

# THE JEFF HOTEL PROJECT, CULVER CITY, CA

## Greenhouse Gas Technical Report

Prepared for  
Sandstone Properties, Inc.  
14724 Ventura Boulevard, Penthouse Suite  
Los Angeles, CA 91403

November 2020





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# ACRONYMS AND ABBREVIATIONS

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<b>Acronym</b>	<b>Description</b>
AB 32	California Global Warming Solutions Act of 2006
Basin	South Coast Air Basin
BAU	Business as Usual
BPMP	Bicycle & Pedestrian Master Plan
CAA	Clean Air Act
CAAQS	California Ambient Air Quality Standards
CalEEMod	California Emissions Estimator Model
CalEPA	California Environmental Protection Agency
CALGreen Code	California Green Building Standards Code
CAFE	Corporate Average Fuel Economy
CAPCOA	California Air Pollution Control Officer's Association
CARB	California Air Resources Board
CCR	California Code of Regulations
CEC	California Energy Commission
CEQA	California Environmental Quality Act
CEUS	Commercial End-Use Survey
CH <sub>4</sub>	Methane
City	City of Culver City
CO <sub>2</sub>	Carbon Dioxide
CO <sub>2e</sub>	Carbon Dioxide Equivalents
CPUC	California Public Utilities Commission
DPM	Diesel Particulate Matter
EMFAC	On-road vehicle emissions factor model
GHG	Greenhouse Gas
GWP	Global Warming Potential
HFCs	Hydrofluorocarbons
HVAC	Heating, Ventilating and Air Conditioning
IPCC	Intergovernmental Panel on Climate Change
LCFS	Low Carbon Fuel Standard
MTCO <sub>2e</sub>	Metric ton of carbon dioxide equivalent

<b>Acronym</b>	<b>Description</b>
MMTCO <sub>2</sub> e	Million metric tons of carbon dioxide equivalent
N <sub>2</sub> O	Nitrous Oxide
PFCs	Perfluorocarbons
RPS	Renewable Portfolio Standard
SF <sub>6</sub>	Sulfur Hexafluoride
OPR	California Office of Planning and Research
VMT	Vehicle miles travelled
EMFAC	On-road vehicle emissions factor model
Hp	Horsepower
LOS	Level of Service
MPO	Metropolitan Planning Organization
NAAQS	National Ambient Air Quality Standards
OFFROAD	Off-road vehicle emissions model
PDF	Project design feature
ppm	Parts per million
RPS	Renewables Portfolio Standard
RTP/SCS	Regional Transportation Plan/Sustainable Communities Strategy
SCAG	Southern California Association of Governments
SCAQMD	South Coast Air Quality Management District
SCE	Southern California Edison
SIP	State Implementation Plan
USDOT	United States Department of Transportation
USEPA	United States Environmental Protection Agency

# EXECUTIVE SUMMARY

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Sandstone Properties, Inc. proposes to develop a five-story, 175-room boutique hotel at 11469 Jefferson Boulevard in Culver City, California (Project). In accordance with the requirements under the California Environmental Quality Act (CEQA), this Technical Report provides an estimate of the greenhouse gas (GHG) emissions for the Project and the potential impacts from associated construction and operational GHG emissions. The report includes the categories and types of emission sources resulting from the Project, the calculation procedures used in the analysis, and any assumptions or limitations.

The Project would comprise a total building area of approximately 111,000 gross square feet within a 0.78 acre (33,800 square feet) parcel (Project Site). Parking would be provided in a two-floor, subterranean parking garage. Development of the Project would require the demolition of the existing low-rise commercial buildings and surface parking lot.

The proposed Project would introduce short-term and temporary GHG emissions from construction, and long-term GHG emissions from operation. The following emission sources, associated with the Project, have been evaluated:

- *Construction* – Activities associated with construction of the Project, such as burning of fossil fuels for demolition, grading, building construction, paving and painting, would result in temporary and incremental increases in GHG emissions.
- *Operation* – Activities from the operation of the Project, such as heating, cooling, electricity, lawn care and maintenance activities, and the treatment and conveyance of water, would result in permanent increases in GHG emissions.

