Pioneertown Motel Expansion

ENERGY ANALYSIS

COUNTY OF SAN BERNARDINO

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LIST OF ABBREVIATED TERMS

%	Percent
(1)	Reference
AQIA	*Pioneertown Motel Expansion Air Quality Impact Analysis*
BACM	Best Available Control Measures
BTU	British Thermal Units
CalEEMod	California Emissions Estimator Model
CAPCOA	California Air Pollution Control Officers Association
CARB	California Air Resources Board
CCR	California Code of Regulations
CEC	California Energy Commission
CEQA	California Environmental Quality Act
CEQA Guidelines	*2020 CEQA Statute and Guidelines*
County	County of San Bernardino
CPUC	California Public Utilities Commission
DMV	Department of Motor Vehicles
EIA	Energy Information Administration
EIR	Environmental Impact Report
EMFAC	Emissions Factor
EPA	Environmental Protection Agency
FERC	Federal Energy Regulatory Commission
GHG	Greenhouse Gas
GS-1	General Service Rate Schedule
GWh	Gigawatt Hour
HHDT	Heavy-Heavy Duty
Hp-hr-gal	Horsepower-Hour Per Gallon
IEPR	Integrative Energy Policy Report
ISO	Independent Service Operator
ISTEA	Intermodal Surface Transportation Efficiency Act
ITE	Institute of Transportation Engineers
kBTU	Kilo-British Thermal Units
kWh	Kilowatt Hour
LDA	Light Duty Auto
LDA	Light Duty Auto
LDT1/LDT2	Light-Duty Trucks
LHDT1/LHDT2	Light-Heavy Duty Trucks
MDAB	Mojave Desert Air Basin

MDV	Medium Duty Trucks
MHDT	Medium-Heavy Duty Trucks
MMcfd	Million Cubic Feet Per Day
mpg	Miles Per Gallon
MPO	Metropolitan Planning Organization
PG&E	Pacific Gas and Electric
Project	Pioneertown Motel Expansion
SCE	Southern California Edison
SDAB	San Diego Air Basin
SDG&E	San Diego Gas and Electric
sf	Square Feet
SoCalGas	Southern California Gas
TEA-21	Transportation Equity Act for the 21st Century
VMT	Vehicle Miles Traveled

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EXECUTIVE SUMMARY

ES.1 SUMMARY OF FINDINGS

The results of this *Pioneertown Motel Expansion Energy Analysis* is summarized below based on the significance criteria in Section 3 of this report consistent with Appendix G of the California Environmental Quality Act (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: Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation.	5.0	*Less Than Significant*	*n/a*
Energy Impact #2: Conflict with or obstruct a state or local plan for renewable energy or energy efficiency.	5.0	*Less Than Significant*	*n/a*

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1 INTRODUCTION

This report presents the results of the energy analysis prepared by Urban Crossroads, Inc., for the proposed Pioneertown Motel Expansion (Project). The purpose of this report is to ensure that energy implication is considered by the County of San Bernardino, as the lead agency, and to quantify anticipated energy usage associated with construction of the proposed Project, determine if the usage amounts are efficient, typical, or wasteful for the land use type, and to emphasize avoiding or reducing inefficient, wasteful, and unnecessary consumption of energy.

1.1 SITE LOCATION

The proposed Pioneertown Motel Expansion Project is located at 5240 Curtis Road in the County of San Bernardino, as shown on Exhibit 1-A. The area surrounding the Project Site includes residential dwellings to the north, retail shops and a restaurant located on Mane Street and Pioneertown road to the south. Vacant land and residential homes are located east of the Project site with addition rural residential homes located to the west.

1.2 PROJECT DESCRIPTION

Pioneertown Motel Expansion will expand the existing use to include 67 additional motel rooms for a total proposed development area of 2.79 acres. As proposed the Pioneertown Motel will include event space, offices, an equestrian lot, a horse loafing shed, a pool and spa. The facility will be open to guests, with some portions available to the public. The facility will be staffed 24 hours a day, seven days a week. The site plan for the proposed Project is shown on Exhibit 1-B.

This energy study is intended to describe energy usage associated with the expected typical operational activities at the Project site. To present a conservative approach, this report assumes the Project will operate 24-hours daily for seven days per week.

EXHIBIT 1-A: LOCATION MAP

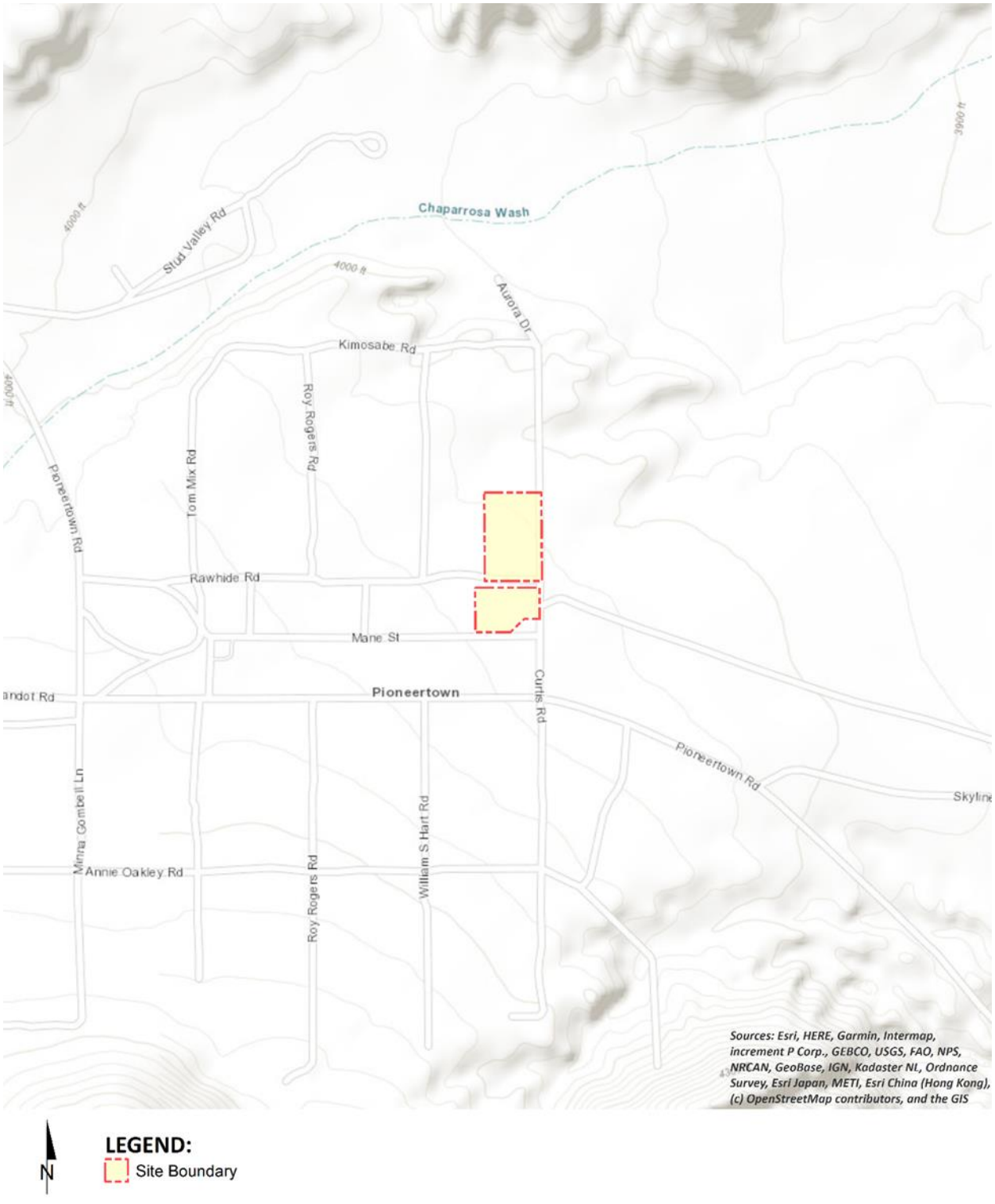
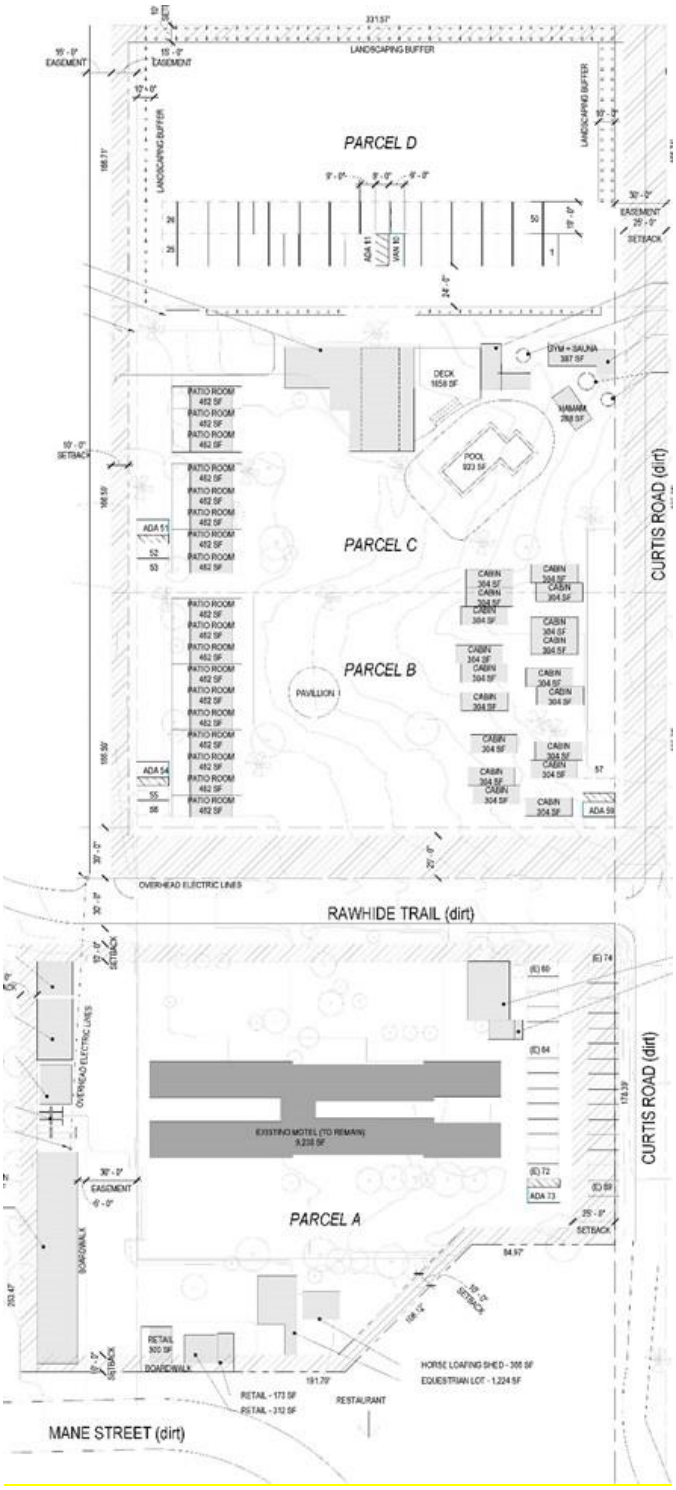


EXHIBIT 1-B: SITE PLAN



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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 and 2019, released by the United States (U.S.) Energy Information Administration's (EIA) California State Profile and Energy Estimates in 2021 and included (2):

- As of 2018, approximately 7,967 trillion British Thermal Unit (BTU) of energy was consumed
- As of 2018, approximately 681 million barrels of petroleum
- As of 2019, approximately 2,144 billion cubic feet of natural gas
- As of 2019, approximately 1 million short tons of coal

The California Energy Commission's (CEC) Transportation Energy Demand Forecast 2018-2030 was released in order to support the 2017 Integrated Energy Policy Report. The Transportation energy Demand Forecast 2018-2030 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 15.8 billion gallons in 2017 to between 12.3 billion and 12.7 billion gallons in 2030 (3)
- Diesel demand in the transportation sector is expected to rise, increasing from approximately 3.7 billion diesel gallons in 2015 to approximately 4.7 billion in 2030 (3)
    - Data from the Department of Energy states that approximately 3.9 billion gallons of diesel fuel were consumed in 2017 (4)

The most recent data provided by the EIA for energy use in California by demand sector is from 2018 and is reported as follows:

- Approximately 39.1% transportation
- Approximately 23.5% industrial
- Approximately 18.3% residential
- Approximately 19.2% commercial (5)

In 2020, total system electric generation for California was 272,576 gigawatt hours (GWh). California's massive electricity in-state generation system generated approximately 190,913 GWh which accounted for approximately 70% of the electricity it uses; the rest was imported from the Pacific Northwest (15%) and the U.S. Southwest (15%) (6). Natural gas is the main source for electricity generation at 42.97% of the total in-state electric generation system power as shown in Table 2-1.

