2.0000e-005**	**1.9700e-003**	**1.0000e-005**	**1.9900e-003**	**5.2000e-004**	**1.0000e-005**	**5.4000e-004**	**0.0000**	**1.6071**	**1.6071**	**4.0000e-005**	**4.0000e-005**	**1.6210**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Site Preparation - 2022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1609	0.0000	0.1609	0.0485	0.0000	0.0485	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0140	0.2263	0.2225	3.8000e-004		0.0114	0.0114		0.0112	0.0112	0.0000	33.4422	33.4422	0.0108	0.0000	33.7126
Total	**0.0140**	**0.2263**	**0.2225**	**3.8000e-004**	**0.1609**	**0.0114**	**0.1724**	**0.0485**	**0.0112**	**0.0597**	**0.0000**	**33.4422**	**33.4422**	**0.0108**	**0.0000**	**33.7126**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.0000e-004	4.9000e-004	6.3900e-003	2.0000e-005	1.1900e-003	1.0000e-005	1.2000e-003	3.3000e-004	1.0000e-005	3.4000e-004	0.0000	1.6071	1.6071	4.0000e-005	4.0000e-005	1.6210
Total	**6.0000e-004**	**4.9000e-004**	**6.3900e-003**	**2.0000e-005**	**1.1900e-003**	**1.0000e-005**	**1.2000e-003**	**3.3000e-004**	**1.0000e-005**	**3.4000e-004**	**0.0000**	**1.6071**	**1.6071**	**4.0000e-005**	**4.0000e-005**	**1.6210**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Site Preparation - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					1.1805	0.0000	1.1805	0.5464	0.0000	0.5464	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.1820	1.7555	1.0063	2.0000e-003		0.1001	0.1001		0.0921	0.0921	0.0000	175.5832	175.5832	0.0568	0.0000	177.0029
Total	**0.1820**	**1.7555**	**1.0063**	**2.0000e-003**	**1.1805**	**0.1001**	**1.2806**	**0.5464**	**0.0921**	**0.6385**	**0.0000**	**175.5832**	**175.5832**	**0.0568**	**0.0000**	**177.0029**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.9500e-003	2.2700e-003	0.0309	9.0000e-005	0.0104	6.0000e-005	0.0104	2.7500e-003	5.0000e-005	2.8100e-003	0.0000	8.2154	8.2154	2.1000e-004	2.1000e-004	8.2828
Total	**2.9500e-003**	**2.2700e-003**	**0.0309**	**9.0000e-005**	**0.0104**	**6.0000e-005**	**0.0104**	**2.7500e-003**	**5.0000e-005**	**2.8100e-003**	**0.0000**	**8.2154**	**8.2154**	**2.1000e-004**	**2.1000e-004**	**8.2828**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Site Preparation - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.4604	0.0000	0.4604	0.2131	0.0000	0.2131	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0676	1.1224	1.1493	2.0000e-003		0.0563	0.0563		0.0553	0.0553	0.0000	175.5830	175.5830	0.0568	0.0000	177.0027
Total	**0.0676**	**1.1224**	**1.1493**	**2.0000e-003**	**0.4604**	**0.0563**	**0.5167**	**0.2131**	**0.0553**	**0.2684**	**0.0000**	**175.5830**	**175.5830**	**0.0568**	**0.0000**	**177.0027**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.9500e-003	2.2700e-003	0.0309	9.0000e-005	6.2300e-003	6.0000e-005	6.2900e-003	1.7400e-003	5.0000e-005	1.7900e-003	0.0000	8.2154	8.2154	2.1000e-004	2.1000e-004	8.2828
Total	**2.9500e-003**	**2.2700e-003**	**0.0309**	**9.0000e-005**	**6.2300e-003**	**6.0000e-005**	**6.2900e-003**	**1.7400e-003**	**5.0000e-005**	**1.7900e-003**	**0.0000**	**8.2154**	**8.2154**	**2.1000e-004**	**2.1000e-004**	**8.2828**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Grading - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.6699	0.0000	0.6699	0.2454	0.0000	0.2454	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.2544	2.5364	2.0651	4.3700e-003		0.1183	0.1183		0.1089	0.1089	0.0000	383.9482	383.9482	0.1242	0.0000	387.0526
Total	**0.2544**	**2.5364**	**2.0651**	**4.3700e-003**	**0.6699**	**0.1183**	**0.7883**	**0.2454**	**0.1089**	**0.3542**	**0.0000**	**383.9482**	**383.9482**	**0.1242**	**0.0000**	**387.0526**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	6.4100e-003	0.3888	0.1044	1.7500e-003	0.0527	2.8000e-003	0.0555	0.0145	2.6800e-003	0.0172	0.0000	174.6848	174.6848	9.7000e-003	0.0278	183.1977
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.6600e-003	3.5800e-003	0.0489	1.4000e-004	0.0164	9.0000e-005	0.0165	4.3600e-003	9.0000e-005	4.4400e-003	0.0000	12.9968	12.9968	3.3000e-004	3.3000e-004	13.1034
Total	**0.0111**	**0.3924**	**0.1533**	**1.8900e-003**	**0.0691**	**2.8900e-003**	**0.0720**	**0.0188**	**2.7700e-003**	**0.0216**	**0.0000**	**187.6816**	**187.6816**	**0.0100**	**0.0281**	**196.3011**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Grading - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.2613	0.0000	0.2613	0.0957	0.0000	0.0957	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.1348	2.1772	2.4421	4.3700e-003		0.0932	0.0932		0.0915	0.0915	0.0000	383.9477	383.9477	0.1242	0.0000	387.0522
Total	**0.1348**	**2.1772**	**2.4421**	**4.3700e-003**	**0.2613**	**0.0932**	**0.3545**	**0.0957**	**0.0915**	**0.1872**	**0.0000**	**383.9477**	**383.9477**	**0.1242**	**0.0000**	**387.0522**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	6.4100e-003	0.3888	0.1044	1.7500e-003	0.0345	2.8000e-003	0.0373	0.0100	2.6800e-003	0.0127	0.0000	174.6848	174.6848	9.7000e-003	0.0278	183.1977
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.6600e-003	3.5800e-003	0.0489	1.4000e-004	9.8600e-003	9.0000e-005	9.9600e-003	2.7500e-003	9.0000e-005	2.8400e-003	0.0000	12.9968	12.9968	3.3000e-004	3.3000e-004	13.1034
Total	**0.0111**	**0.3924**	**0.1533**	**1.8900e-003**	**0.0443**	**2.8900e-003**	**0.0472**	**0.0128**	**2.7700e-003**	**0.0155**	**0.0000**	**187.6816**	**187.6816**	**0.0100**	**0.0281**	**196.3011**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1799	1.6596	1.8608	3.1000e-003		0.0804	0.0804		0.0756	0.0756	0.0000	267.0312	267.0312	0.0651	0.0000	268.6574
Total	**0.1799**	**1.6596**	**1.8608**	**3.1000e-003**		**0.0804**	**0.0804**		**0.0756**	**0.0756**	**0.0000**	**267.0312**	**267.0312**	**0.0651**	**0.0000**	**268.6574**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0205	0.7208	0.2744	3.4500e-003	0.1193	4.0100e-003	0.1233	0.0344	3.8300e-003	0.0383	0.0000	336.7223	336.7223	0.0113	0.0488	351.5434
Worker	0.2571	0.1977	2.6978	7.7200e-003	0.9046	5.1900e-003	0.9098	0.2402	4.7800e-003	0.2450	0.0000	716.8002	716.8002	0.0182	0.0182	722.6831
Total	**0.2776**	**0.9185**	**2.9722**	**0.0112**	**1.0239**	**9.2000e-003**	**1.0331**	**0.2747**	**8.6100e-003**	**0.2833**	**0.0000**	**1,053.5225**	**1,053.5225**	**0.0295**	**0.0670**	**1,074.2265**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Building Construction - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1799	1.6596	1.8608	3.1000e-003		0.0804	0.0804		0.0756	0.0756	0.0000	267.0309	267.0309	0.0651	0.0000	268.6571
Total	**0.1799**	**1.6596**	**1.8608**	**3.1000e-003**		**0.0804**	**0.0804**		**0.0756**	**0.0756**	**0.0000**	**267.0309**	**267.0309**	**0.0651**	**0.0000**	**268.6571**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0205	0.7208	0.2744	3.4500e-003	0.0805	4.0100e-003	0.0845	0.0249	3.8300e-003	0.0287	0.0000	336.7223	336.7223	0.0113	0.0488	351.5434
Worker	0.2571	0.1977	2.6978	7.7200e-003	0.5439	5.1900e-003	0.5491	0.1517	4.7800e-003	0.1565	0.0000	716.8002	716.8002	0.0182	0.0182	722.6831
Total	**0.2776**	**0.9185**	**2.9722**	**0.0112**	**0.6243**	**9.2000e-003**	**0.6335**	**0.1766**	**8.6100e-003**	**0.1852**	**0.0000**	**1,053.5225**	**1,053.5225**	**0.0295**	**0.0670**	**1,074.2265**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Building Construction - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.2053	1.8897	2.2567	3.7800e-003		0.0860	0.0860		0.0808	0.0808	0.0000	325.4719	325.4719	0.0789	0.0000	327.4433
Total	**0.2053**	**1.8897**	**2.2567**	**3.7800e-003**		**0.0860**	**0.0860**		**0.0808**	**0.0808**	**0.0000**	**325.4719**	**325.4719**	**0.0789**	**0.0000**	**327.4433**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0243	0.8824	0.3289	4.1400e-003	0.1454	4.9000e-003	0.1503	0.0420	4.6800e-003	0.0466	0.0000	404.4335	404.4335	0.0138	0.0587	422.2643
Worker	0.2929	0.2152	3.0680	9.1300e-003	1.1024	6.0600e-003	1.1084	0.2928	5.5800e-003	0.2983	0.0000	854.7270	854.7270	0.0201	0.0207	861.3845
Total	**0.3173**	**1.0976**	**3.3969**	**0.0133**	**1.2478**	**0.0110**	**1.2587**	**0.3347**	**0.0103**	**0.3450**	**0.0000**	**1,259.1604**	**1,259.1604**	**0.0339**	**0.0793**	**1,283.6488**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Building Construction - 2024