Greenhouse gas emissions associated with the Project would be consistent with applicable portions of Culver City's Green Building Program. In addition, the Project would be consistent with the applicable Southern California Association of Governments (SCAG) Regional Transportation Plan (RTP)/Sustainable Communities Strategy (SCS) policies intended to meet the regions' GHG reduction targets as assigned by the California Air Resources Board (CARB). Thus the Project's GHG emissions would be consistent with regulatory schemes intended to reduce GHG emissions. Therefore, the Project would result in less than significant GHG emissions based on applicable thresholds of significance as evaluated in this GHG Technical Report. Furthermore, the Project would be designed to meet criteria for the Leadership in Energy and Environmental Design (LEED) Silver or equivalent certification level and would implement green building measures that would reduce the Project's direct and indirect GHG emissions. With the implementation of the Projects' green building measures, the Project would achieve substantial GHG reductions and would achieve reductions consistent with the statewide GHG reduction target.



# SECTION 1

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## Introduction

### 1.1 Existing Conditions

The approximately 0.78-acre Project Site is located at the northwest corner of Jefferson Boulevard and Slauson Avenue in Culver City. The Project Site is bounded by Jefferson Boulevard to the south, Slauson Avenue to the west, Berryman Avenue to the north and Sepulveda Boulevard to the east. A two-lane service alley runs along the northwest side of the Project Site and the service alley serves as the western boundary of the Project Site. The Project Site is shown in **Figure 1, Regional Location**. Nearby uses surrounding the Project Site include residential uses to the north and west across the service alley, adjacent commercial uses to the east, and commercial uses to the south across Jefferson Boulevard and Slauson Avenue. **Figure 2, Aerial Photograph with Surrounding Land Uses**, shows the site and surrounding land uses. The Project Site is 33,800 square feet in size and is currently developed with low-level commercial buildings totaling 13,301 square feet and a surface parking lot totaling 20,516 square feet, all of which would be demolished and removed to support development of the Project.

The Project Site is well served by a network of regional transportation facilities. Various public transit stops operated by the Los Angeles County Metropolitan Transportation Authority (Metro) and Culver City Bus are located in close proximity to the Project Site, including the Culver City Transit Center Bus Station that is located approximately 900 feet southeast of the Project Site. The Metro Expo Line Culver City light rail station is approximately two and three quarter miles north of the Project Site. State Route 90 is approximately 350 feet west of the Project at its closest point; Interstate 405 is approximately 450 feet southwest of the Project Site at its closest point; The Pacific Coast Highway (State Route 1) is approximately two and one quarter miles to the southwest of the Project Site; Interstate 10 is approximately two and three quarter miles to the north; and Interstate 105 is approximately four miles to the south.

### 1.2 Project Description

Sandstone Properties, Inc. proposes to develop a five-story, 175-room boutique hotel at 11469 Jefferson Boulevard in Culver City, California (Project). The Project would comprise a total building area of approximately 111,000 gross square feet within a 0.78 acre (33,800 square feet) parcel (Project Site). Development of the Project would require the demolition of the existing low-level commercial buildings totaling 13,301 square feet and a surface parking lot totaling 20,516 square feet.





SOURCE: Open Street Map, 2019

The Jeff Hotel

**Figure 2**  
Aerial Photograph with Surrounding Land Uses



The Project would be designed to accommodate the 175 guest rooms and ground level amenities around a central open-to-the-sky atrium (oculus), podium level courtyard (Level 2), and additional rooftop amenities. Level 1 would include restaurant/commercial uses, service/administrative/housekeeping/kitchen uses, a meeting room, a lobby, a lounge, and oculus. Level 2 would include guestrooms, housekeeping, meeting rooms, a courtyard, and rear terrace. Level 3 would include guestrooms, housekeeping, a fitness room, and a courtyard. Level 4 would include guestrooms and housekeeping. Level 5 would include guestrooms, housekeeping, and a pool deck. Rooftop amenities would include a rooftop bar and open space/lounge areas. Parking would be provided in a two-floor, subterranean parking garage.

### 1.3 Project Land Use Characteristics

The Project would represent an urban infill development, since it would be undertaken on a currently developed property, and would be located near existing public transit stops, which would result in reduced vehicle trips and VMT compared to model default assumptions. Conservatively, the Project traffic study<sup>1</sup> did not include transit credit from public transit stops and used default trips rates in the Institute of Transportation Engineers, *Trip Generation, 10<sup>th</sup> Edition*. These trip rates were used in the operational emissions modeling.