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

Fuel Type	California In-State Generation (GWh)	Percent of California In-State Generation	Northwest Imports (GWh)	Southwest Imports (GWh)	Total Imports (GWh)	Percent of Imports	Total California Energy Mix	Total California Power Mix
Coal	317	0.17%	194	6,963	7,157	8.76%	7,474	2.74%
Natural Gas	92,298	48.35%	70	8,654	8,724	10.68%	101,022	37.06%
Oil	30	0.02%	-	-	0	0.00%	30	0.01%
Other (Waste Heat/Petroleum Coke)	384	0.20%	125	9	134	0.16%	518	0.19%
Nuclear	16,280	8.53%	672	8,481	9,154	11.21%	25,434	9.33%
Large Hydro	17,938	9.40%	14,078	1,259	15,337	18.78%	33,275	12.21%
Unspecified	-	0.00%	12,870	1,745	14,615	17.90%	14,615	5.36%
Non-Renewable and Unspecified Totals	127,248	66.65%	28,009	27,111	55,120	67.50%	182,368	66.91%
Biomass	5,680	2.97%	975	25	1,000	1.22%	6,679	2.45%
Geothermal	11,345	5.94%	166	1,825	1,991	2.44%	13,336	4.89%
Small Hydro	3,476	1.82%	320	2	322	0.39%	3,798	1.39%
Solar	29,456	15.43%	284	6,312	6,596	8.08%	36,052	13.23%
Wind	13,708	7.18%	11,438	5,197	16,635	20.37%	30,343	11.13%
Renewable Totals	63,665	33.35%	13,184	13,359	26,543	32.50%	90,208	33.09%
System Totals	***190,913***	***100.00%***	***41,193***	***40,471***	***81,663***	***100.00%***	***272,576***	***100.00%***

Source: California Energy Commission's 2020 Total System Electric Generation

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 (7):

- 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. Foreign suppliers, led by Saudi Arabia, Iraq, Ecuador, and Colombia, provided more than half of the crude oil refined in California in 2019.
- California is the largest consumer of both jet fuel and motor gasoline among the 50 states and accounted for 17% of the nation's jet fuel consumption and 11% of motor gasoline consumption in 2019. The state is the second-largest consumer of all petroleum products combined, accounting for 10% of the U.S. total. In 2018, California's energy consumption was the second highest among the states, but its per capita energy consumption was the fourth-lowest due in part to its mild climate and its energy efficiency programs.
- In 2019, California was the nation's top producer of electricity from solar, geothermal, and biomass energy and the state was second 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.

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 ISO studies revealed the extent to which the Mojave Desert Air Basin (MDAB) and the San Diego Air Basin (SDAB) 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 (8). Similarly, the subsequent 2018 and 2019 IEPR's identify 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 (9).

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 (10).

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, utilities 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.

Tables 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 16.0%, and coal is at 0% (11).

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%
Eligible Hydroelectric	1.0%
Solar	16.0%
Wind	11.5%
Coal	**0.0%**
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 and 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 (FAR) system in 2008, and it is now referred to as the backbone transmission system (BTS) 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." (12)

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.

2.4 TRANSPORTATION ENERGY RESOURCES

The Project would generate additional vehicle trips with resulting consumption of energy resources, predominantly gasoline and diesel fuel. In March 2019, the Department of Motor Vehicles (DMV) identified 36.4 million registered vehicles in California (13), and those vehicles consume an estimated 17.8 billion gallons of fuel each year[1]. Gasoline (and other vehicle fuels) are commercially provided commodities and would be available to the Project patrons and employees via commercial outlets.

[1] Fuel consumptions estimated utilizing information from EMFAC2017.

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 (13). 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 (14). 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 (15), or the equivalent of 183 billion gallons of gasoline.

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3 REGULATORY BACKGROUND

Federal and state agencies regulate energy use and consumption through various means and programs. On the federal level, the United States Department of Transportation, the United States Department of Energy, and the United States 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 § 25301[a]). The CEC 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, 2020, and continues to work towards improving electricity, natural gas, and transportation fuel energy use in California. The 2020 IEPR identifies actions the

state and others can take to ensure a clean, affordable, and reliable energy system. California's innovative energy policies strengthen energy resiliency, reduce greenhouse gas (GHG) emissions that cause climate change, improve air quality, and contribute to a more equitable future (16).

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, 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 Title are applicable to building permit applications submitted on or after January 1, 2020. The 2019 Title 24 standards require solar PV systems for new homes, establish requirements for newly constructed healthcare facilities, encourage demand responsive technologies for residential buildings, and update indoor and outdoor lighting standards for nonresidential buildings. The CEC anticipates that nonresidential buildings will use approximately 30% less energy due to lighting upgrades compared to the prior code (17).

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 (18).

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

44.1 EVALUATION CRITERIA

In compliance with Appendix G of the *State CEQA Guidelines* (19), this report analyzes the project's anticipated energy use 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

In addition, Appendix F of the *State CEQA Guidelines* (20), states that the means of achieving the goal of energy conservation includes the following:

- 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.

4.2 METHODOLOGY

Information from the CalEEMod outputs for the *Pioneertown Motel Expansion Air Quality Impact Analysis* (Urban Crossroads, Inc.) (AQIA) was utilized in this analysis, detailing Project related construction equipment, transportation energy demands, and facility energy demands (21).

4.2.1 CALEEMOD

In May 2021, the SCAQMD, in conjunction with the California Air Pollution Control Officers Association (CAPCOA) 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 (22). 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 construction and operational model runs are 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 (23). 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, 2023, and 2024 analysis years was utilized to determine the average vehicle fuel economy used throughout the duration of the Project.

4.3 CONSTRUCTION ENERGY DEMANDS

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.

4.3.1 CONSTRUCTION POWER COST

The total Project construction power costs is the summation of the products of the area (square feet [sf]) by the construction duration and the typical power cost.

CONSTRUCTION DURATION

Construction is expected to commence in June 2022 and will last through May 2024 (21). The construction schedule utilized in the analysis, shown in Table 4-1, represents a "worst-case" analysis scenario. The duration of construction activity and associated equipment represents a reasonable approximation of the expected construction fleet as required per *CEQA Guidelines* (24).

TABLE 4-1: CONSTRUCTION DURATION

Phase Name	Start Date	End Date	Days
Demolition	06/22/2022	07/19/2022	20
Site Preparation	07/20/2022	9/13/2022	40
Grading	09/14/2022	12/06/2022	60
Building Construction	08/02/2022	04/08/2024	440
Paving	04/09/2024	04/22/2024	10
Architectural Coating	04/23/2024	05/06/2024	10

PROJECT CONSTRUCTION POWER COST

The *2021 National Construction Estimator* identifies a typical power cost per 1,000 sf of construction per month of $2.37, which was used to calculate the Project's total construction power cost (25). As shown 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 $6,926.98.

4.3.2 CONSTRUCTION ELECTRICITY USAGE

The total Project construction electricity usage is the summation of the products of the power cost (estimated in Table 4-2) by the utility provider cost per kilowatt hour (kWh) of electricity.

TABLE 4-2: CONSTRUCTION POWER COST

Land Use	**Power Cost** (per 1,000 SF)	**Size** (1,000 SF)	**Construction Duration** (months)	**Project Construction Power Cost**
Motel	$2.37	90.169	23	$4,915.12
Regional Shopping Center	$2.37	0.785	23	$42.79
Parking Lot	$2.37	35.200	23	$1,918.75
Recreational Swimming Pool	$2.37	0.923	23	$50.31
CONSTRUCTION POWER COST				***$6,926.98***

PROJECT CONSTRUCTION ELECTRICITY USAGE

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 industrial services (26). As shown on Table 4-3, the total electricity usage from on-site Project construction related activities is estimated to be approximately 62,070 kWh.

TABLE 4-3: CONSTRUCTION ELECTRICITY USAGE

Land Use	Cost per kWh	**Project Construction Electricity Usage** (kWh)
Motel	$0.11	44,042
Regional Shopping Center	$0.11	383
Parking Lot	$0.11	17,193
Recreational Swimming Pool	$0.11	451
CONSTRUCTION ELECTRICITY USAGE		***62,070***

4.3.3 CONSTRUCTION EQUIPMENT FUEL ESTIMATES

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

CONSTRUCTION EQUIPMENT

A summary of construction equipment by phase is provided at Table 4-4. 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 County of San Bernardino Municipal Code.

TABLE 4-4: CONSTRUCTION EQUIPMENT ASSUMPTIONS

Phase Name	Equipment	Number	Hours Per Day
Demolition	Concrete/Industrial Saws	1	8
	Rubber Tired Dozers	1	8
	Tractors/Loaders/Backhoes	3	8
Site Preparation	Graders	1	8
	Scrapers	1	8
	Tractors/Loaders/Backhoes	1	7
Grading	Graders	1	8
	Rubber Tired Dozers	1	8
	Tractors/Loaders/Backhoes	2	7
Building Construction	Cranes	1	8
	Forklifts	2	7
	Generator Sets	1	8
	Tractors/Loaders/Backhoes	1	6
	Welders	3	8
Paving	Cement and Mortar Mixers	1	8
	Pavers	1	8
	Paving Equipment	1	8
	Rollers	2	8
Paving	Tractors/Loaders/Backhoes	1	8
Architectural Coating	Air Compressors	1	6

PROJECT CONSTRUCTION EQUIPMENT FUEL CONSUMPTION

Project construction activity timeline estimates, construction equipment schedules, equipment power ratings, load factors, and associated fuel consumption estimates are presented in Table 4-5. 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 (27). For the purposes of this analysis, the calculations are based on all construction equipment being diesel-powered which is consistent with industry standards. Diesel fuel would be supplied by existing commercial fuel providers serving the Project area and region[2]. As presented in Table 4-5, Project construction activities would consume an estimated 61,837 gallons of diesel fuel.

[2] Based on Appendix A of the CalEEMod User's Guide, Construction consists of several types of off-road equipment. Since the majority of the off-road construction equipment used for construction projects are diesel fueled, CalEEMod assumes all of the equipment operates on diesel fuel.