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.2053	1.8897	2.2567	3.7800e-003		0.0860	0.0860		0.0808	0.0808	0.0000	325.4715	325.4715	0.0789	0.0000	327.4429
Total	**0.2053**	**1.8897**	**2.2567**	**3.7800e-003**		**0.0860**	**0.0860**		**0.0808**	**0.0808**	**0.0000**	**325.4715**	**325.4715**	**0.0789**	**0.0000**	**327.4429**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0243	0.8824	0.3289	4.1400e-003	0.0981	4.9000e-003	0.1030	0.0303	4.6800e-003	0.0350	0.0000	404.4335	404.4335	0.0138	0.0587	422.2643
Worker	0.2929	0.2152	3.0680	9.1300e-003	0.6628	6.0600e-003	0.6688	0.1849	5.5800e-003	0.1904	0.0000	854.7270	854.7270	0.0201	0.0207	861.3845
Total	**0.3173**	**1.0976**	**3.3969**	**0.0133**	**0.7608**	**0.0110**	**0.7718**	**0.2152**	**0.0103**	**0.2255**	**0.0000**	**1,259.1604**	**1,259.1604**	**0.0339**	**0.0793**	**1,283.6488**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Building Construction - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1900	1.7443	2.2365	3.7700e-003		0.0737	0.0737		0.0692	0.0692	0.0000	324.3345	324.3345	0.0782	0.0000	326.2884
Total	**0.1900**	**1.7443**	**2.2365**	**3.7700e-003**		**0.0737**	**0.0737**		**0.0692**	**0.0692**	**0.0000**	**324.3345**	**324.3345**	**0.0782**	**0.0000**	**326.2884**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0237	0.8748	0.3228	4.0400e-003	0.1448	4.8900e-003	0.1497	0.0418	4.6800e-003	0.0465	0.0000	395.5511	395.5511	0.0138	0.0575	413.0163
Worker	0.2737	0.1927	2.8546	8.7900e-003	1.0982	5.7600e-003	1.1039	0.2916	5.3000e-003	0.2970	0.0000	830.6573	830.6573	0.0181	0.0192	836.8409
Total	**0.2973**	**1.0675**	**3.1773**	**0.0128**	**1.2430**	**0.0107**	**1.2537**	**0.3334**	**9.9800e-003**	**0.3434**	**0.0000**	**1,226.2084**	**1,226.2084**	**0.0319**	**0.0767**	**1,249.8572**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Building Construction - 2025