### 1.4 Project Design Features

The Project will incorporate Project Design Features (PDFs) that will reduce construction emissions and target sustainable site development, water savings, energy efficiency, green-oriented materials selection, and improved indoor environmental quality. PDFs are part of the Project design, and are not mitigation measures. The PDFs that will be included in the Project design include the following:

**PDF-AIR-1: Construction Features:** Construction equipment operating at the Project Site shall be subject to a number of requirements. These requirements shall be included in applicable bid documents and successful contractor(s) must demonstrate the ability to supply such equipment. Construction measures would include, but are not limited to the following:

- The Project shall require all off-road diesel construction equipment greater than 50 horsepower (hp) that will be used an aggregate of 40 or more hours to meet the U.S. Environmental Protection Agency Tier 4 Final off-road emission standards. A copy of each unit's certified tier specification or model year specification and California Air Resources Board or South Coast Air Quality Management District operating permit (if applicable) shall be available upon request at the time of mobilization of each applicable unit of equipment. This construction feature would allow for a reduction in diesel particulate matter and NO<sub>x</sub> emissions during construction activities.

**PDF-AIR-2: Design Elements:** In accordance with CALGreen Building Standards, the project shall incorporate the following mandatory energy and emission saving features:

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<sup>1</sup> Crain & Associates, Jefferson Hotel Project Traffic Study, 2020.

- The Project shall recycle and/or salvage at least 65 percent of non-hazardous construction and demolition debris.
- The Project shall include easily accessible recycling areas dedicated to the collection and storage of non-hazardous materials such as paper, corrugated cardboard, glass, plastics, metals, and landscaping debris (trimmings).
- The Project shall include efficient heating, ventilation, and air conditioning (HVAC) systems.
- The Project shall install low-flow water fixtures that are consistent with U.S. Environmental Protection Agency WaterSense specifications.

**PDF-AIR-3: Voluntary Design Elements:** The project shall incorporate many operational energy and emission saving features including the following:

- The Project design would meet criteria for the LEED Silver or equivalent certification level.
- The Project shall install a solar photovoltaic power system equivalent to at least 1 percent of the Project's electricity demand and at least 1 kilowatt (kW) of solar photovoltaics per 10,000 square feet of new development.

## 1.5 Existing Greenhouse Gas Environment

### Global Climate Change

Global climate change refers to changes in average climatic conditions on Earth as a whole, including changes in temperature, wind patterns, precipitation and storms. Historical records indicate that global climate changes have occurred in the past due to natural phenomena; however, current data increasingly indicate that the current global conditions differ from past climate changes in rate and magnitude. Global climate change attributable to anthropogenic (human) GHG emissions is currently one of the most important and widely debated scientific, economic and political issues in the United States and the world. The extent to which increased concentrations of GHGs have caused or will cause climate change and the appropriate actions to limit and/or respond to climate change are the subject of significant and rapidly evolving regulatory efforts at the federal and state levels of government.

GHGs are those compounds in the Earth's atmosphere which play a critical role in determining temperature near the Earth's surface. More specifically, these gases allow high-frequency shortwave solar radiation to enter the Earth's atmosphere, but retain some of the low frequency infrared energy which is radiated back from the Earth towards space, resulting in a warming of the atmosphere. Not all GHGs possess the same ability to induce climate change; as a result, GHG contributions are commonly quantified in the units of equivalent mass of carbon dioxide (CO<sub>2</sub>e). Mass emissions are calculated by converting pollutant specific emissions to CO<sub>2</sub>e

emissions by applying the proper global warming potential (GWP) value.<sup>2</sup> These GWP ratios are available from the Intergovernmental Panel on Climate Change (IPCC). Historically, GHG emission inventories have been calculated using the GWPs from the IPCC's Second Assessment Report (SAR). The IPCC updated the GWP values based on the latest science in its Fourth Assessment Report (AR4). The updated GWPs in the IPCC AR4 are used in GHG emissions inventories. By applying the GWP ratios, Project-related CO<sub>2</sub>e emissions can be tabulated in metric tons per year. Typically, the GWP ratio corresponding to the warming potential of CO<sub>2</sub> over a 100-year period is used as a baseline. The CO<sub>2</sub>e values are calculated for construction years as well as existing and Project build-out conditions in order to generate a net change in GHG emissions for construction and operation. Compounds that are regulated as GHGs are discussed below.<sup>3,4</sup>