TABLE 4-5: CONSTRUCTION EQUIPMENT FUEL CONSUMPTION ESTIMATES

Phase Name	Duration (Days)	Equipment	HP Rating	Quantity	Usage Hours	Load Factor	HP-hrs/day	Total Fuel Consumption
Demolition	20	Concrete/Industrial Saws	81	1	8	0.73	473	511
		Rubber Tired Dozers	247	1	8	0.40	790	854
		Tractors/Loaders/Backhoes	97	3	8	0.37	861	931
Site Preparation	40	Graders	187	1	8	0.41	613	1,326
		Scrapers	367	1	8	0.48	1,409	3,047
		Tractors/Loaders/Backhoes	97	1	7	0.37	251	543
Grading	60	Graders	187	1	8	0.41	613	1,989
		Rubber Tired Dozers	247	1	8	0.40	790	2,563
		Tractors/Loaders/Backhoes	97	2	7	0.37	502	1,630
Building Construction	440	Cranes	231	1	8	0.29	536	12,746
		Forklifts	89	2	7	0.20	249	5,927
		Generator Sets	84	1	8	0.74	497	11,827
		Tractors/Loaders/Backhoes	97	1	6	0.37	215	5,122
		Welders	46	3	8	0.45	497	11,816
Paving	10	Cement and Mortar Mixers	9	1	8	0.56	40	22
		Pavers	130	1	8	0.42	437	236
		Paving Equipment	132	1	8	0.36	380	205
		Rollers	80	2	8	0.38	486	263
		Tractors/Loaders/Backhoes	97	1	8	0.37	287	155
Architectural Coating	10	Air Compressors	78	1	6	0.48	225	121
CONSTRUCTION FUEL DEMAND (GALLONS DIESEL FUEL)								***61,837***

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.

4.3.4 CONSTRUCTION TRIPS AND VMT

Construction generates on-road vehicle emissions from vehicle usage for workers, hauling, and vendors commuting to and from the site. The number of workers, hauling, and vendor trips are presented below in Table 4-6.

TABLE 4-6: CONSTRUCTION TRIPS AND VMT

Phase Name	Worker Trips Per Day	Vendor Trips Per Day	Total Hauling Trips
Demolition	13	0	0
Site Preparation	8	0	0
Grading	10	0	0
Building Construction	53	21	0
Paving	15	0	0
Architectural Coating	11	0	0

4.3.5 CONSTRUCTION WORKER FUEL ESTIMATES

With respect to estimated VMT for the Project, the construction worker trips would generate an estimated 381,142 VMT during the 23 months of construction (21). Based on CalEEMod methodology, it is assumed that 50% of all worker trips are from light-duty-auto vehicles (LDA), 25% are from light-duty-trucks with 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 (LDT1), and 25% are from light-duty-trucks with a GVWR of less than 6,000 lbs. and ETW between 3,751 lbs. and 5,750 lbs (LDT2). Data regarding Project related construction worker trips were based on CalEEMod defaults utilized within the AQIA. Vehicle fuel efficiencies for LDA, LDT1, and LDT2 were estimated using information generated within the 2017 version of the EMFAC developed by CARB. 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 (23). EMFAC2017 was run for the LDA, LDT1, and LDT2 vehicle class within the California sub-area for the 2022 through 2024 calendar years. Data from EMFAC2017 is shown in Appendix 4.2.

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 5,587 gallons of fuel will be consumed related to construction worker trips during full construction of the Project.

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 3,467 gallons of fuel will be consumed related to construction worker trips during full construction of the Project.

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 3,690 gallons of fuel will be consumed related to construction worker trips during full construction of the Project.

TABLE 4-7: CONSTRUCTION WORKER FUEL CONSUMPTION ESTIMATES – LDA

Phase Name	Duration (Days)	Worker Trips/Day	Trip Length (miles)	VMT	Average Vehicle Fuel Economy (mpg)	Estimated Fuel Consumption (gallons)
2022						
Demolition	20	7	14.7	2,058	32.50	63
Site Preparation	40	4	14.7	2,352	32.50	72
Grading	60	5	14.7	4,410	32.50	136
Building Construction	109	27	14.7	43,262	32.50	1,331
2023						
Building Construction	260	27	14.7	103,194	33.54	3,077
2024						
Building Construction	71	27	14.7	28,180	34.66	813
Paving	10	8	14.7	1,176	34.66	34
Architectural Coating	24	6	14.7	2,117	34.66	61
TOTAL CONSTRUCTION WORKER (LDA) FUEL CONSUMPTION						***5,587***

TABLE 4-8: CONSTRUCTION WORKER FUEL CONSUMPTION ESTIMATES – LDT1

Phase Name	Duration (Days)	Worker Trips/Day	Trip Length (miles)	VMT	Average Vehicle Fuel Economy (mpg)	Estimated Fuel Consumption (gallons)
2022						
Demolition	20	4	14.7	1,176	27.31	43
Site Preparation	40	2	14.7	1,176	27.31	43
Grading	60	3	14.7	2,646	27.31	97
Building Construction	109	14	14.7	22,432	27.31	821
2023						
Building Construction	260	14	14.7	53,508	28.13	1,902
2024						
Building Construction	71	14	14.7	14,612	29.01	504
Paving	10	4	14.7	588	29.01	20
Architectural Coating	24	3	14.7	1,058	29.01	36
TOTAL CONSTRUCTION WORKER (LDT1) FUEL CONSUMPTION						***3,467***

TABLE 4-9: CONSTRUCTION WORKER FUEL CONSUMPTION ESTIMATES – LDT2

Phase Name	Duration (Days)	Worker Trips/Day	Trip Length (miles)	VMT	Average Vehicle Fuel Economy (mpg)	Estimated Fuel Consumption (gallons)
2022						
Demolition	20	4	14.7	1,176	25.48	46
Site Preparation	40	2	14.7	1,176	25.48	46
Grading	60	3	14.7	2,646	25.48	104
Building Construction	109	14	14.7	22,432	25.48	880
2023						
Building Construction	260	14	14.7	53,508	26.46	2,022
2024						
Building Construction	71	14	14.7	14,612	27.48	532
Paving	10	4	14.7	588	27.48	21
Architectural Coating	24	3	14.7	1,058	27.48	39
TOTAL CONSTRUCTION WORKER (LDT2) FUEL CONSUMPTION						***3,690***

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.

4.3.6 CONSTRUCTION VENDOR FUEL ESTIMATES

With respect to estimated VMT, the construction vendor trips (vehicles that deliver materials to the site during construction) would generate an estimated 66,792 VMT along area roadways for the Project over the duration of construction activity. It is assumed that 50% of all vendor trips are from medium-heavy duty trucks (MHDT) and 50% are from heavy-heavy duty trucks (HHDT). These assumptions are consistent with the CalEEMod defaults utilized within the within the AQIA (21). Vehicle fuel efficiencies for MHDTs and HHDTs were estimated using information generated within EMFAC2017. EMFAC2017 was run for the MHDT and HHDT vehicle classes within the California sub-area for the 2022 through 2024 calendar years. Data from EMFAC2017 is shown in Appendix 4.2.

Based on Table 4-10, it is estimated that 3,779 gallons of fuel will be consumed related to construction vendor trips (MHDTs) during full construction of the Project.

Tables 4-11 shows the estimated fuel economy of HHDTs accessing the Project site. Based on Tables 4-11, fuel consumption from construction vendor (HHDTs) will total approximately 4,543 gallons.

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.

TABLE 4-10: CONSTRUCTION VENDOR FUEL CONSUMPTION ESTIMATES – MHDT

Phase Name	Duration (Days)	Vendor Trips/Day	Trip Length (miles)	VMT	Average Vehicle Fuel Economy (mpg)	Estimated Fuel Consumption (gallons)
2022						
Building Construction	109	11	6.9	8,273	8.65	956
2023						
Building Construction	260	11	6.9	19,734	8.86	2,228
2024						
Building Construction	71	11	6.9	5,389	9.05	595
TOTAL CONSTRUCTION VENDOR (MHDT) FUEL CONSUMPTION						***3,779***

TABLE 4-11: CONSTRUCTION VENDOR/HAULING FUEL CONSUMPTION ESTIMATES – HHDT

Phase Name	Duration (Days)	Vendor Trips/Day	Trip Length (miles)	VMT	Average Vehicle Fuel Economy (mpg)	Estimated Fuel Consumption (gallons)
2022						
Building Construction	109	11	6.9	8,273	7.14	1,159
2023						
Building Construction	260	11	6.9	19,734	7.39	2,671
2024						
Building Construction	71	11	6.9	5,389	7.56	713
TOTAL CONSTRUCTION VENDOR (HHDT) FUEL CONSUMPTION						***4,543***

4.3.7 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 turn over 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 (BACM). 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. 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. The VMT per vehicle class can be determined by evaluated in the vehicle fleet mix and the total VMT.

As with worker and vendors trips, operational vehicle fuel efficiencies were estimated using information generated within EMFAC2017 developed by CARB (23). EMFAC2017 was run for the San Bernardino County (Mojave Desert) area for the 2024 calendar year. Data from EMFAC2017 is shown in Appendix 4.2.

It should be noted that the existing development energy demands were subtracted from the Project to determine the new energy demands from the proposed Project. As summarized on Table 4-12 the Project will result in 360,431 annual VMT and an estimated annual fuel consumption of 13,569 gallons of fuel.

TABLE 4-12: TOTAL PROJECT-GENERATED TRAFFIC ANNUAL FUEL CONSUMPTION (ALL VEHICLES)

Vehicle Type	Annual VMT	Average Vehicle Fuel Economy (mpg)	Estimated Annual Fuel Consumption (gallons)
LDA	194,837	34.66	5,622
LDT1	20,205	29.01	697
LDT2	62,239	27.48	2,265
MDV	49,197	21.86	2,251
LHDT1	9,481	14.46	656
LHDT2	2,561	15.30	167
MHDT	4,210	9.05	465
HHDT	6,289	7.56	832
OBUS	200	5.71	35
UBUS	90	4.47	20
MCY	9,038	39.18	231
SBUS	344	8.16	42
MH	1,741	6.07	287
TOTAL (ALL VEHICLES)	**360,431**	**-**	**13,569**

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. As such, the CalEEMod defaults for Title 24 – Electricity and Lighting Energy were reduced by 30% in order to reflect consistency with the 2019 Title 24 standard. Annual natural gas and electricity demands of the Project are summarized in Tables 4-13.

TABLE 4-13: PROJECT ANNUAL ENERGY DEMAND SUMMARY (1 OF 2)

Land Use	Natural Gas Demand (kBTU/year)
Motel	5,361,460
Regional Shopping Center	1,727
Parking Lot	0
Recreational Swimming Pool	0
TOTAL PROJECT NATURAL GAS DEMAND	***5,363,187***

TABLE 4-13: PROJECT ANNUAL ENERGY DEMAND SUMMARY (2 OF 2)

Land Use	**Electricity Demand** (kWh/year)
Motel	1,573,450
Regional Shopping Center	9,530
Parking Lot	12,320
Recreational Swimming Pool	0
TOTAL PROJECT ELECTRICITY DEMAND	***1,595,300***

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).

It should also be noted that the Project would not result in a substantial increase in demand or transmission service, resulting in the need for new or expanded sources of energy supply or new or expanded energy delivery systems or infrastructure because it would be served by the existing electric utility lines in the Project vicinity.

ENHANCED VEHICLE FUEL EFFICIENCIES

Project annual fuel consumption estimates presented previously in Tables 4-12 represent likely potential maximums that would occur for the Project. Under subsequent future conditions, average fuel economies of vehicles accessing the Project sites 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.

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 $6,926.98. 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 62,070 kWh.

Construction equipment used by the Project would result in single event consumption of approximately 61,837 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, 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 12,745 gallons of fuel. Additionally, fuel consumption from construction vendor and hauling trips (MHDTs and HHDTs) will total approximately 8,323 gallons. Diesel fuel would be supplied by County and 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 (16). 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 net fuel demand of 13,569 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 industrial uses of similar scale and configuration, as reflected respectively in the Institute of Transportation Engineers (ITE) 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 industrial uses.

It should be noted that the state strategy for the transportation sector for medium and heavy-duty trucks is focused on making trucks more efficient and expediting truck turnover rather than reducing VMT from trucks. This is in contrast to the passenger vehicle component of the transportation sector where both per-capita VMT reductions and an increase in vehicle efficiency are forecasted to be needed to achieve the overall state emissions reductions goals.