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1900	1.7443	2.2365	3.7700e-003		0.0737	0.0737		0.0692	0.0692	0.0000	324.3341	324.3341	0.0782	0.0000	326.2881
Total	**0.1900**	**1.7443**	**2.2365**	**3.7700e-003**		**0.0737**	**0.0737**		**0.0692**	**0.0692**	**0.0000**	**324.3341**	**324.3341**	**0.0782**	**0.0000**	**326.2881**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0237	0.8748	0.3228	4.0400e-003	0.0977	4.8900e-003	0.1026	0.0302	4.6800e-003	0.0349	0.0000	395.5511	395.5511	0.0138	0.0575	413.0163
Worker	0.2737	0.1927	2.8546	8.7900e-003	0.6602	5.7600e-003	0.6660	0.1842	5.3000e-003	0.1895	0.0000	830.6573	830.6573	0.0181	0.0192	836.8409
Total	**0.2973**	**1.0675**	**3.1773**	**0.0128**	**0.7579**	**0.0107**	**0.7686**	**0.2144**	**9.9800e-003**	**0.2244**	**0.0000**	**1,226.2084**	**1,226.2084**	**0.0319**	**0.0767**	**1,249.8572**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Building Construction - 2026

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0925	0.8488	1.0883	1.8300e-003		0.0359	0.0359		0.0337	0.0337	0.0000	157.8180	157.8180	0.0380	0.0000	158.7687
Total	**0.0925**	**0.8488**	**1.0883**	**1.8300e-003**		**0.0359**	**0.0359**		**0.0337**	**0.0337**	**0.0000**	**157.8180**	**157.8180**	**0.0380**	**0.0000**	**158.7687**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0113	0.4226	0.1551	1.9300e-003	0.0705	2.3700e-003	0.0729	0.0203	2.2700e-003	0.0226	0.0000	188.8635	188.8635	6.7000e-003	0.0275	197.2138
Worker	0.1256	0.0852	1.3070	4.1500e-003	0.5344	2.6600e-003	0.5370	0.1419	2.4500e-003	0.1444	0.0000	395.0012	395.0012	8.0100e-003	8.8200e-003	397.8309
Total	**0.1369**	**0.5078**	**1.4622**	**6.0800e-003**	**0.6048**	**5.0300e-003**	**0.6099**	**0.1623**	**4.7200e-003**	**0.1670**	**0.0000**	**583.8647**	**583.8647**	**0.0147**	**0.0363**	**595.0447**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Building Construction - 2026

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0925	0.8488	1.0883	1.8300e-003		0.0359	0.0359		0.0337	0.0337	0.0000	157.8178	157.8178	0.0380	0.0000	158.7685
Total	**0.0925**	**0.8488**	**1.0883**	**1.8300e-003**		**0.0359**	**0.0359**		**0.0337**	**0.0337**	**0.0000**	**157.8178**	**157.8178**	**0.0380**	**0.0000**	**158.7685**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0113	0.4226	0.1551	1.9300e-003	0.0475	2.3700e-003	0.0499	0.0147	2.2700e-003	0.0170	0.0000	188.8635	188.8635	6.7000e-003	0.0275	197.2138
Worker	0.1256	0.0852	1.3070	4.1500e-003	0.3213	2.6600e-003	0.3239	0.0896	2.4500e-003	0.0921	0.0000	395.0012	395.0012	8.0100e-003	8.8200e-003	397.8309
Total	**0.1369**	**0.5078**	**1.4622**	**6.0800e-003**	**0.3688**	**5.0300e-003**	**0.3738**	**0.1043**	**4.7200e-003**	**0.1090**	**0.0000**	**583.8647**	**583.8647**	**0.0147**	**0.0363**	**595.0447**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Paving - 2026

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0572	0.5364	0.9111	1.4200e-003		0.0262	0.0262		0.0241	0.0241	0.0000	125.1204	125.1204	0.0405	0.0000	126.1320
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0572**	**0.5364**	**0.9111**	**1.4200e-003**		**0.0262**	**0.0262**		**0.0241**	**0.0241**	**0.0000**	**125.1204**	**125.1204**	**0.0405**	**0.0000**	**126.1320**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.4200e-003	1.6400e-003	0.0252	8.0000e-005	0.0103	5.0000e-005	0.0103	2.7300e-003	5.0000e-005	2.7800e-003	0.0000	7.6033	7.6033	1.5000e-004	1.7000e-004	7.6577
Total	**2.4200e-003**	**1.6400e-003**	**0.0252**	**8.0000e-005**	**0.0103**	**5.0000e-005**	**0.0103**	**2.7300e-003**	**5.0000e-005**	**2.7800e-003**	**0.0000**	**7.6033**	**7.6033**	**1.5000e-004**	**1.7000e-004**	**7.6577**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Paving - 2026

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0572	0.5364	0.9111	1.4200e-003		0.0262	0.0262		0.0241	0.0241	0.0000	125.1202	125.1202	0.0405	0.0000	126.1319
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0572**	**0.5364**	**0.9111**	**1.4200e-003**		**0.0262**	**0.0262**		**0.0241**	**0.0241**	**0.0000**	**125.1202**	**125.1202**	**0.0405**	**0.0000**	**126.1319**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.4200e-003	1.6400e-003	0.0252	8.0000e-005	6.1800e-003	5.0000e-005	6.2400e-003	1.7200e-003	5.0000e-005	1.7700e-003	0.0000	7.6033	7.6033	1.5000e-004	1.7000e-004	7.6577
Total	**2.4200e-003**	**1.6400e-003**	**0.0252**	**8.0000e-005**	**6.1800e-003**	**5.0000e-005**	**6.2400e-003**	**1.7200e-003**	**5.0000e-005**	**1.7700e-003**	**0.0000**	**7.6033**	**7.6033**	**1.5000e-004**	**1.7000e-004**	**7.6577**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.7 Architectural Coating - 2026