- **Carbon Dioxide (CO<sub>2</sub>):** CO<sub>2</sub> is the most abundant GHG in the atmosphere and is primarily generated from fossil fuel combustion from stationary and mobile sources. CO<sub>2</sub> is the reference gas (GWP of 1) for determining the GWPs of other GHGs.<sup>5</sup>
- **Methane (CH<sub>4</sub>):** CH<sub>4</sub> is emitted from biogenic sources (i.e., resulting from the activity of living organisms), incomplete combustion in forest fires, landfills, manure management, and leaks in natural gas pipelines. The GWP of CH<sub>4</sub> is 21 in the IPCC SAR and 25 in the IPCC AR4.<sup>6</sup>
- **Nitrous Oxide (N<sub>2</sub>O):** N<sub>2</sub>O produced by human-related sources including agricultural soil management, animal manure management, sewage treatment, mobile and stationary combustion of fossil fuel, adipic acid production, and nitric acid production. The GWP of N<sub>2</sub>O is 310 in the IPCC SAR and 298 in the IPCC AR4.<sup>7</sup>
- **Hydrofluorocarbons (HFCs):** HFCs are fluorinated compounds consisting of hydrogen, carbon, and fluorine. They are typically used as refrigerants in both stationary refrigeration and mobile air conditioning systems. The GWP of HFCs ranges from 140 for HFC-152a to 11,700 for HFC-23 in the IPCC SAR and 124 for HFC-152a to 14,800 for HFC-23 in the IPCC AR4.<sup>8</sup>
- **Nitrogen Trifluoride (NF<sub>3</sub>):** NF<sub>3</sub> is an inorganic, non-flammable, non-toxic odorless gas. NF<sub>3</sub> is used as an oxidizer of high energy fuels, for the preparation of

<sup>2</sup> GWPs and associated CO<sub>2</sub>e values were developed by the Intergovernmental Panel on Climate Change (IPCC), and published in its Second Assessment Report (SAR) in 1996. Historically, GHG emission inventories have been calculated using the GWPs from the IPCC's SAR. The IPCC updated the GWP values based on the latest science in its Fourth Assessment Report (AR4). The California Air Resources Board (CARB) has begun reporting GHG emission inventories for California using the GWP values from the IPCC AR4.

<sup>3</sup> Intergovernmental Panel on Climate Change (IPCC), Second Assessment Report, Working Group I: The Science of Climate Change, 1995, <https://www.ipcc.ch/pdf/climate-changes-1995/ipcc-2nd-assessment/2nd-assessment-en.pdf>. Accessed February 2019.

<sup>4</sup> IPCC, Fourth Assessment Report (AR4), Working Group I Report: The Physical Science Basis, Table 2.14, 2007, [https://www.ipcc.ch/publications\\_and\\_data/ar4/wg1/en/ch2s2-10-2.html](https://www.ipcc.ch/publications_and_data/ar4/wg1/en/ch2s2-10-2.html). Accessed February 2019.

<sup>5</sup> IPCC, AR4, Working Group I Report: The Physical Science Basis, Table 2.14.

<sup>6</sup> IPCC, AR4, Working Group I Report: The Physical Science Basis, Table 2.14.

<sup>7</sup> IPCC, AR4, Working Group I Report: The Physical Science Basis, Table 2.14.

<sup>8</sup> IPCC, AR4, Working Group I Report: The Physical Science Basis, Table 2.14.

tetrafluorohydrazine, as a fluorine source in high power chemical lasers, in semiconductor manufacturing, and as an etchant gas in the electronic industry. The GWP of  $\text{NF}_3$  is 17,200 in the IPCC AR4.<sup>9</sup>