Heavy duty trucks involved in goods movements are generally controlled on the technology side and through fleet turnover of older trucks and engines to newer and cleaner trucks and engines. The first battery-electric heavy-heavy duty trucks are being tested this year and SCAQMD is looking to integrate this new technology into large-scale truck operations. The following state strategies reduce GHG emissions from the medium and heavy-duty trucks:

- CARB's Mobile Source Strategy focuses on reducing GHGs through the transition to zero and low emission vehicles and from medium-duty and heavy-duty trucks.
- CARB's Sustainable Freight Action Plan establishes a goal to improve freight efficiency by 25 percent by 2030, deploy over 100,000 freight vehicles and equipment capable of zero emission

operation and maximize both zero and near-zero emission freight vehicles and equipment powered by renewable energy by 2030.

- CARB's Emissions Reduction Plan for Ports and Goods Movement (Goods Movement Plan) in California focuses on reducing heavy-duty truck-related emissions focus on establishment of emissions standards for trucks, fleet turnover, truck retrofits, and restriction on truck idling (CARB 2006). While the focus of Goods Movement Plan is to reduce criteria air pollutant and air toxic emissions, the strategies to reduce these pollutants would also generally have a beneficial effect in reducing GHG emissions.
- CARB's On-Road Truck and Bus Regulation (2010) requires diesel trucks and buses that operate in California to be upgraded to reduce emissions. Newer heavier trucks and buses must meet particulate matter filter requirements beginning January 1, 2012. Lighter and older heavier trucks must be replaced starting January 1, 2015. By January 1, 2023 nearly all trucks and buses will need to have 2010 model year engines or equivalent (28).
- CARB's Heavy-Duty (Tractor-Trailer) GHG Regulation requires SmartWay tractor trailers that include idle-reduction technologies, aerodynamic technologies, and low-rolling resistant tires that would reduce fuel consumption and associated GHG emissions.

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. 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 County 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 net energy demands are estimated at: 5,363,187 kBTU/year of natural gas; and 1,595,300 kWh/year of electricity. Natural gas would be supplied to the Project by SoCalGas; electricity would be supplied by SCE. The Project proposes conventional industrial uses reflecting 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 industrial uses 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.

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5 CONCLUSIONS

5.1 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.

5.2 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 SCAG is not planning for intermodal facilities on or through the Project site.

CONSISTENCY WITH TEA-21

The Project site is located along 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 and takes advantage of existing infrastructure systems. 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 would be provided to the Project by SCE. SCE's *Clean Power and Electrification Pathway* (CPEP) 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.

Additionally, the Project will comply with the applicable Title 24 standards which would ensure that the Project energy demands would not be inefficient, wasteful, or otherwise unnecessary. As such, development of the proposed Project would support the goals presented in the 2020 IEPR.

CONSISTENCY WITH STATE OF CALIFORNIA ENERGY PLAN

The Project site is located along major transportation corridors with proximate access to the Interstate freeway system. The site selected for the Project 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 CEC and became effective on January 1, 2020. It should be noted that the analysis herein assumes compliance with the 2019 Title 24 Standards. It should be noted that the CEC anticipates that nonresidential buildings will use approximately 30% less energy compared to the prior code (17). As such, the CalEEMod defaults for Title 24 – Electricity and Lighting Energy were reduced by 30% in order to reflect consistency with the 2019 Title 24 standard.

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 RPS 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 industrial 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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7 CERTIFICATIONS

The contents of this energy report represent an accurate depiction of the environmental impacts associated with the proposed Pioneertown Motel Expansion. The information contained in this energy report is based on the best available data at the time of preparation. If you have any questions, please contact me directly at (714) 612-6664.

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EDUCATION

Master of Science in Environmental Studies
California State University, Fullerton • May, 2010

Bachelor of Arts in Environmental Analysis and Design
University of California, Irvine • June, 2006

PROFESSIONAL AFFILIATIONS

AEP – Association of Environmental Planners
AWMA – Air and Waste Management Association
ASTM – American Society for Testing and Materials

PROFESSIONAL CERTIFICATIONS

Environmental Site Assessment – American Society for Testing and Materials • June, 2013
Planned Communities and Urban Infill – Urban Land Institute • June, 2011
Indoor Air Quality and Industrial Hygiene – EMSL Analytical • April, 2008
Principles of Ambient Air Monitoring – CARB • August, 2007
AB2588 Regulatory Standards – Trinity Consultants • November, 2006
Air Dispersion Modeling – Lakes Environmental • June, 2006

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APPENDIX 4.1:

CALEEMOD ANNUAL EMISSIONS MODEL OUTPUTS

Pioneertown Motel - San Bernardino-Mojave Desert County, Annual

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

Pioneertown Motel

San Bernardino-Mojave Desert County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Motel	46.00	Room	1.96	90,169.20	0
Regional Shopping Center	0.79	1000sqft	0.02	785.00	0
Parking Lot	88.00	Space	0.79	35,200.00	0
Recreational Swimming Pool	0.92	1000sqft	0.02	923.00	0

1.2 Other Project Characteristics

Urbanization	Rural	**Wind Speed (m/s)**	2.6	**Precipitation Freq (Days)**	32
Climate Zone	10			**Operational Year**	2024
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 - Motel lot acreage adjusted to equal total proposed development area lot acreage.

Construction Phase - Construction schedule revised based on information provided by the Project team which identifies construction start 06/22 through 05/24.

Demolition -

Grading -

Architectural Coating - MDAQMD Rule 1113 Building Envelope Coatings = 50g/l

Vehicle Trips - Recreational Swimming Pool is part of the Motel.

Construction Off-road Equipment Mitigation -

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

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	50.00
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	50.00
tblConstructionPhase	NumDays	220.00	440.00
tblConstructionPhase	NumDays	6.00	60.00
tblConstructionPhase	NumDays	3.00	40.00
tblConstructionPhase	PhaseEndDate	7/3/2023	5/6/2024
tblConstructionPhase	PhaseEndDate	6/5/2023	4/8/2024
tblConstructionPhase	PhaseEndDate	8/1/2022	12/6/2022
tblConstructionPhase	PhaseEndDate	6/19/2023	4/22/2024
tblConstructionPhase	PhaseEndDate	7/22/2022	9/13/2022
tblConstructionPhase	PhaseStartDate	6/20/2023	4/23/2024
tblConstructionPhase	PhaseStartDate	7/23/2022	9/14/2022
tblConstructionPhase	PhaseStartDate	6/6/2023	4/9/2024
tblLandUse	LotAcreage	2.07	1.96
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblVehicleTrips	ST_TR	9.10	0.00
tblVehicleTrips	SU_TR	13.60	0.00
tblVehicleTrips	WD_TR	28.82	0.00

2.0 Emissions Summary

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	0.2080	1.8476	1.5563	3.3000e-003	0.2948	0.0816	0.3764	0.1198	0.0767	0.1965	0.0000	286.5086	286.5086	0.0602	3.9300e-003	289.1852
2023	0.2519	1.8890	2.1392	4.4500e-003	0.1028	0.0809	0.1837	0.0277	0.0775	0.1052	0.0000	382.9867	382.9867	0.0539	8.5300e-003	386.8769
2024	0.2958	0.5340	0.6472	1.3200e-003	0.0297	0.0217	0.0514	7.9900e-003	0.0207	0.0287	0.0000	114.3021	114.3021	0.0170	2.3000e-003	115.4127
Maximum	**0.2958**	**1.8890**	**2.1392**	**4.4500e-003**	**0.2948**	**0.0816**	**0.3764**	**0.1198**	**0.0775**	**0.1965**	**0.0000**	**382.9867**	**382.9867**	**0.0602**	**8.5300e-003**	**386.8769**

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	0.2080	1.8476	1.5563	3.3000e-003	0.1458	0.0816	0.2274	0.0550	0.0767	0.1317	0.0000	286.5083	286.5083	0.0602	3.9300e-003	289.1849
2023	0.2519	1.8890	2.1392	4.4500e-003	0.1028	0.0809	0.1837	0.0277	0.0775	0.1052	0.0000	382.9863	382.9863	0.0539	8.5300e-003	386.8765
2024	0.2958	0.5340	0.6472	1.3200e-003	0.0297	0.0217	0.0514	7.9900e-003	0.0207	0.0287	0.0000	114.3020	114.3020	0.0170	2.3000e-003	115.4126
Maximum	**0.2958**	**1.8890**	**2.1392**	**4.4500e-003**	**0.1458**	**0.0816**	**0.2274**	**0.0550**	**0.0775**	**0.1317**	**0.0000**	**382.9863**	**382.9863**	**0.0602**	**8.5300e-003**	**386.8765**

Pioneertown Motel - San Bernardino-Mojave Desert County, 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	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**34.88**	**0.00**	**24.37**	**41.67**	**0.00**	**19.61**	**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	**6-22-2022**	**9-21-2022**	0.9033	0.9033
2	**9-22-2022**	**12-21-2022**	1.0842	1.0842
3	**12-22-2022**	**3-21-2023**	0.5346	0.5346
4	**3-22-2023**	**6-21-2023**	0.5404	0.5404
5	**6-22-2023**	**9-21-2023**	0.5402	0.5402
6	**9-22-2023**	**12-21-2023**	0.5355	0.5355
7	**12-22-2023**	**3-21-2024**	0.5084	0.5084
8	**3-22-2024**	**6-21-2024**	0.3784	0.3784
		Highest	1.0842	1.0842

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

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	0.4686	1.0000e-005	1.2500e-003	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.4200e-003	2.4200e-003	1.0000e-005	0.0000	2.5800e-003
Energy	0.0289	0.2629	0.2208	1.5800e-003		0.0200	0.0200		0.0200	0.0200	0.0000	569.1199	569.1199	0.0294	8.1400e-003	572.2802
Mobile	0.0753	0.1008	0.6556	1.3200e-003	0.1359	1.1000e-003	0.1370	0.0363	1.0300e-003	0.0373	0.0000	124.3367	124.3367	8.4600e-003	6.8900e-003	126.6017
Waste						0.0000	0.0000		0.0000	0.0000	6.3435	0.0000	6.3435	0.3749	0.0000	15.7157
Water						0.0000	0.0000		0.0000	0.0000	0.4060	3.3472	3.7532	0.0420	1.0200e-003	5.1065
Total	**0.5728**	**0.3637**	**0.8777**	**2.9000e-003**	**0.1359**	**0.0211**	**0.1570**	**0.0363**	**0.0210**	**0.0573**	**6.7495**	**696.8062**	**703.5557**	**0.4547**	**0.0161**	**719.7066**

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	0.4686	1.0000e-005	1.2500e-003	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.4200e-003	2.4200e-003	1.0000e-005	0.0000	2.5800e-003
Energy	0.0289	0.2629	0.2208	1.5800e-003		0.0200	0.0200		0.0200	0.0200	0.0000	569.1199	569.1199	0.0294	8.1400e-003	572.2802
Mobile	0.0753	0.1008	0.6556	1.3200e-003	0.1359	1.1000e-003	0.1370	0.0363	1.0300e-003	0.0373	0.0000	124.3367	124.3367	8.4600e-003	6.8900e-003	126.6017
Waste						0.0000	0.0000		0.0000	0.0000	6.3435	0.0000	6.3435	0.3749	0.0000	15.7157
Water						0.0000	0.0000		0.0000	0.0000	0.4060	3.3472	3.7532	0.0420	1.0200e-003	5.1065
Total	**0.5728**	**0.3637**	**0.8777**	**2.9000e-003**	**0.1359**	**0.0211**	**0.1570**	**0.0363**	**0.0210**	**0.0573**	**6.7495**	**696.8062**	**703.5557**	**0.4547**	**0.0161**	**719.7066**

	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	6/22/2022	7/19/2022	5	20	
2	Site Preparation	Site Preparation	7/20/2022	9/13/2022	5	40	
3	Grading	Grading	9/14/2022	12/6/2022	5	60	

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

4	Building Construction	Building Construction	8/2/2022	4/8/2024	5	440	
5	Paving	Paving	4/9/2024	4/22/2024	5	10	
6	Architectural Coating	Architectural Coating	4/23/2024	5/6/2024	5	10	