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	2.7950					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0142	0.0955	0.1508	2.5000e-004		4.2900e-003	4.2900e-003		4.2900e-003	4.2900e-003	0.0000	21.2771	21.2771	1.1600e-003	0.0000	21.3061
Total	**2.8092**	**0.0955**	**0.1508**	**2.5000e-004**		**4.2900e-003**	**4.2900e-003**		**4.2900e-003**	**4.2900e-003**	**0.0000**	**21.2771**	**21.2771**	**1.1600e-003**	**0.0000**	**21.3061**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0247	0.0167	0.2566	8.1000e-004	0.1049	5.2000e-004	0.1054	0.0279	4.8000e-004	0.0283	0.0000	77.5534	77.5534	1.5700e-003	1.7300e-003	78.1090
Total	**0.0247**	**0.0167**	**0.2566**	**8.1000e-004**	**0.1049**	**5.2000e-004**	**0.1054**	**0.0279**	**4.8000e-004**	**0.0283**	**0.0000**	**77.5534**	**77.5534**	**1.5700e-003**	**1.7300e-003**	**78.1090**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.7 Architectural Coating - 2026

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	2.7950					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0142	0.0955	0.1508	2.5000e-004		4.2900e-003	4.2900e-003		4.2900e-003	4.2900e-003	0.0000	21.2771	21.2771	1.1600e-003	0.0000	21.3061
Total	**2.8092**	**0.0955**	**0.1508**	**2.5000e-004**		**4.2900e-003**	**4.2900e-003**		**4.2900e-003**	**4.2900e-003**	**0.0000**	**21.2771**	**21.2771**	**1.1600e-003**	**0.0000**	**21.3061**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0247	0.0167	0.2566	8.1000e-004	0.0631	5.2000e-004	0.0636	0.0176	4.8000e-004	0.0181	0.0000	77.5534	77.5534	1.5700e-003	1.7300e-003	78.1090
Total	**0.0247**	**0.0167**	**0.2566**	**8.1000e-004**	**0.0631**	**5.2000e-004**	**0.0636**	**0.0176**	**4.8000e-004**	**0.0181**	**0.0000**	**77.5534**	**77.5534**	**1.5700e-003**	**1.7300e-003**	**78.1090**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.7454	0.7753	6.7258	0.0141	1.5781	0.0105	1.5886	0.4212	9.7900e-003	0.4310	0.0000	1,341.7183	1,341.7183	0.0945	0.0630	1,362.8387
Unmitigated	0.7454	0.7753	6.7258	0.0141	1.5781	0.0105	1.5886	0.4212	9.7900e-003	0.4310	0.0000	1,341.7183	1,341.7183	0.0945	0.0630	1,362.8387

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Mid Rise	448.26	404.88	339.81	1,457,654	1,457,654
Enclosed Parking with Elevator	0.00	0.00	0.00		
Enclosed Parking with Elevator	0.00	0.00	0.00		
Enclosed Parking with Elevator	0.00	0.00	0.00		
Fast Food Restaurant w/o Drive Thru	634.08	1,274.56	915.52	1,386,866	1,386,866
Free-Standing Discount Superstore	180.96	228.23	199.81	360,541	360,541
General Office Building	14.05	3.18	0.98	34,249	34,249
High Turnover (Sit Down Restaurant)	206.08	224.80	261.92	295,368	295,368
Quality Restaurant	21.01	22.55	18.02	29,615	29,615
Strip Mall	359.97	341.64	166.14	627,212	627,212
Total	1,864.41	2,499.84	1,902.20	4,191,506	4,191,506

4.3 Trip Type Information

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Mid Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
Enclosed Parking with Elevator	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Enclosed Parking with Elevator	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Enclosed Parking with Elevator	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Fast Food Restaurant w/o Drive	16.60	8.40	6.90	1.50	79.50	19.00	51	37	12
Free-Standing Discount	16.60	8.40	6.90	13.20	67.80	19.00	47.5	35.5	17
General Office Building	16.60	8.40	6.90	33.00	48.00	19.00	77	19	4
High Turnover (Sit Down	16.60	8.40	6.90	8.50	72.50	19.00	37	20	43
Quality Restaurant	16.60	8.40	6.90	12.00	69.00	19.00	38	18	44
Strip Mall	16.60	8.40	6.90	16.60	64.40	19.00	45	40	15

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Mid Rise	0.540893	0.062748	0.186142	0.127785	0.023768	0.006610	0.012333	0.009205	0.000817	0.000491	0.024860	0.000754	0.003594
Enclosed Parking with Elevator	0.540893	0.062748	0.186142	0.127785	0.023768	0.006610	0.012333	0.009205	0.000817	0.000491	0.024860	0.000754	0.003594
Fast Food Restaurant w/o Drive Thru	0.540893	0.062748	0.186142	0.127785	0.023768	0.006610	0.012333	0.009205	0.000817	0.000491	0.024860	0.000754	0.003594
Free-Standing Discount Superstore	0.540893	0.062748	0.186142	0.127785	0.023768	0.006610	0.012333	0.009205	0.000817	0.000491	0.024860	0.000754	0.003594
General Office Building	0.540893	0.062748	0.186142	0.127785	0.023768	0.006610	0.012333	0.009205	0.000817	0.000491	0.024860	0.000754	0.003594
High Turnover (Sit Down Restaurant)	0.540893	0.062748	0.186142	0.127785	0.023768	0.006610	0.012333	0.009205	0.000817	0.000491	0.024860	0.000754	0.003594
Quality Restaurant	0.540893	0.062748	0.186142	0.127785	0.023768	0.006610	0.012333	0.009205	0.000817	0.000491	0.024860	0.000754	0.003594
Strip Mall	0.540893	0.062748	0.186142	0.127785	0.023768	0.006610	0.012333	0.009205	0.000817	0.000491	0.024860	0.000754	0.003594