- **Perfluorocarbons (PFCs):** PFCs are fluorinated compounds consisting of carbon and fluorine. They are primarily created as a byproduct of aluminum production and semiconductor manufacturing. The GWPs of PFCs range from 6,500 to 9,200 in the IPCC SAR and 7,390 to 17,700 in the IPCC AR4.<sup>10</sup>
- **Sulfur Hexafluoride ( $\text{SF}_6$ ):**  $\text{SF}_6$  is a fluorinated compound consisting of sulfur and fluoride. It is a colorless, odorless, nontoxic, nonflammable gas. It is most commonly used as an electrical insulator in high voltage equipment that transmits and distributes electricity.  $\text{SF}_6$  has a GWP of 23,900 in the IPCC SAR and 22,800 in the IPCC AR4.<sup>11</sup>

Worldwide man-made emissions of GHGs are approximately 49,000 MMTCO<sub>2</sub>e annually including ongoing emissions from industrial and agricultural sources and emissions from land use changes (e.g., deforestation).<sup>12</sup> Emissions of CO<sub>2</sub> from fossil fuel use and industrial processes account for 65 percent of the total while CO<sub>2</sub> emissions from all sources accounts for 76 percent of the total. Methane emissions account for 16 percent and N<sub>2</sub>O emissions for 6.2 percent. In 2016, the United States was the world's second largest emitter of carbon dioxide at 5,000 MMTCO<sub>2</sub>e (China was the largest emitter of carbon dioxide at 10,500 MMTCO<sub>2</sub>e).<sup>13</sup>

CARB compiles GHG inventories for the State of California. Based on the year 2018 GHG inventory data (the latest year for which data are available), California emitted 425.3 million metric tons of CO<sub>2</sub>e (MMTCO<sub>2</sub>e) which includes emissions resulting from imported electrical power.<sup>14</sup> Between 1990 and 2018, the population of California grew by approximately 9.7 million (from 29.8 to 39.5 million).<sup>15,16</sup> This represents an increase of approximately 33 percent from 1990 population levels. In addition, the California economy, measured as gross state product, grew from \$773 billion in 1990 to \$2.99 trillion in 2018, representing an increase of almost four times the 1990 gross state product.<sup>17</sup> Despite the population and economic growth, California's net GHG emissions were reduced to below 1990 levels in 2016. According to CARB, the declining trend coupled with the state's GHG reduction programs (such as the Renewables

<sup>9</sup> IPCC, AR4, Working Group I Report: The Physical Science Basis, Table 2.14.

<sup>10</sup> IPCC, AR4, Working Group I Report: The Physical Science Basis, Table 2.14.

<sup>11</sup> IPCC, AR4, Working Group I Report: The Physical Science Basis, Table 2.14.

<sup>12</sup> IPCC, Climate Change 2014: Synthesis Report, 2014, page 45, <http://www.ipcc.ch/report/ar5/syr/>. Accessed February 2019.

<sup>13</sup> PBL Netherlands Environmental Assessment Agency and the European Commission Joint Research Center, Trends in Global CO<sub>2</sub> Emissions 2017 Report, pp. 20 and 24 (2017).

<sup>14</sup> CARB, Current California GHG Emission Inventory Data - 2000-2018 GHG Inventory (2020 Edition).

<sup>15</sup> United States Census Bureau, National and State Population Estimates: 1990-1994, 1995; 2019 National and State Population Estimates.

<sup>16</sup> California Department of Finance, American Community Survey, 2017, [http://www.dof.ca.gov/Reports/Demographic\\_Reports/American\\_Community\\_Survey/documents/Web\\_ACS2017\\_Pop-Race.xlsx](http://www.dof.ca.gov/Reports/Demographic_Reports/American_Community_Survey/documents/Web_ACS2017_Pop-Race.xlsx). Accessed May 27, 2020.

<sup>17</sup> California Department of Finance, Gross State Product, [http://www.dof.ca.gov/Forecasting/Economics/Indicators/Gross\\_State\\_Product/documents/CA\\_GDP.xlsx](http://www.dof.ca.gov/Forecasting/Economics/Indicators/Gross_State_Product/documents/CA_GDP.xlsx). Accessed February 27, 2020. Amounts are based on current dollars as of the date of the report (May 2019).

Portfolio Standard, Low Carbon Fuel Standard (LCFS), vehicle efficiency standards, and declining caps under the Cap and Trade Program) demonstrate that California is on track to meet the 2020 GHG reduction target codified in HSC, Division 25.5, also known as AB 32 and amended by SB 32.<sup>18</sup> **Table 1, *State of California Greenhouse Gas Emissions***, identifies and quantifies Statewide anthropogenic GHG emissions and sinks (e.g., carbon sequestration due to forest growth) in 1990 and 2018. As shown in Table 1, the transportation sector is the largest contributor to Statewide GHG emissions at approximately 40 percent in 2018.