Acres of Grading (Site Preparation Phase): 60

Acres of Grading (Grading Phase): 60

Acres of Paving: 0.79

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 137,714; Non-Residential Outdoor: 45,905; Striped Parking Area: 2,112 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Rubber Tired Dozers	1	8.00	247	0.40
Demolition	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Site Preparation	Graders	1	8.00	187	0.41
Site Preparation	Scrapers	1	8.00	367	0.48
Site Preparation	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	2	7.00	97	0.37
Building Construction	Cranes	1	8.00	231	0.29
Building Construction	Forklifts	2	7.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Building Construction	Welders	3	8.00	46	0.45
Paving	Cement and Mortar Mixers	1	8.00	9	0.56
Paving	Pavers	1	8.00	130	0.42
Paving	Paving Equipment	1	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
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	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	5	13.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	3	8.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	8	53.00	21.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	11.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

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					2.0000e-005	0.0000	2.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0169	0.1662	0.1396	2.4000e-004		8.3800e-003	8.3800e-003		7.8300e-003	7.8300e-003	0.0000	21.0777	21.0777	5.3700e-003	0.0000	21.2120
Total	**0.0169**	**0.1662**	**0.1396**	**2.4000e-004**	**2.0000e-005**	**8.3800e-003**	**8.4000e-003**	**0.0000**	**7.8300e-003**	**7.8300e-003**	**0.0000**	**21.0777**	**21.0777**	**5.3700e-003**	**0.0000**	**21.2120**

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	5.3000e-004	4.3000e-004	5.1700e-003	1.0000e-005	1.6300e-003	1.0000e-005	1.6400e-003	4.3000e-004	1.0000e-005	4.4000e-004	0.0000	1.3034	1.3034	3.0000e-005	4.0000e-005	1.3151
Total	**5.3000e-004**	**4.3000e-004**	**5.1700e-003**	**1.0000e-005**	**1.6300e-003**	**1.0000e-005**	**1.6400e-003**	**4.3000e-004**	**1.0000e-005**	**4.4000e-004**	**0.0000**	**1.3034**	**1.3034**	**3.0000e-005**	**4.0000e-005**	**1.3151**

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					1.0000e-005	0.0000	1.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0169	0.1662	0.1396	2.4000e-004		8.3800e-003	8.3800e-003		7.8300e-003	7.8300e-003	0.0000	21.0777	21.0777	5.3700e-003	0.0000	21.2119
Total	**0.0169**	**0.1662**	**0.1396**	**2.4000e-004**	**1.0000e-005**	**8.3800e-003**	**8.3900e-003**	**0.0000**	**7.8300e-003**	**7.8300e-003**	**0.0000**	**21.0777**	**21.0777**	**5.3700e-003**	**0.0000**	**21.2119**

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	5.3000e-004	4.3000e-004	5.1700e-003	1.0000e-005	1.6300e-003	1.0000e-005	1.6400e-003	4.3000e-004	1.0000e-005	4.4000e-004	0.0000	1.3034	1.3034	3.0000e-005	4.0000e-005	1.3151
Total	**5.3000e-004**	**4.3000e-004**	**5.1700e-003**	**1.0000e-005**	**1.6300e-003**	**1.0000e-005**	**1.6400e-003**	**4.3000e-004**	**1.0000e-005**	**4.4000e-004**	**0.0000**	**1.3034**	**1.3034**	**3.0000e-005**	**4.0000e-005**	**1.3151**

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					0.0318	0.0000	0.0318	3.4400e-003	0.0000	3.4400e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0276	0.3134	0.2011	4.9000e-004		0.0119	0.0119		0.0110	0.0110	0.0000	43.0941	43.0941	0.0139	0.0000	43.4426
Total	**0.0276**	**0.3134**	**0.2011**	**4.9000e-004**	**0.0318**	**0.0119**	**0.0437**	**3.4400e-003**	**0.0110**	**0.0144**	**0.0000**	**43.0941**	**43.0941**	**0.0139**	**0.0000**	**43.4426**

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	6.6000e-004	5.3000e-004	6.3600e-003	2.0000e-005	2.0000e-003	1.0000e-005	2.0200e-003	5.3000e-004	1.0000e-005	5.4000e-004	0.0000	1.6041	1.6041	4.0000e-005	4.0000e-005	1.6186
Total	**6.6000e-004**	**5.3000e-004**	**6.3600e-003**	**2.0000e-005**	**2.0000e-003**	**1.0000e-005**	**2.0200e-003**	**5.3000e-004**	**1.0000e-005**	**5.4000e-004**	**0.0000**	**1.6041**	**1.6041**	**4.0000e-005**	**4.0000e-005**	**1.6186**

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					0.0124	0.0000	0.0124	1.3400e-003	0.0000	1.3400e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0276	0.3134	0.2011	4.9000e-004		0.0119	0.0119		0.0110	0.0110	0.0000	43.0941	43.0941	0.0139	0.0000	43.4425
Total	**0.0276**	**0.3134**	**0.2011**	**4.9000e-004**	**0.0124**	**0.0119**	**0.0243**	**1.3400e-003**	**0.0110**	**0.0123**	**0.0000**	**43.0941**	**43.0941**	**0.0139**	**0.0000**	**43.4425**

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	6.6000e-004	5.3000e-004	6.3600e-003	2.0000e-005	2.0000e-003	1.0000e-005	2.0200e-003	5.3000e-004	1.0000e-005	5.4000e-004	0.0000	1.6041	1.6041	4.0000e-005	4.0000e-005	1.6186
Total	**6.6000e-004**	**5.3000e-004**	**6.3600e-003**	**2.0000e-005**	**2.0000e-003**	**1.0000e-005**	**2.0200e-003**	**5.3000e-004**	**1.0000e-005**	**5.4000e-004**	**0.0000**	**1.6041**	**1.6041**	**4.0000e-005**	**4.0000e-005**	**1.6186**

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

3.4 Grading - 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					0.2125	0.0000	0.2125	0.1027	0.0000	0.1027	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0462	0.5095	0.2766	6.2000e-004		0.0223	0.0223		0.0205	0.0205	0.0000	54.3081	54.3081	0.0176	0.0000	54.7473
Total	**0.0462**	**0.5095**	**0.2766**	**6.2000e-004**	**0.2125**	**0.0223**	**0.2348**	**0.1027**	**0.0205**	**0.1232**	**0.0000**	**54.3081**	**54.3081**	**0.0176**	**0.0000**	**54.7473**

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	1.2300e-003	9.9000e-004	0.0119	3.0000e-005	3.7600e-003	2.0000e-005	3.7800e-003	1.0000e-003	2.0000e-005	1.0200e-003	0.0000	3.0078	3.0078	8.0000e-005	8.0000e-005	3.0348
Total	**1.2300e-003**	**9.9000e-004**	**0.0119**	**3.0000e-005**	**3.7600e-003**	**2.0000e-005**	**3.7800e-003**	**1.0000e-003**	**2.0000e-005**	**1.0200e-003**	**0.0000**	**3.0078**	**3.0078**	**8.0000e-005**	**8.0000e-005**	**3.0348**

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

3.4 Grading - 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					0.0829	0.0000	0.0829	0.0401	0.0000	0.0401	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0462	0.5095	0.2766	6.2000e-004		0.0223	0.0223		0.0205	0.0205	0.0000	54.3081	54.3081	0.0176	0.0000	54.7472
Total	**0.0462**	**0.5095**	**0.2766**	**6.2000e-004**	**0.0829**	**0.0223**	**0.1051**	**0.0401**	**0.0205**	**0.0606**	**0.0000**	**54.3081**	**54.3081**	**0.0176**	**0.0000**	**54.7472**

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	1.2300e-003	9.9000e-004	0.0119	3.0000e-005	3.7600e-003	2.0000e-005	3.7800e-003	1.0000e-003	2.0000e-005	1.0200e-003	0.0000	3.0078	3.0078	8.0000e-005	8.0000e-005	3.0348
Total	**1.2300e-003**	**9.9000e-004**	**0.0119**	**3.0000e-005**	**3.7600e-003**	**2.0000e-005**	**3.7800e-003**	**1.0000e-003**	**2.0000e-005**	**1.0200e-003**	**0.0000**	**3.0078**	**3.0078**	**8.0000e-005**	**8.0000e-005**	**3.0348**

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

3.5 Building Construction - 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					
Off-Road	0.1011	0.7959	0.7823	1.3600e-003		0.0383	0.0383		0.0367	0.0367	0.0000	113.1857	113.1857	0.0218	0.0000	113.7316
Total	**0.1011**	**0.7959**	**0.7823**	**1.3600e-003**		**0.0383**	**0.0383**		**0.0367**	**0.0367**	**0.0000**	**113.1857**	**113.1857**	**0.0218**	**0.0000**	**113.7316**

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	1.9000e-003	0.0511	0.0184	2.1000e-004	6.9100e-003	5.7000e-004	7.4800e-003	1.9900e-003	5.5000e-004	2.5400e-003	0.0000	19.9679	19.9679	5.4000e-004	2.9600e-003	20.8629
Worker	0.0119	9.5400e-003	0.1149	3.1000e-004	0.0362	1.9000e-004	0.0364	9.6100e-003	1.8000e-004	9.7900e-003	0.0000	28.9598	28.9598	7.7000e-004	8.1000e-004	29.2204
Total	**0.0138**	**0.0606**	**0.1333**	**5.2000e-004**	**0.0431**	**7.6000e-004**	**0.0439**	**0.0116**	**7.3000e-004**	**0.0123**	**0.0000**	**48.9277**	**48.9277**	**1.3100e-003**	**3.7700e-003**	**50.0833**

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

3.5 Building Construction - 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					
Off-Road	0.1011	0.7959	0.7823	1.3600e-003		0.0383	0.0383		0.0367	0.0367	0.0000	113.1855	113.1855	0.0218	0.0000	113.7314
Total	**0.1011**	**0.7959**	**0.7823**	**1.3600e-003**		**0.0383**	**0.0383**		**0.0367**	**0.0367**	**0.0000**	**113.1855**	**113.1855**	**0.0218**	**0.0000**	**113.7314**

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	1.9000e-003	0.0511	0.0184	2.1000e-004	6.9100e-003	5.7000e-004	7.4800e-003	1.9900e-003	5.5000e-004	2.5400e-003	0.0000	19.9679	19.9679	5.4000e-004	2.9600e-003	20.8629
Worker	0.0119	9.5400e-003	0.1149	3.1000e-004	0.0362	1.9000e-004	0.0364	9.6100e-003	1.8000e-004	9.7900e-003	0.0000	28.9598	28.9598	7.7000e-004	8.1000e-004	29.2204
Total	**0.0138**	**0.0606**	**0.1333**	**5.2000e-004**	**0.0431**	**7.6000e-004**	**0.0439**	**0.0116**	**7.3000e-004**	**0.0123**	**0.0000**	**48.9277**	**48.9277**	**1.3100e-003**	**3.7700e-003**	**50.0833**

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	0.2228	1.7711	1.8479	3.2500e-003		0.0798	0.0798		0.0764	0.0764	0.0000	270.0127	270.0127	0.0511	0.0000	271.2893
Total	**0.2228**	**1.7711**	**1.8479**	**3.2500e-003**		**0.0798**	**0.0798**		**0.0764**	**0.0764**	**0.0000**	**270.0127**	**270.0127**	**0.0511**	**0.0000**	**271.2893**

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	3.0300e-003	0.0979	0.0403	4.7000e-004	0.0165	6.9000e-004	0.0172	4.7500e-003	6.6000e-004	5.4200e-003	0.0000	45.7155	45.7155	1.1900e-003	6.7600e-003	47.7592
Worker	0.0261	0.0200	0.2510	7.2000e-004	0.0863	4.3000e-004	0.0868	0.0229	4.0000e-004	0.0233	0.0000	67.2585	67.2585	1.6500e-003	1.7700e-003	67.8284
Total	**0.0292**	**0.1179**	**0.2913**	**1.1900e-003**	**0.1028**	**1.1200e-003**	**0.1039**	**0.0277**	**1.0600e-003**	**0.0287**	**0.0000**	**112.9740**	**112.9740**	**2.8400e-003**	**8.5300e-003**	**115.5876**