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

State Street Village - South Coast AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	1,391.8061	1,391.8061	0.1175	0.0142	1,398.9862
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	1,391.8061	1,391.8061	0.1175	0.0142	1,398.9862
NaturalGas Mitigated	0.0946	0.8319	0.5184	5.1600e-003		0.0653	0.0653		0.0653	0.0653	0.0000	935.8755	935.8755	0.0179	0.0172	941.4369
NaturalGas Unmitigated	0.0946	0.8319	0.5184	5.1600e-003		0.0653	0.0653		0.0653	0.0653	0.0000	935.8755	935.8755	0.0179	0.0172	941.4369

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Apartments Mid Rise	9.44714e+006	0.0509	0.4353	0.1852	2.7800e-003		0.0352	0.0352		0.0352	0.0352	0.0000	504.1356	504.1356	9.6600e-003	9.2400e-003	507.1314
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Fast Food Restaurant w/o Drive Thru	3.68528e+006	0.0199	0.1807	0.1518	1.0800e-003		0.0137	0.0137		0.0137	0.0137	0.0000	196.6606	196.6606	3.7700e-003	3.6100e-003	197.8292
Free-Standing Discount Superstore	23635	1.3000e-004	1.1600e-003	9.7000e-004	1.0000e-005		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005	0.0000	1.2613	1.2613	2.0000e-005	2.0000e-005	1.2688
General Office Building	126009	6.8000e-004	6.1800e-003	5.1900e-003	4.0000e-005		4.7000e-004	4.7000e-004		4.7000e-004	4.7000e-004	0.0000	6.7243	6.7243	1.3000e-004	1.2000e-004	6.7643
High Turnover (Sit Down Restaurant)	3.68528e+006	0.0199	0.1807	0.1518	1.0800e-003		0.0137	0.0137		0.0137	0.0137	0.0000	196.6606	196.6606	3.7700e-003	3.6100e-003	197.8292
Quality Restaurant	506726	2.7300e-003	0.0248	0.0209	1.5000e-004		1.8900e-003	1.8900e-003		1.8900e-003	1.8900e-003	0.0000	27.0408	27.0408	5.2000e-004	5.0000e-004	27.2015
Strip Mall	63570	3.4000e-004	3.1200e-003	2.6200e-003	2.0000e-005		2.4000e-004	2.4000e-004		2.4000e-004	2.4000e-004	0.0000	3.3923	3.3923	7.0000e-005	6.0000e-005	3.4125
Total		**0.0946**	**0.8319**	**0.5184**	**5.1600e-003**		**0.0654**	**0.0654**		**0.0654**	**0.0654**	**0.0000**	**935.8755**	**935.8755**	**0.0179**	**0.0172**	**941.4369**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Apartments Mid Rise	9.44714e+006	0.0509	0.4353	0.1852	2.7800e-003		0.0352	0.0352		0.0352	0.0352	0.0000	504.1356	504.1356	9.6600e-003	9.2400e-003	507.1314
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Fast Food Restaurant w/o Drive Thru	3.68528e+006	0.0199	0.1807	0.1518	1.0800e-003		0.0137	0.0137		0.0137	0.0137	0.0000	196.6606	196.6606	3.7700e-003	3.6100e-003	197.8292
Free-Standing Discount Superstore	23635	1.3000e-004	1.1600e-003	9.7000e-004	1.0000e-005		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005	0.0000	1.2613	1.2613	2.0000e-005	2.0000e-005	1.2688
General Office Building	126009	6.8000e-004	6.1800e-003	5.1900e-003	4.0000e-005		4.7000e-004	4.7000e-004		4.7000e-004	4.7000e-004	0.0000	6.7243	6.7243	1.3000e-004	1.2000e-004	6.7643
High Turnover (Sit Down Restaurant)	3.68528e+006	0.0199	0.1807	0.1518	1.0800e-003		0.0137	0.0137		0.0137	0.0137	0.0000	196.6606	196.6606	3.7700e-003	3.6100e-003	197.8292
Quality Restaurant	506726	2.7300e-003	0.0248	0.0209	1.5000e-004		1.8900e-003	1.8900e-003		1.8900e-003	1.8900e-003	0.0000	27.0408	27.0408	5.2000e-004	5.0000e-004	27.2015
Strip Mall	63570	3.4000e-004	3.1200e-003	2.6200e-003	2.0000e-005		2.4000e-004	2.4000e-004		2.4000e-004	2.4000e-004	0.0000	3.3923	3.3923	7.0000e-005	6.0000e-005	3.4125
Total		**0.0946**	**0.8319**	**0.5184**	**5.1600e-003**		**0.0654**	**0.0654**		**0.0654**	**0.0654**	**0.0000**	**935.8755**	**935.8755**	**0.0179**	**0.0172**	**941.4369**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Mid Rise	2.78308e+006	493.5669	0.0417	5.0500e-003	496.1131
Enclosed Parking with Elevator	1.33171e+006	236.1732	0.0199	2.4200e-003	237.3916
Enclosed Parking with Elevator	504832	89.5297	7.5600e-003	9.2000e-004	89.9916
Enclosed Parking with Elevator	896512	158.9924	0.0134	1.6300e-003	159.8126
Fast Food Restaurant w/o Drive Thru	692320	122.7799	0.0104	1.2600e-003	123.4133
Free-Standing Discount Superstore	189515	33.6096	2.8400e-003	3.4000e-004	33.7830
General Office Building	152775	27.0940	2.2900e-003	2.8000e-004	27.2337
High Turnover (Sit Down Restaurant)	692320	122.7799	0.0104	1.2600e-003	123.4133
Quality Restaurant	95194	16.8822	1.4200e-003	1.7000e-004	16.9693
Strip Mall	509730	90.3983	7.6300e-003	9.2000e-004	90.8647
Total		**1,391.8061**	**0.1175**	**0.0143**	**1,398.9862**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Mid Rise	2.78308e+006	493.5669	0.0417	5.0500e-003	496.1131
Enclosed Parking with Elevator	1.33171e+006	236.1732	0.0199	2.4200e-003	237.3916
Enclosed Parking with Elevator	504832	89.5297	7.5600e-003	9.2000e-004	89.9916
Enclosed Parking with Elevator	896512	158.9924	0.0134	1.6300e-003	159.8126
Fast Food Restaurant w/o Drive Thru	692320	122.7799	0.0104	1.2600e-003	123.4133
Free-Standing Discount Superstore	189515	33.6096	2.8400e-003	3.4000e-004	33.7830
General Office Building	152775	27.0940	2.2900e-003	2.8000e-004	27.2337
High Turnover (Sit Down Restaurant)	692320	122.7799	0.0104	1.2600e-003	123.4133
Quality Restaurant	95194	16.8822	1.4200e-003	1.7000e-004	16.9693
Strip Mall	509730	90.3983	7.6300e-003	9.2000e-004	90.8647
Total		**1,391.8061**	**0.1175**	**0.0143**	**1,398.9862**