**TABLE 1  
STATE OF CALIFORNIA GREENHOUSE GAS EMISSIONS**

Category	Total 1990 Emissions using IPCC SAR (MMTCO <sub>2</sub> e)	Percent of Total 1990 Emissions	Total 2018 Emissions using IPCC AR4 (MMTCO <sub>2</sub> e)*	Percent of Total 2018 Emissions*
Transportation	150.7	35%	169.5	40%
Electric Power	110.6	26%	63.1	15%
Commercial	14.4	3%	25.7	6%
Residential	29.7	7%	15.6	4%
Industrial	103.0	24%	89.2	21%
Recycling and Waste <sup>a</sup>	–	–	9.1	2%
High GWP/Non-Specified <sup>b</sup>	1.3	<1%	20.5	5%
Agriculture/Forestry	23.6	6%	32.6	8%
Forestry Sinks	-6.7	--	-- <sup>c</sup>	--
<b>Net Total (IPCC SAR)</b>	<b>426.6</b>	<b>100%</b>	--	--
<b>Net Total (IPCC AR4) <sup>d</sup></b>	<b>431</b>	<b>100%</b>	<b>425.3</b>	<b>100%</b>

\* Totals may not add up exactly due to rounding.

<sup>a</sup> Included in other categories for the 1990 emissions inventory.

<sup>b</sup> High GWP gases are not specifically called out in the 1990 emissions inventory.

<sup>c</sup> Revised methodology under development (not reported for 2015).

<sup>d</sup> CARB revised the State's 1990 level GHG emissions using GWPs from the IPCC AR4.

SOURCES: CARB, Staff Report – California 1990 Greenhouse Gas Emissions Level and 2020 Emissions Limit, 2007; CARB, 2000-2018 Trends Figure Data, Figure 4.

## Effects of Global Climate Change

The scientific community's understanding of the fundamental processes responsible for global climate change has improved over the past decade, and its predictive capabilities are advancing. However, there remain significant scientific uncertainties in, for example, predictions of local effects of climate change, occurrence, frequency, and magnitude of extreme weather events, effects of aerosols, changes in clouds, shifts in the intensity and distribution of precipitation, and changes in oceanic circulation. Due to the complexity of the Earth's climate system and inability to accurately model it, the uncertainty surrounding climate change may never be completely eliminated. Nonetheless, the IPCC's *Fifth Assessment Report, Summary for Policy Makers* states that, "it is *extremely likely* that more than half of the observed increase in global average surface

<sup>18</sup> CARB, Frequently Asked Questions for the 2016 Edition California Greenhouse Gas Emission Inventory, 2016.

temperature from 1951 to 2010 was caused by the anthropogenic increase in greenhouse gas concentrations and other anthropogenic forces [*sic*] together.”<sup>19</sup> A report from the National Academy of Sciences concluded that 97 to 98 percent of the climate researchers most actively publishing in the field support the tenets of the IPCC in that climate change is very likely caused by human (i.e., anthropogenic) activity.<sup>20</sup>

According to the California EPA, the potential impacts in California due to global climate change may include: loss in snow pack; sea level rise; more extreme heat days per year; more high ozone days; more large forest fires; more drought years; increased erosion of California’s coastlines and sea water intrusion into the Sacramento and San Joaquin Deltas and associated levee systems; and increased pest infestation.<sup>21</sup> Data regarding potential future climate change impacts are available from the California Natural Resources Agency (CNRA), which in 2009 published the *California Climate Adaptation Strategy*<sup>22</sup> as a response to Executive Order S-13-2008. The CNRA report lists specific recommendations for state and local agencies to best adapt to the anticipated risks posed by a changing climate. In accordance with the *California Climate Adaptation Strategy*, the CEC was directed to develop a website on climate change scenarios and impacts that would be beneficial for local decision makers.<sup>23</sup> The website, known as Cal-Adapt, became operational in 2011.<sup>24</sup> The information provided by the Cal-Adapt website represents a projection of potential future climate scenarios. The data are comprised of the average values from a variety of scenarios and models, and are meant to illustrate how the climate may change based on a variety of different potential social and economic factors. Below is a summary of some of the potential climate change effects and relevant Cal-Adapt data, reported by an array of studies that could be experienced in California as a result of global warming and climate change.