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	0.2228	1.7711	1.8479	3.2500e-003		0.0798	0.0798		0.0764	0.0764	0.0000	270.0124	270.0124	0.0511	0.0000	271.2889
Total	**0.2228**	**1.7711**	**1.8479**	**3.2500e-003**		**0.0798**	**0.0798**		**0.0764**	**0.0764**	**0.0000**	**270.0124**	**270.0124**	**0.0511**	**0.0000**	**271.2889**

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	3.0300e-003	0.0979	0.0403	4.7000e-004	0.0165	6.9000e-004	0.0172	4.7500e-003	6.6000e-004	5.4200e-003	0.0000	45.7155	45.7155	1.1900e-003	6.7600e-003	47.7592
Worker	0.0261	0.0200	0.2510	7.2000e-004	0.0863	4.3000e-004	0.0868	0.0229	4.0000e-004	0.0233	0.0000	67.2585	67.2585	1.6500e-003	1.7700e-003	67.8284
Total	**0.0292**	**0.1179**	**0.2913**	**1.1900e-003**	**0.1028**	**1.1200e-003**	**0.1039**	**0.0277**	**1.0600e-003**	**0.0287**	**0.0000**	**112.9740**	**112.9740**	**2.8400e-003**	**8.5300e-003**	**115.5876**

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	0.0567	0.4552	0.5006	8.9000e-004		0.0191	0.0191		0.0183	0.0183	0.0000	73.7384	73.7384	0.0137	0.0000	74.0818
Total	**0.0567**	**0.4552**	**0.5006**	**8.9000e-004**		**0.0191**	**0.0191**		**0.0183**	**0.0183**	**0.0000**	**73.7384**	**73.7384**	**0.0137**	**0.0000**	**74.0818**

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	8.1000e-004	0.0270	0.0108	1.3000e-004	4.5000e-003	1.9000e-004	4.6800e-003	1.3000e-003	1.8000e-004	1.4800e-003	0.0000	12.3119	12.3119	3.2000e-004	1.8200e-003	12.8620
Worker	6.6400e-003	4.8300e-003	0.0639	1.9000e-004	0.0236	1.1000e-004	0.0237	6.2600e-003	1.0000e-004	6.3600e-003	0.0000	17.9758	17.9758	4.1000e-004	4.5000e-004	18.1197
Total	**7.4500e-003**	**0.0318**	**0.0747**	**3.2000e-004**	**0.0281**	**3.0000e-004**	**0.0284**	**7.5600e-003**	**2.8000e-004**	**7.8400e-003**	**0.0000**	**30.2877**	**30.2877**	**7.3000e-004**	**2.2700e-003**	**30.9817**

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	0.0567	0.4552	0.5006	8.9000e-004		0.0191	0.0191		0.0183	0.0183	0.0000	73.7384	73.7384	0.0137	0.0000	74.0817
Total	**0.0567**	**0.4552**	**0.5006**	**8.9000e-004**		**0.0191**	**0.0191**		**0.0183**	**0.0183**	**0.0000**	**73.7384**	**73.7384**	**0.0137**	**0.0000**	**74.0817**

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	8.1000e-004	0.0270	0.0108	1.3000e-004	4.5000e-003	1.9000e-004	4.6800e-003	1.3000e-003	1.8000e-004	1.4800e-003	0.0000	12.3119	12.3119	3.2000e-004	1.8200e-003	12.8620
Worker	6.6400e-003	4.8300e-003	0.0639	1.9000e-004	0.0236	1.1000e-004	0.0237	6.2600e-003	1.0000e-004	6.3600e-003	0.0000	17.9758	17.9758	4.1000e-004	4.5000e-004	18.1197
Total	**7.4500e-003**	**0.0318**	**0.0747**	**3.2000e-004**	**0.0281**	**3.0000e-004**	**0.0284**	**7.5600e-003**	**2.8000e-004**	**7.8400e-003**	**0.0000**	**30.2877**	**30.2877**	**7.3000e-004**	**2.2700e-003**	**30.9817**

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

3.6 Paving - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	4.2100e-003	0.0405	0.0585	9.0000e-005		1.9800e-003	1.9800e-003		1.8300e-003	1.8300e-003	0.0000	7.7574	7.7574	2.4600e-003	0.0000	7.8188
Paving	1.0300e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**5.2400e-003**	**0.0405**	**0.0585**	**9.0000e-005**		**1.9800e-003**	**1.9800e-003**		**1.8300e-003**	**1.8300e-003**	**0.0000**	**7.7574**	**7.7574**	**2.4600e-003**	**0.0000**	**7.8188**

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	2.6000e-004	1.9000e-004	2.5500e-003	1.0000e-005	9.4000e-004	0.0000	9.4000e-004	2.5000e-004	0.0000	2.5000e-004	0.0000	0.7166	0.7166	2.0000e-005	2.0000e-005	0.7223
Total	**2.6000e-004**	**1.9000e-004**	**2.5500e-003**	**1.0000e-005**	**9.4000e-004**	**0.0000**	**9.4000e-004**	**2.5000e-004**	**0.0000**	**2.5000e-004**	**0.0000**	**0.7166**	**0.7166**	**2.0000e-005**	**2.0000e-005**	**0.7223**

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

3.6 Paving - 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	4.2100e-003	0.0405	0.0585	9.0000e-005		1.9800e-003	1.9800e-003		1.8300e-003	1.8300e-003	0.0000	7.7573	7.7573	2.4600e-003	0.0000	7.8188
Paving	1.0300e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**5.2400e-003**	**0.0405**	**0.0585**	**9.0000e-005**		**1.9800e-003**	**1.9800e-003**		**1.8300e-003**	**1.8300e-003**	**0.0000**	**7.7573**	**7.7573**	**2.4600e-003**	**0.0000**	**7.8188**

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	2.6000e-004	1.9000e-004	2.5500e-003	1.0000e-005	9.4000e-004	0.0000	9.4000e-004	2.5000e-004	0.0000	2.5000e-004	0.0000	0.7166	0.7166	2.0000e-005	2.0000e-005	0.7223
Total	**2.6000e-004**	**1.9000e-004**	**2.5500e-003**	**1.0000e-005**	**9.4000e-004**	**0.0000**	**9.4000e-004**	**2.5000e-004**	**0.0000**	**2.5000e-004**	**0.0000**	**0.7166**	**0.7166**	**2.0000e-005**	**2.0000e-005**	**0.7223**

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

3.7 Architectural Coating - 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					
Archit. Coating	0.2250					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	9.0000e-004	6.0900e-003	9.0500e-003	1.0000e-005		3.0000e-004	3.0000e-004		3.0000e-004	3.0000e-004	0.0000	1.2766	1.2766	7.0000e-005	0.0000	1.2784
Total	**0.2259**	**6.0900e-003**	**9.0500e-003**	**1.0000e-005**		**3.0000e-004**	**3.0000e-004**		**3.0000e-004**	**3.0000e-004**	**0.0000**	**1.2766**	**1.2766**	**7.0000e-005**	**0.0000**	**1.2784**

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	1.9000e-004	1.4000e-004	1.8700e-003	1.0000e-005	6.9000e-004	0.0000	6.9000e-004	1.8000e-004	0.0000	1.9000e-004	0.0000	0.5255	0.5255	1.0000e-005	1.0000e-005	0.5297
Total	**1.9000e-004**	**1.4000e-004**	**1.8700e-003**	**1.0000e-005**	**6.9000e-004**	**0.0000**	**6.9000e-004**	**1.8000e-004**	**0.0000**	**1.9000e-004**	**0.0000**	**0.5255**	**0.5255**	**1.0000e-005**	**1.0000e-005**	**0.5297**

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

3.7 Architectural Coating - 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					
Archit. Coating	0.2250					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	9.0000e-004	6.0900e-003	9.0500e-003	1.0000e-005		3.0000e-004	3.0000e-004		3.0000e-004	3.0000e-004	0.0000	1.2766	1.2766	7.0000e-005	0.0000	1.2784
Total	**0.2259**	**6.0900e-003**	**9.0500e-003**	**1.0000e-005**		**3.0000e-004**	**3.0000e-004**		**3.0000e-004**	**3.0000e-004**	**0.0000**	**1.2766**	**1.2766**	**7.0000e-005**	**0.0000**	**1.2784**

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	1.9000e-004	1.4000e-004	1.8700e-003	1.0000e-005	6.9000e-004	0.0000	6.9000e-004	1.8000e-004	0.0000	1.9000e-004	0.0000	0.5255	0.5255	1.0000e-005	1.0000e-005	0.5297
Total	**1.9000e-004**	**1.4000e-004**	**1.8700e-003**	**1.0000e-005**	**6.9000e-004**	**0.0000**	**6.9000e-004**	**1.8000e-004**	**0.0000**	**1.9000e-004**	**0.0000**	**0.5255**	**0.5255**	**1.0000e-005**	**1.0000e-005**	**0.5297**

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	0.0753	0.1008	0.6556	1.3200e-003	0.1359	1.1000e-003	0.1370	0.0363	1.0300e-003	0.0373	0.0000	124.3367	124.3367	8.4600e-003	6.8900e-003	126.6017
Unmitigated	0.0753	0.1008	0.6556	1.3200e-003	0.1359	1.1000e-003	0.1370	0.0363	1.0300e-003	0.0373	0.0000	124.3367	124.3367	8.4600e-003	6.8900e-003	126.6017

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Motel	154.10	154.10	154.10	308,386	308,386
Regional Shopping Center	29.63	36.20	16.56	52,045	52,045
Parking Lot	0.00	0.00	0.00		
Recreational Swimming Pool	0.00	0.00	0.00		
Total	183.73	190.30	170.66	360,431	360,431

4.3 Trip Type Information

	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
Motel	14.70	6.60	6.60	19.00	62.00	19.00	58	38	4
Regional Shopping Center	14.70	6.60	6.60	16.30	64.70	19.00	54	35	11
Parking Lot	14.70	6.60	6.60	0.00	0.00	0.00	0	0	0

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
Recreational Swimming Pool	14.70	6.60	6.60	33.00	48.00	19.00	52	39	9

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Motel	0.540566	0.056059	0.172680	0.136494	0.026304	0.007104	0.011680	0.017449	0.000554	0.000251	0.025076	0.000954	0.004830
Regional Shopping Center	0.540566	0.056059	0.172680	0.136494	0.026304	0.007104	0.011680	0.017449	0.000554	0.000251	0.025076	0.000954	0.004830
Parking Lot	0.540566	0.056059	0.172680	0.136494	0.026304	0.007104	0.011680	0.017449	0.000554	0.000251	0.025076	0.000954	0.004830
Recreational Swimming Pool	0.540566	0.056059	0.172680	0.136494	0.026304	0.007104	0.011680	0.017449	0.000554	0.000251	0.025076	0.000954	0.004830

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Pioneertown Motel - San Bernardino-Mojave Desert County, 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	282.9198	282.9198	0.0239	2.8900e-003	284.3793
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	282.9198	282.9198	0.0239	2.8900e-003	284.3793
NaturalGas Mitigated	0.0289	0.2629	0.2208	1.5800e-003		0.0200	0.0200		0.0200	0.0200	0.0000	286.2001	286.2001	5.4900e-003	5.2500e-003	287.9009
NaturalGas Unmitigated	0.0289	0.2629	0.2208	1.5800e-003		0.0200	0.0200		0.0200	0.0200	0.0000	286.2001	286.2001	5.4900e-003	5.2500e-003	287.9009