6.0 Area Detail

6.1 Mitigation Measures Area

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	3.5109	0.0860	7.4663	4.0000e-004		0.0414	0.0414		0.0414	0.0414	0.0000	12.2130	12.2130	0.0118	0.0000	12.5068
Unmitigated	3.5109	0.0860	7.4663	4.0000e-004		0.0414	0.0414		0.0414	0.0414	0.0000	12.2130	12.2130	0.0118	0.0000	12.5068

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.2795					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	3.0061					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.2252	0.0860	7.4663	4.0000e-004		0.0414	0.0414		0.0414	0.0414	0.0000	12.2130	12.2130	0.0118	0.0000	12.5068
Total	**3.5108**	**0.0860**	**7.4663**	**4.0000e-004**		**0.0414**	**0.0414**		**0.0414**	**0.0414**	**0.0000**	**12.2130**	**12.2130**	**0.0118**	**0.0000**	**12.5068**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.2795					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	3.0061					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.2252	0.0860	7.4663	4.0000e-004		0.0414	0.0414		0.0414	0.0414	0.0000	12.2130	12.2130	0.0118	0.0000	12.5068
Total	**3.5108**	**0.0860**	**7.4663**	**4.0000e-004**		**0.0414**	**0.0414**		**0.0414**	**0.0414**	**0.0000**	**12.2130**	**12.2130**	**0.0118**	**0.0000**	**12.5068**

7.0 Water Detail

7.1 Mitigation Measures Water

State Street Village - South Coast AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	200.9082	1.6741	0.0411	254.9938
Unmitigated	200.9082	1.6741	0.0411	254.9938

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Mid Rise	37.6851 / 29.6975	157.4920	1.2403	0.0305	197.5825
Enclosed Parking with Elevator	0 / 0	0.0000	0.0000	0.0000	0.0000
Fast Food Restaurant w/o Drive Thru	3.88523 / 0.309992	10.8152	0.1274	3.0900e-003	14.9205
Free-Standing Discount Superstore	0.859241 / 0.65829	3.5538	0.0283	6.9000e-004	4.4677
General Office Building	1.73753 / 1.33117	7.1864	0.0572	1.4000e-003	9.0344
High Turnover (Sit Down Restaurant)	3.88523 / 0.309992	10.8152	0.1274	3.0900e-003	14.9205
Quality Restaurant	0.534219 / 0.0426239	1.4871	0.0175	4.2000e-004	2.0516
Strip Mall	2.31106 / 1.77057	9.5585	0.0761	1.8700e-003	12.0166
Total		**200.9082**	**1.6741**	**0.0410**	**254.9938**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Mid Rise	37.6851 / 29.6975	157.4920	1.2403	0.0305	197.5825
Enclosed Parking with Elevator	0 / 0	0.0000	0.0000	0.0000	0.0000
Fast Food Restaurant w/o Drive Thru	3.88523 / 0.309992	10.8152	0.1274	3.0900e-003	14.9205
Free-Standing Discount Superstore	0.859241 / 0.65829	3.5538	0.0283	6.9000e-004	4.4677
General Office Building	1.73753 / 1.33117	7.1864	0.0572	1.4000e-003	9.0344
High Turnover (Sit Down Restaurant)	3.88523 / 0.309992	10.8152	0.1274	3.0900e-003	14.9205
Quality Restaurant	0.534219 / 0.0426239	1.4871	0.0175	4.2000e-004	2.0516
Strip Mall	2.31106 / 1.77057	9.5585	0.0761	1.8700e-003	12.0166
Total		**200.9082**	**1.6741**	**0.0410**	**254.9938**

8.0 Waste Detail

8.1 Mitigation Measures Waste

State Street Village - South Coast AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	167.2564	9.8846	0.0000	414.3707
Unmitigated	167.2564	9.8846	0.0000	414.3707

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Mid Rise	332.58	67.5107	3.9898	0.0000	167.2550
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
Fast Food Restaurant w/o Drive Thru	184.3	37.4112	2.2109	0.0000	92.6848
Free-Standing Discount Superstore	62.36	12.6585	0.7481	0.0000	31.3609
General Office Building	11.36	2.3060	0.1363	0.0000	5.7130
High Turnover (Sit Down Restaurant)	190.4	38.6495	2.2841	0.0000	95.7525
Quality Restaurant	2.01	0.4080	0.0241	0.0000	1.0108
Strip Mall	40.95	8.3125	0.4913	0.0000	20.5938
Total		**167.2564**	**9.8846**	**0.0000**	**414.3707**

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Mid Rise	332.58	67.5107	3.9898	0.0000	167.2550
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
Fast Food Restaurant w/o Drive Thru	184.3	37.4112	2.2109	0.0000	92.6848
Free-Standing Discount Superstore	62.36	12.6585	0.7481	0.0000	31.3609
General Office Building	11.36	2.3060	0.1363	0.0000	5.7130
High Turnover (Sit Down Restaurant)	190.4	38.6495	2.2841	0.0000	95.7525
Quality Restaurant	2.01	0.4080	0.0241	0.0000	1.0108
Strip Mall	40.95	8.3125	0.4913	0.0000	20.5938
Total		**167.2564**	**9.8846**	**0.0000**	**414.3707**

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

APPENDIX 4.2:

EMFAC2017

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Source: EMFAC2017 (v1.0.3) Emissions Inventory
Region Type: Sub-Area
Region: San Bernardino (SC)
Calendar Year: 2022
Season: Annual
Vehicle Classification: EMFAC2007 Categories
Units: miles/day for VMT, trips/day for Trips, tons/day for Emissions, 1000 gallons/day for Fuel Consumption