## Air Quality

Higher temperatures, conducive to air pollution formation, could worsen air quality in California. Climate change may increase the concentration of ground-level ozone, but the magnitude of the effect, and therefore, its indirect effects, are uncertain. If higher temperatures are accompanied by drier conditions, the potential for large wildfires could increase, which, in turn, would further worsen air quality. However, if higher temperatures are accompanied by wetter, rather than drier conditions, the rains would tend to temporarily clear the air of particulate pollution and reduce the incidence of large wildfires, thus ameliorating the pollution associated with wildfires.

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- <sup>19</sup> IPCC, *Climate Change 2014: Synthesis Report, Contribution of Working Groups I, II and III to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change, Summary for Policy Makers*, 2014, page 5, <http://ipcc.ch/report/ar5/syr/>. Accessed February 2019.
- <sup>20</sup> Anderegg, William R. L., J.W. Prall, J. Harold, S.H., Schneider, *Expert Credibility in Climate Change*, Proceedings of the National Academy of Sciences of the United States of America, 2010, 107:12107-12109.
- <sup>21</sup> California Environmental Protection Agency, Climate Action Team, *Climate Action Team Report to Governor Schwarzenegger and the Legislature*, 2006.
- <sup>22</sup> California Natural Resources Agency, Climate Action Team, *2009 California Climate Adaptation Strategy: A Report to the Governor of the State of California in Response to Executive Order S-13-2008*, 2009.
- <sup>23</sup> California Natural Resources Agency, Climate Action Team, *2009 California Climate Adaptation Strategy: A Report to the Governor of the State of California in Response to Executive Order S-13-2008*.
- <sup>24</sup> The Cal-Adapt website address is: <http://cal-adapt.org>.

Additionally, severe heat accompanied by drier conditions and poor air quality could increase the number of heat-related deaths, illnesses, and asthma attacks throughout the state.<sup>25</sup>

According to the Cal-Adapt website, the portion of the City of Culver City in which the Project Site is located could result in an average increase in temperature of approximately 6 to 9 percent (from an annual average of 71.4°F to 75.4-78.1°F) by 2070-2099, compared to the baseline 1961-1990 period.<sup>26</sup> Data suggests that the predicted future increase in temperatures as a result of climate change could potentially interfere with efforts to control and reduce ground-level ozone in the region.

## Water Supply

Uncertainty remains with respect to the overall impact of global climate change on future water supplies in California. Studies have found that, “Considerable uncertainty about precise impacts of climate change on California hydrology and water resources will remain until we have more precise and consistent information about how precipitation patterns, timing, and intensity will change.”<sup>27</sup> For example, some studies identify little change in total annual precipitation in projections for California while others show significantly more precipitation.<sup>28</sup> Warmer, wetter winters would increase the amount of runoff available for groundwater recharge; however, this additional runoff would occur at a time when some basins are either being recharged at their maximum capacity or are already full.<sup>29</sup> Conversely, reductions in spring runoff and higher evapotranspiration because of higher temperatures could reduce the amount of water available for recharge.<sup>30</sup>

The California Department of Water Resources report on climate change and effects on the State Water Project (SWP), the Central Valley Project, and the Sacramento-San Joaquin Delta, concludes that “climate change will likely have a significant effect on California’s future water resources...[and] future water demand.” It also reports that “much uncertainty about future water demand [remains], especially [for] those aspects of future demand that will be directly affected by climate change and warming. While climate change is expected to continue through at least the end of this century, the magnitude and, in some cases, the nature of future changes is uncertain.” It also reports that the relationship between climate change and its potential effect on water demand is not well understood, but “[i]t is unlikely that this level of uncertainty will diminish significantly in the foreseeable future.” Still, changes in water supply are expected to occur, and

<sup>25</sup> California Energy Commission, Scenarios of Climate Change in California: An Overview, February 2006, <http://www.energy.ca.gov/2005publications/CEC-500-2005-186/CEC-500-2005-186-SF.PDF>. Accessed February 2019.