Pioneertown Motel - San Bernardino-Mojave Desert County, Annual

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					
Motel	5.36146e+006	0.0289	0.2628	0.2208	1.5800e-003		0.0200	0.0200		0.0200	0.0200	0.0000	286.1080	286.1080	5.4800e-003	5.2500e-003	287.8082
Parking Lot	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
Recreational Swimming Pool	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
Regional Shopping Center	1727	1.0000e-005	8.0000e-005	7.0000e-005	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	0.0922	0.0922	0.0000	0.0000	0.0927
Total		**0.0289**	**0.2629**	**0.2208**	**1.5800e-003**		**0.0200**	**0.0200**		**0.0200**	**0.0200**	**0.0000**	**286.2001**	**286.2001**	**5.4800e-003**	**5.2500e-003**	**287.9009**

Pioneertown Motel - San Bernardino-Mojave Desert County, Annual

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					
Motel	5.36146e+006	0.0289	0.2628	0.2208	1.5800e-003		0.0200	0.0200		0.0200	0.0200	0.0000	286.1080	286.1080	5.4800e-003	5.2500e-003	287.8082
Parking Lot	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
Recreational Swimming Pool	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
Regional Shopping Center	1727	1.0000e-005	8.0000e-005	7.0000e-005	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	0.0922	0.0922	0.0000	0.0000	0.0927
Total		**0.0289**	**0.2629**	**0.2208**	**1.5800e-003**		**0.0200**	**0.0200**		**0.0200**	**0.0200**	**0.0000**	**286.2001**	**286.2001**	**5.4800e-003**	**5.2500e-003**	**287.9009**

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			
Motel	1.57345e+006	279.0448	0.0236	2.8500e-003	280.4843
Parking Lot	12320	2.1849	1.8000e-004	2.0000e-005	2.1962
Recreational Swimming Pool	0	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	9529.9	1.6901	1.4000e-004	2.0000e-005	1.6988
Total		**282.9198**	**0.0239**	**2.8900e-003**	**284.3793**

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Motel	1.57345e+006	279.0448	0.0236	2.8500e-003	280.4843
Parking Lot	12320	2.1849	1.8000e-004	2.0000e-005	2.1962
Recreational Swimming Pool	0	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	9529.9	1.6901	1.4000e-004	2.0000e-005	1.6988
Total		**282.9198**	**0.0239**	**2.8900e-003**	**284.3793**

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	0.4686	1.0000e-005	1.2500e-003	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.4200e-003	2.4200e-003	1.0000e-005	0.0000	2.5800e-003
Unmitigated	0.4686	1.0000e-005	1.2500e-003	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.4200e-003	2.4200e-003	1.0000e-005	0.0000	2.5800e-003

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	0.1076					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.3608					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.1000e-004	1.0000e-005	1.2500e-003	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.4200e-003	2.4200e-003	1.0000e-005	0.0000	2.5800e-003
Total	**0.4686**	**1.0000e-005**	**1.2500e-003**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**2.4200e-003**	**2.4200e-003**	**1.0000e-005**	**0.0000**	**2.5800e-003**

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	0.1076					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.3608					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.1000e-004	1.0000e-005	1.2500e-003	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.4200e-003	2.4200e-003	1.0000e-005	0.0000	2.5800e-003
Total	**0.4686**	**1.0000e-005**	**1.2500e-003**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**2.4200e-003**	**2.4200e-003**	**1.0000e-005**	**0.0000**	**2.5800e-003**

7.0 Water Detail

7.1 Mitigation Measures Water

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	3.7532	0.0420	1.0200e-003	5.1065
Unmitigated	3.7532	0.0420	1.0200e-003	5.1065

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Motel	1.16687 / 0.129652	3.3202	0.0383	9.3000e-004	4.5535
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Recreational Swimming Pool	0.0544117 / 0.0333491	0.2086	1.7900e-003	4.0000e-005	0.2664
Regional Shopping Center	0.0585173 / 0.0358654	0.2244	1.9200e-003	5.0000e-005	0.2865
Total		**3.7532**	**0.0420**	**1.0200e-003**	**5.1065**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Motel	1.16687 / 0.129652	3.3202	0.0383	9.3000e-004	4.5535
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Recreational Swimming Pool	0.0544117 / 0.0333491	0.2086	1.7900e-003	4.0000e-005	0.2664
Regional Shopping Center	0.0585173 / 0.0358654	0.2244	1.9200e-003	5.0000e-005	0.2865
Total		**3.7532**	**0.0420**	**1.0200e-003**	**5.1065**

8.0 Waste Detail

8.1 Mitigation Measures Waste

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	6.3435	0.3749	0.0000	15.7157
Unmitigated	6.3435	0.3749	0.0000	15.7157

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Motel	25.18	5.1113	0.3021	0.0000	12.6631
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Recreational Swimming Pool	5.24	1.0637	0.0629	0.0000	2.6352
Regional Shopping Center	0.83	0.1685	9.9600e-003	0.0000	0.4174
Total		**6.3435**	**0.3749**	**0.0000**	**15.7157**

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

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Motel	25.18	5.1113	0.3021	0.0000	12.6631
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Recreational Swimming Pool	5.24	1.0637	0.0629	0.0000	2.6352
Regional Shopping Center	0.83	0.1685	9.9600e-003	0.0000	0.4174
Total		**6.3435**	**0.3749**	**0.0000**	**15.7157**

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

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

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

Equipment Type	Number

11.0 Vegetation

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APPENDIX 4.2:

EMFAC 2017 MODEL OUTPUTS

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

Region	CalYr	VehClass	MdlYr	Speed	Fuel	Population	VMT	Fuel_Consumption	Fuel_Consumption	Total Fuel	VMT	Total VMT	Miles per Gallon	Vehicle Class
San Bernardino (MD)	2022	HHDT	Aggregate	Aggregate	Gasoline	2.370838621	114842.922	26.49105217	26491.05217	104282060.9	114842.922	744145551.5	7.14	HHDT
San Bernardino (MD)	2022	HHDT	Aggregate	Aggregate	Diesel	14223.99917	743969878	104229.5059	104229505.9		743969878			
San Bernardino (MD)	2022	HHDT	Aggregate	Aggregate	Natural Gas	4.796841066	60830.58679	26.06393425	26063.93425		60830.58679			
San Bernardino (MD)	2022	LDA	Aggregate	Aggregate	Gasoline	366454.0342	5134466147	161358.9295	161358929.5	162345614.8	5134466147	5277015636	32.50	LDA
San Bernardino (MD)	2022	LDA	Aggregate	Aggregate	Diesel	3471.95609	50407899.02	986.6853259	986685.3259		50407899.02			
San Bernardino (MD)	2022	LDA	Aggregate	Aggregate	Electricity	6322.069523	92141589.82	0	0		92141589.82			
San Bernardino (MD)	2022	LDT1	Aggregate	Aggregate	Gasoline	40304.2736	501284939.2	18479.24361	18479243.61	18483734.87	501284939.2	504805525.8	27.31	LDT1
San Bernardino (MD)	2022	LDT1	Aggregate	Aggregate	Diesel	20.13949813	117321.5656	4.491264966	4491.264966		117321.5656			
San Bernardino (MD)	2022	LDT1	Aggregate	Aggregate	Electricity	220.7748657	3403265.021	0	0		3403265.021			
San Bernardino (MD)	2022	LDT2	Aggregate	Aggregate	Gasoline	123751.8082	1602844129	63529.70895	63529708.95	63810542.73	1602844129	1625945005	25.48	LDT2
San Bernardino (MD)	2022	LDT2	Aggregate	Aggregate	Diesel	703.2748912	10737360.74	280.8337818	280833.7818		10737360.74			
San Bernardino (MD)	2022	LDT2	Aggregate	Aggregate	Electricity	1061.761929	12363515.52	0	0		12363515.52			
San Bernardino (MD)	2022	LHDT1	Aggregate	Aggregate	Gasoline	10936.32505	119766188.9	11492.73527	11492735.27	17745396.47	119766188.9	249128213.7	14.04	LHDT1
San Bernardino (MD)	2022	LHDT1	Aggregate	Aggregate	Diesel	11292.9008	129362024.8	6252.6612	6252661.2		129362024.8			
San Bernardino (MD)	2022	LHDT2	Aggregate	Aggregate	Gasoline	1520.850277	17098003.59	1870.642379	1870642.379	4390630.215	17098003.59	65504516.15	14.92	LHDT2
San Bernardino (MD)	2022	LHDT2	Aggregate	Aggregate	Diesel	4160.651583	48406512.56	2519.987836	2519987.836		48406512.56			
San Bernardino (MD)	2022	MCY	Aggregate	Aggregate	Gasoline	20635.00402	96105925.74	2456.845787	2456845.787	2456845.787	96105925.74	96105925.74	39.12	MCY
San Bernardino (MD)	2022	MDV	Aggregate	Aggregate	Gasoline	99574.56883	1243762225	61661.7781	61661778.1	62756996.68	1243762225	1281022323	20.41	MDV
San Bernardino (MD)	2022	MDV	Aggregate	Aggregate	Diesel	2137.236681	30596106.28	1095.218576	1095218.576		30596106.28			
San Bernardino (MD)	2022	MDV	Aggregate	Aggregate	Electricity	556.0595181	6663991.675	0	0		6663991.675			
San Bernardino (MD)	2022	MH	Aggregate	Aggregate	Gasoline	3177.709292	8516223.294	1709.490659	1709490.659	2007632.694	8516223.294	11781956.97	5.87	MH
San Bernardino (MD)	2022	MH	Aggregate	Aggregate	Diesel	1193.154258	3265733.675	298.1420347	298142.0347		3265733.675			
San Bernardino (MD)	2022	MHDT	Aggregate	Aggregate	Gasoline	951.9209644	23451289.78	4579.889235	4579889.235	11436245.09	23451289.78	98938520.28	8.65	MHDT
San Bernardino (MD)	2022	MHDT	Aggregate	Aggregate	Diesel	3437.97759	75487230.5	6856.355853	6856355.853		75487230.5			
San Bernardino (MD)	2022	OBUS	Aggregate	Aggregate	Gasoline	281.1627443	5967108.815	1185.881237	1185881.237	1367380.389	5967108.815	7478445.088	5.47	OBUS
San Bernardino (MD)	2022	OBUS	Aggregate	Aggregate	Diesel	67.81672951	1511336.274	181.4991514	181499.1514		1511336.274			
San Bernardino (MD)	2022	SBUS	Aggregate	Aggregate	Gasoline	45.96726716	1030762.616	102.2688096	102268.8096	944729.54	1030762.616	7515878.589	7.96	SBUS
San Bernardino (MD)	2022	SBUS	Aggregate	Aggregate	Diesel	622.3333353	6485115.973	842.4607305	842460.7305		6485115.973			
San Bernardino (MD)	2022	UBUS	Aggregate	Aggregate	Gasoline	43.18239997	1567866.024	358.5432594	358543.2594	1126509.391	1567866.024	5030301.356	4.47	UBUS
San Bernardino (MD)	2022	UBUS	Aggregate	Aggregate	Diesel	1.355983709	40577.07924	6.678003951	6678.003951		40577.07924			
San Bernardino (MD)	2022	UBUS	Aggregate	Aggregate	Electricity	0.027468686	218.2808104	0	0		218.2808104			
San Bernardino (MD)	2022	UBUS	Aggregate	Aggregate	Natural Gas	77.29156343	3421639.971	761.288128	761288.128		3421639.971			

Source: EMFAC2017 (v1.0.3) Emissions Inventory
Region Type: Sub-Area
Region: San Bernardino (MD)
Calendar Year: 2023
Season: Annual
Vehicle Classification: EMFAC2007 Categories
Units: miles/year for VMT, trips/year for Trips, tons/year for Emissions, 1000 gallons/year for Fuel Consumption