Region	Calenc	Vehicle Ca	Model Year	Speed	Fuel	Population	VMT	Trips	Fuel Consumption	Total Fuel	VMT	Total VMT	Miles per Gallon	Vehicle Class	Ratio
San Bernardino (SC)	2022	HHDT	Aggregate	Aggregate	Gasol	5.738390567	475.6178858	114.8137	0.112383403	290203.3429	475.6178858	1836855.091	6.33	HHDT	50.20%
San Bernardino (SC)	2022	HHDT	Aggregate	Aggregate	Diese	14883.97368	1789151.452	152272.4	268.1907848		1789151.452				
San Bernardino (SC)	2022	HHDT	Aggregate	Aggregate	Natur	1157.767624	47228.02172	4515.294	21.90017462		47228.02172				
San Bernardino (SC)	2022	LDA	Aggregate	Aggregate	Gasol	543957.3772	23065957.3	2563744	735.7584163	739612.8822	23065957.3	23615949.6	31.93	LDA	70.64%
San Bernardino (SC)	2022	LDA	Aggregate	Aggregate	Diese	4325.601093	197774.636	20802.16	3.854465902		197774.636				
San Bernardino (SC)	2022	LDA	Aggregate	Aggregate	Electr	8565.692529	352217.6714	43034.91	0		352217.6714				
San Bernardino (SC)	2022	LDT1	Aggregate	Aggregate	Gasol	56195.86841	2019926.608	254845	75.91557909	75938.79873	2019926.608	2034372.961	26.79	LDT1	7.17%
San Bernardino (SC)	2022	LDT1	Aggregate	Aggregate	Diese	30.18816941	569.3508455	99.609	0.023219639		569.3508455				
San Bernardino (SC)	2022	LDT1	Aggregate	Aggregate	Electr	324.4928921	13877.00183	1649.842	0		13877.00183				
San Bernardino (SC)	2022	LDT2	Aggregate	Aggregate	Gasol	172388.4413	6504289.119	803134.5	261.2120947	262301.5224	6504289.119	6595584.808	25.15	LDT2	22.18%
San Bernardino (SC)	2022	LDT2	Aggregate	Aggregate	Diese	945.5703737	41265.88695	4678.034	1.089427653		41265.88695				
San Bernardino (SC)	2022	LDT2	Aggregate	Aggregate	Electr	1538.819096	50029.80218	7798.615	0		50029.80218				
San Bernardino (SC)	2022	LHDT1	Aggregate	Aggregate	Gasol	14369.52529	483946.4297	214084.5	45.95460177	66338.08762	483946.4297	911984.1949	13.75	LHDT1	
San Bernardino (SC)	2022	LHDT1	Aggregate	Aggregate	Diese	11813.96292	428037.7653	148604.8	20.38348585		428037.7653				
San Bernardino (SC)	2022	LHDT2	Aggregate	Aggregate	Gasol	2566.416218	84834.80397	38235.78	9.275102025	17759.38097	84834.80397	246397.2785	13.87	LHDT2	
San Bernardino (SC)	2022	LHDT2	Aggregate	Aggregate	Diese	4468.655223	161562.4745	56210.06	8.484278943		161562.4745				
San Bernardino (SC)	2022	MCY	Aggregate	Aggregate	Gasol	23940.89968	154635.86	47881.8	4.153326569	4153.326569	154635.86	154635.86	37.23	MCY	
San Bernardino (SC)	2022	MDV	Aggregate	Aggregate	Gasol	141538.2102	5144209.705	645868	255.6136238	259695.0211	5144209.705	5287468.043	20.36	MDV	
San Bernardino (SC)	2022	MDV	Aggregate	Aggregate	Diese	2634.747756	115566.3521	12857	4.081397273		115566.3521				
San Bernardino (SC)	2022	MDV	Aggregate	Aggregate	Electr	829.5186217	27691.98636	4239.476	0		27691.98636				
San Bernardino (SC)	2022	MH	Aggregate	Aggregate	Gasol	3599.155888	30327.10079	360.0596	5.94631971	7047.71226	30327.10079	41882.48855	5.94	MH	
San Bernardino (SC)	2022	MH	Aggregate	Aggregate	Diese	1326.593838	11555.38776	132.6594	1.10139255		11555.38776				
San Bernardino (SC)	2022	MHDT	Aggregate	Aggregate	Gasol	1426.666165	78373.2467	28544.74	15.19267393	104293.6617	78373.2467	1051136.413	10.08	MHDT	49.80%
San Bernardino (SC)	2022	MHDT	Aggregate	Aggregate	Diese	14492.29473	972763.1661	145806.4	89.10098778		972763.1661				
San Bernardino (SC)	2022	OBUS	Aggregate	Aggregate	Gasol	409.5822199	18358.32454	8194.921	3.596414899	5628.514468	18358.32454	35953.61331	6.39	OBUS	
San Bernardino (SC)	2022	OBUS	Aggregate	Aggregate	Diese	235.5339692	17595.28877	2280.101	2.03209957		17595.28877				
San Bernardino (SC)	2022	SBUS	Aggregate	Aggregate	Gasol	236.4064257	10313.05593	945.6257	1.141902256	4281.325881	10313.05593	34494.49484	8.06	SBUS	
San Bernardino (SC)	2022	SBUS	Aggregate	Aggregate	Diese	761.8554538	24181.43891	8791.706	3.139423625		24181.43891				
San Bernardino (SC)	2022	UBUS	Aggregate	Aggregate	Gasol	114.8207422	13058.35426	459.283	1.433837711	8753.002438	13058.35426	41265.96522	4.71	UBUS	
San Bernardino (SC)	2022	UBUS	Aggregate	Aggregate	Diese	2.896720367	238.2836669	11.58688	0.031682285		238.2836669				
San Bernardino (SC)	2022	UBUS	Aggregate	Aggregate	Electr	0.058469431	1.251702935	0.233878	0		1.251702935				
San Bernardino (SC)	2022	UBUS	Aggregate	Aggregate	Natur	209.2602095	27968.07558	837.0408	7.287482442		27968.07558				