Region	CalYr	VehClass	MdlYr	Speed	Fuel	Population	VMT	Fuel_Consumption	Fuel_Consumption	Total Fuel	VMT	Total VMT	Miles per Gallon	Vehicle Class
San Bernardino (MD)	2023	HHDT	Aggregate	Aggregate	Gasoline	2.401326697	131072.9618	29.54616131	29546.16131	102669118.6	131072.9618	758627261.4	7.39	HHDT
San Bernardino (MD)	2023	HHDT	Aggregate	Aggregate	Diesel	14430.92026	758428061	102610.8361	102610836.1		758428061			
San Bernardino (MD)	2023	HHDT	Aggregate	Aggregate	Natural Gas	5.37028577	68127.39056	28.73625324	28736.25324		68127.39056			
San Bernardino (MD)	2023	LDA	Aggregate	Aggregate	Gasoline	373604.6189	5206539135	159208.948	159208948	160220726.1	5206539135	5373598306	33.54	LDA
San Bernardino (MD)	2023	LDA	Aggregate	Aggregate	Diesel	3679.245064	53059441.13	1011.778077	1011778.077		53059441.13			
San Bernardino (MD)	2023	LDA	Aggregate	Aggregate	Electricity	7633.554803	113999730	0	0		113999730			
San Bernardino (MD)	2023	LDT1	Aggregate	Aggregate	Gasoline	40976.73837	509772450.5	18291.76531	18291765.31	18295927.46	509772450.5	514736446.7	28.13	LDT1
San Bernardino (MD)	2023	LDT1	Aggregate	Aggregate	Diesel	18.57884914	110505.0419	4.162145924	4162.145924		110505.0419			
San Bernardino (MD)	2023	LDT1	Aggregate	Aggregate	Electricity	307.9630377	4853491.1	0	0		4853491.1			
San Bernardino (MD)	2023	LDT2	Aggregate	Aggregate	Gasoline	125268.6909	1616918155	61853.31533	61853315.33	62149448.33	1616918155	1644308446	26.46	LDT2
San Bernardino (MD)	2023	LDT2	Aggregate	Aggregate	Diesel	775.0531319	11638968.74	296.1330024	296133.0024		11638968.74			
San Bernardino (MD)	2023	LDT2	Aggregate	Aggregate	Electricity	1373.727457	15751322.17	0	0		15751322.17			
San Bernardino (MD)	2023	LHDT1	Aggregate	Aggregate	Gasoline	10651.51086	116856871.5	11089.46274	11089462.74	17167189.25	116856871.5	244131537.7	14.22	LHDT1
San Bernardino (MD)	2023	LHDT1	Aggregate	Aggregate	Diesel	11209.32886	127274666.2	6077.726512	6077726.512		127274666.2			
San Bernardino (MD)	2023	LHDT2	Aggregate	Aggregate	Gasoline	1508.549584	16941215.92	1832.761235	1832761.235	4299903.595	16941215.92	64898851.08	15.09	LHDT2
San Bernardino (MD)	2023	LHDT2	Aggregate	Aggregate	Diesel	4173.349481	47957635.16	2467.14236	2467142.36		47957635.16			
San Bernardino (MD)	2023	MCY	Aggregate	Aggregate	Gasoline	20700.08804	94318545.73	2410.269196	2410269.196	2410269.196	94318545.73	94318545.73	39.13	MCY
San Bernardino (MD)	2023	MDV	Aggregate	Aggregate	Gasoline	98766.74154	1227271358	58995.80009	58995800.09	60109223.17	1227271358	1268533000	21.10	MDV
San Bernardino (MD)	2023	MDV	Aggregate	Aggregate	Diesel	2267.017131	31948536.36	1113.423074	1113423.074		31948536.36			
San Bernardino (MD)	2023	MDV	Aggregate	Aggregate	Electricity	790.6656376	9313105.602	0	0		9313105.602			
San Bernardino (MD)	2023	MH	Aggregate	Aggregate	Gasoline	3018.82624	8104407.85	1611.080329	1611080.329	1901568.449	8104407.85	11309881.96	5.95	MH
San Bernardino (MD)	2023	MH	Aggregate	Aggregate	Diesel	1186.424067	3205474.113	290.4881207	290488.1207		3205474.113			
San Bernardino (MD)	2023	MHDT	Aggregate	Aggregate	Gasoline	963.9362319	24043088.86	4628.83471	4628834.71	11423444.31	24043088.86	101191336.5	8.86	MHDT
San Bernardino (MD)	2023	MHDT	Aggregate	Aggregate	Diesel	3424.211276	77148247.64	6794.609598	6794609.598		77148247.64			
San Bernardino (MD)	2023	OBUS	Aggregate	Aggregate	Gasoline	280.0617227	5886630.544	1153.770812	1153770.812	1337073.469	5886630.544	7443830.896	5.57	OBUS
San Bernardino (MD)	2023	OBUS	Aggregate	Aggregate	Diesel	68.67259267	1557200.352	183.3026578	183302.6578		1557200.352			
San Bernardino (MD)	2023	SBUS	Aggregate	Aggregate	Gasoline	53.52205694	1192126.695	117.1135125	117113.5125	957588.4309	1192126.695	7707265.165	8.05	SBUS
San Bernardino (MD)	2023	SBUS	Aggregate	Aggregate	Diesel	626.8679849	6515138.47	840.4749184	840474.9184		6515138.47			
San Bernardino (MD)	2023	UBUS	Aggregate	Aggregate	Gasoline	43.43718733	1577116.841	360.1534068	360153.4068	1132688.127	1577116.841	5059981.439	4.47	UBUS
San Bernardino (MD)	2023	UBUS	Aggregate	Aggregate	Diesel	1.336705286	40058.50974	6.60832954	6608.32954		40058.50974			
San Bernardino (MD)	2023	UBUS	Aggregate	Aggregate	Electricity	0.027468686	218.2808104	0	0		218.2808104			
San Bernardino (MD)	2023	UBUS	Aggregate	Aggregate	Natural Gas	77.77504486	3442587.808	765.9263907	765926.3907		3442587.808			

Source: EMFAC2017 (v1.0.3) Emissions Inventory
Region Type: Sub-Area
Region: San Bernardino (MD)
Calendar Year: 2024
Season: Annual
Vehicle Classification: EMFAC2007 Categories
Units: miles/year for VMT, trips/year for Trips, tons/year for Emissions, 1000 gallons/year for Fuel Consumption

Region	CalYr	VehClass	MdlYr	Speed	Fuel	Population	VMT	Fuel_Consumption	Fuel_Consumption	Total Fuel	VMT	Total VMT	Miles per Gallon	Vehicle Class
San Bernardino (MD)	2024	HHDT	Aggregate	Aggregate	Gasoline	2.411936038	146848.8148	32.07238753	32072.38753	102425220	146848.8148	773988049.6	7.56	HHDT
San Bernardino (MD)	2024	HHDT	Aggregate	Aggregate	Diesel	14891.66439	773765657.9	102361.8445	102361844.5		773765657.9			
San Bernardino (MD)	2024	HHDT	Aggregate	Aggregate	Natural Gas	5.952631547	75542.84895	31.30315624	31303.15624		75542.84895			
San Bernardino (MD)	2024	LDA	Aggregate	Aggregate	Gasoline	380539.0546	5272102136	156723.215	156723215	157749868.7	5272102136	5466931783	34.66	LDA
San Bernardino (MD)	2024	LDA	Aggregate	Aggregate	Diesel	3867.869746	55458394.59	1026.653705	1026653.705		55458394.59			
San Bernardino (MD)	2024	LDA	Aggregate	Aggregate	Electricity	9116.212598	139371251.8	0	0		139371251.8			
San Bernardino (MD)	2024	LDT1	Aggregate	Aggregate	Gasoline	41671.13361	517985496.6	18079.89017	18079890.17	18083770.87	517985496.6	524601539.5	29.01	LDT1
San Bernardino (MD)	2024	LDT1	Aggregate	Aggregate	Diesel	17.2635193	105229.5414	3.880706144	3880.706144		105229.5414			
San Bernardino (MD)	2024	LDT1	Aggregate	Aggregate	Electricity	405.1814569	6510813.339	0	0		6510813.339			
San Bernardino (MD)	2024	LDT2	Aggregate	Aggregate	Gasoline	126873.5527	1631292243	60207.41847	60207418.47	60514887.69	1631292243	1663173395	27.48	LDT2
San Bernardino (MD)	2024	LDT2	Aggregate	Aggregate	Diesel	842.4175208	12461585.77	307.4692228	307469.2228		12461585.77			
San Bernardino (MD)	2024	LDT2	Aggregate	Aggregate	Electricity	1720.680246	19419565.66	0	0		19419565.66			
San Bernardino (MD)	2024	LHDT1	Aggregate	Aggregate	Gasoline	10392.04276	114309276.2	10668.48463	10668484.63	16575169.8	114309276.2	239620249.6	14.46	LHDT1
San Bernardino (MD)	2024	LHDT1	Aggregate	Aggregate	Diesel	11118.64856	125310973.4	5906.685171	5906685.171		125310973.4			
San Bernardino (MD)	2024	LHDT2	Aggregate	Aggregate	Gasoline	1498.630702	16806991.79	1788.463642	1788463.642	4203533.895	16806991.79	64322047.67	15.30	LHDT2
San Bernardino (MD)	2024	LHDT2	Aggregate	Aggregate	Diesel	4181.119006	47515055.89	2415.070253	2415070.253		47515055.89			
San Bernardino (MD)	2024	MCY	Aggregate	Aggregate	Gasoline	20778.54181	92771089.49	2367.962465	2367962.465	2367962.465	92771089.49	92771089.49	39.18	MCY
San Bernardino (MD)	2024	MDV	Aggregate	Aggregate	Gasoline	98024.11078	1212580646	56427.91486	56427914.86	57550334.21	1212580646	1257931983	21.86	MDV
San Bernardino (MD)	2024	MDV	Aggregate	Aggregate	Diesel	2390.765011	33183469.37	1122.419348	1122419.348		33183469.37			
San Bernardino (MD)	2024	MDV	Aggregate	Aggregate	Electricity	1051.798802	12167867.44	0	0		12167867.44			
San Bernardino (MD)	2024	MH	Aggregate	Aggregate	Gasoline	2867.716615	7732448.794	1509.864204	1509864.204	1791985.355	7732448.794	10884469.96	6.07	MH
San Bernardino (MD)	2024	MH	Aggregate	Aggregate	Diesel	1179.218043	3152021.167	282.1211506	282121.1506		3152021.167			
San Bernardino (MD)	2024	MHDT	Aggregate	Aggregate	Gasoline	977.9867329	24607234.6	4629.816375	4629816.375	11438572.31	24607234.6	103521184.9	9.05	MHDT
San Bernardino (MD)	2024	MHDT	Aggregate	Aggregate	Diesel	3588.772527	78913950.31	6808.755935	6808755.935		78913950.31			
San Bernardino (MD)	2024	OBUS	Aggregate	Aggregate	Gasoline	279.044491	5818855.369	1115.246105	1115246.105	1301226.632	5818855.369	7426782.645	5.71	OBUS
San Bernardino (MD)	2024	OBUS	Aggregate	Aggregate	Diesel	71.37577825	1607927.276	185.9805272	185980.5272		1607927.276			
San Bernardino (MD)	2024	SBUS	Aggregate	Aggregate	Gasoline	61.14127279	1353195.11	130.7655694	130765.5694	969544.6828	1353195.11	7907632.547	8.16	SBUS
San Bernardino (MD)	2024	SBUS	Aggregate	Aggregate	Diesel	632.1054382	6554437.436	838.7791134	838779.1134		6554437.436			
San Bernardino (MD)	2024	UBUS	Aggregate	Aggregate	Gasoline	43.69197469	1586367.657	361.7100215	361710.0215	1139449.532	1586367.657	5089661.522	4.47	UBUS
San Bernardino (MD)	2024	UBUS	Aggregate	Aggregate	Diesel	1.301635371	39115.16558	6.482276253	6482.276253		39115.16558			
San Bernardino (MD)	2024	UBUS	Aggregate	Aggregate	Electricity	0.027468686	218.2808104	0	0		218.2808104			
San Bernardino (MD)	2024	UBUS	Aggregate	Aggregate	Natural Gas	78.27431777	3463960.418	771.2572341	771257.2341		3463960.418			

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