Source: EMFAC2017 (v1.0.3) Emissions Inventory
Region Type: Sub-Area
Region: San Bernardino (SC)
Calendar Year: 2026
Season: Annual
Vehicle Classification: EMFAC2007 Categories
Units: miles/day for VMT, trips/day for Trips, tons/day for Emissions, 1000 gallons/day for Fuel Consumption

Region	Calenc	Vehicle Cat	Model Year	Speed	Fuel	Population	VMT	Fuel Consumption	Total Fuel	VMT	Total VMT	Miles per Gallon	Vehicle Class	Ratio
San Bernardino (SC)	2026	HHDT	Aggregate	Aggregate	Gasoli	4.720867136	594.8591884	0.127719168	282821.6686	594.8591884	1987982.518	7.03	HHDT	49.01%
San Bernardino (SC)	2026	HHDT	Aggregate	Aggregate	Diesel	15969.79276	1938473.027	261.0368384		1938473.027				
San Bernardino (SC)	2026	HHDT	Aggregate	Aggregate	Natur	1199.345022	48914.63196	21.65711097		48914.63196				
San Bernardino (SC)	2026	LDA	Aggregate	Aggregate	Gasoli	587792.5319	23906546.96	687.2235274	691624.74	23906546.96	24916136.8	36.03	LDA	70.67%
San Bernardino (SC)	2026	LDA	Aggregate	Aggregate	Diesel	5698.363397	247586.4032	4.401212597		247586.4032				
San Bernardino (SC)	2026	LDA	Aggregate	Aggregate	Electr	17868.94831	762003.4358	0		762003.4358				
San Bernardino (SC)	2026	LDT1	Aggregate	Aggregate	Gasoli	61267.88574	2158027.118	73.1611466	73176.98287	2158027.118	2198755.881	30.05	LDT1	7.19%
San Bernardino (SC)	2026	LDT1	Aggregate	Aggregate	Diesel	20.16022996	419.1262733	0.015836271		419.1262733				
San Bernardino (SC)	2026	LDT1	Aggregate	Aggregate	Electr	916.2474992	40309.63596	0		40309.63596				
San Bernardino (SC)	2026	LDT2	Aggregate	Aggregate	Gasoli	186419.8568	6799101.781	238.9040319	240228.9717	6799101.781	6965266.685	28.99	LDT2	22.13%
San Bernardino (SC)	2026	LDT2	Aggregate	Aggregate	Diesel	1369.883286	55382.70601	1.32493983		55382.70601				
San Bernardino (SC)	2026	LDT2	Aggregate	Aggregate	Electr	3682.717307	110782.1977	0		110782.1977				
San Bernardino (SC)	2026	LHDT1	Aggregate	Aggregate	Gasoli	13600.88328	454774.223	41.38675956	60926.82562	454774.223	888214.9273	14.58	LHDT1	
San Bernardino (SC)	2026	LHDT1	Aggregate	Aggregate	Diesel	12433.79761	433440.7042	19.54006605		433440.7042				
San Bernardino (SC)	2026	LHDT2	Aggregate	Aggregate	Gasoli	2443.686316	78230.60529	8.245717655	16557.59022	78230.60529	244874.0934	14.79	LHDT2	
San Bernardino (SC)	2026	LHDT2	Aggregate	Aggregate	Diesel	4846.12821	166643.4881	8.311872562		166643.4881				
San Bernardino (SC)	2026	MCY	Aggregate	Aggregate	Gasoli	25209.41145	153969.6144	4.172253638	4172.253638	153969.6144	153969.6144	36.90	MCY	
San Bernardino (SC)	2026	MDV	Aggregate	Aggregate	Gasoli	140683.498	4973961.38	217.5631517	222038.8375	4973961.38	5190160.095	23.38	MDV	
San Bernardino (SC)	2026	MDV	Aggregate	Aggregate	Diesel	3478.496592	140774.4617	4.475685771		140774.4617				
San Bernardino (SC)	2026	MDV	Aggregate	Aggregate	Electr	2462.825572	75424.25364	0		75424.25364				
San Bernardino (SC)	2026	MH	Aggregate	Aggregate	Gasoli	3121.041242	26518.12086	4.966248396	5996.526945	26518.12086	37664.0814	6.28	MH	
San Bernardino (SC)	2026	MH	Aggregate	Aggregate	Diesel	1352.540563	11145.96055	1.030278549		11145.96055				
San Bernardino (SC)	2026	MHDT	Aggregate	Aggregate	Gasoli	1500.110642	82257.54862	15.06806603	104316.943	82257.54862	1136255.938	10.89	MHDT	50.99%
San Bernardino (SC)	2026	MHDT	Aggregate	Aggregate	Diesel	16366.0008	1053998.389	89.24887701		1053998.389				
San Bernardino (SC)	2026	OBUS	Aggregate	Aggregate	Gasoli	406.5140232	17060.18718	3.172067042	5214.469653	17060.18718	35934.48369	6.89	OBUS	
San Bernardino (SC)	2026	OBUS	Aggregate	Aggregate	Diesel	266.4977909	18874.29651	2.042402611		18874.29651				
San Bernardino (SC)	2026	SBUS	Aggregate	Aggregate	Gasoli	272.3988401	11437.97399	1.227314996	4360.482782	11437.97399	36958.34001	8.48	SBUS	
San Bernardino (SC)	2026	SBUS	Aggregate	Aggregate	Diesel	802.7110536	25520.36602	3.133167786		25520.36602				
San Bernardino (SC)	2026	UBUS	Aggregate	Aggregate	Gasoli	117.5306309	13366.54497	1.409778271	8921.95811	13366.54497	42239.88481	4.73	UBUS	
San Bernardino (SC)	2026	UBUS	Aggregate	Aggregate	Diesel	0.141961099	11.67769301	0.001263483		11.67769301				
San Bernardino (SC)	2026	UBUS	Aggregate	Aggregate	Electr	0.058469431	1.251702935	0		1.251702935				
San Bernardino (SC)	2026	UBUS	Aggregate	Aggregate	Natur	217.0234724	28860.41044	7.510916356		28860.41044				