<sup>26</sup> Cal-Adapt, Annual Average Maximum Temperatures for the area of the City of Culver City that the Project is located, 2020, <https://cal-adapt.org/tools/annual-averages/>. Accessed November 2020.

<sup>27</sup> Pacific Institute for Studies in Development, Environment and Security, Climate Change and California Water Resources: A Survey and Summary of the Literature, July 2003, [http://www.pacinst.org/reports/climate\\_change\\_and\\_california\\_water\\_resources.pdf](http://www.pacinst.org/reports/climate_change_and_california_water_resources.pdf). Accessed February 2019.

<sup>28</sup> Pacific Institute for Studies in Development, Environment and Security, Climate Change and California Water Resources: A Survey and Summary of the Literature.

<sup>29</sup> Pacific Institute for Studies in Development, Environment and Security, Climate Change and California Water Resources: A Survey and Summary of the Literature.

<sup>30</sup> Pacific Institute for Studies in Development, Environment and Security, Climate Change and California Water Resources: A Survey and Summary of the Literature.

many regional studies have shown that large changes in the reliability of water yields from reservoirs could result from only small changes in inflows.<sup>31</sup> In its *Fifth Assessment Report*, the IPCC states “Changes in the global water cycle in response to the warming over the 21st century will not be uniform. The contrast in precipitation between wet and dry regions and between wet and dry seasons will increase, although there may be regional exceptions.”<sup>32</sup>

## Hydrology and Sea Level Rise

As discussed above, climate changes could potentially affect: the amount of snowfall, rainfall and snow pack; the intensity and frequency of storms; flood hydrographs (flash floods, rain or snow events, coincidental high tide and high runoff events); sea level rise and coastal flooding; coastal erosion; and the potential for salt water intrusion. Sea level rise can be a product of global warming through two main processes: expansion of seawater as the oceans warm, and melting of ice over land. Absent planning and preparation, a rise in sea levels could result in coastal flooding and erosion and could jeopardize California’s water supply, and increased storm intensity and frequency could affect the ability of flood-control facilities, including levees, to handle storm events.

## Agriculture

California has a \$30 billion agricultural industry that produces one half of the country’s fruits and vegetables. Higher CO<sub>2</sub> levels can stimulate plant production and increase plant water-use efficiency. However, if temperatures rise and drier conditions prevail, water demand could increase; without planning and preparations. Crop-yield could be threatened by a less reliable water supply. Also, greater ozone pollution could render plants more susceptible to pest and disease outbreaks. In addition, temperature increases could change the time of year certain crops, such as wine grapes, bloom or ripen, and thus affect their quality.<sup>33</sup>

## Ecosystems and Wildlife

Increases in global temperatures and the potential resulting changes in weather patterns could have ecological effects on a global and local scale. Increasing concentrations of GHGs are likely to accelerate the rate of climate change. Scientists expect that the average global surface temperature could rise by 2 to 11.5°F (1.1 to 6.4°C) by 2100, with significant regional variation.<sup>34</sup> Soil moisture is likely to decline in many regions, and intense rainstorms are likely to become more frequent. Sea level could rise as much as 2 feet along most of the U.S. coast. Rising temperatures could have four major impacts on plants and animals: (1) timing of ecological

<sup>31</sup> California Department of Water Resources Climate Change Report, Progress on Incorporating Climate Change into Planning and Management of California’s Water Resources, July 2006, <https://www.water.ca.gov/LegacyFiles/climatechange/docs/DWRClimateChangeJuly06.pdf>. Accessed February 2019.

<sup>32</sup> IPCC, Fifth Assessment Report, Summary for Policy Makers, 2013, page 20.

<sup>33</sup> California Climate Change Center, *Our Changing Climate: Assessing the Risks to California*, 2006.

<sup>34</sup> National Research Council, *Advancing the Science of Climate Change*, 2010.

events; (2) geographic range; (3) species' composition within communities; and (4) ecosystem processes such as carbon cycling and storage.<sup>35,36</sup>

## Existing Site Greenhouse Gas Emissions

As previously stated, the Project Site is located in Culver City, and is currently developed with low-level commercial buildings totaling 13,301 square feet and a surface parking lot totaling 20,516 square feet, all of which would be demolished and removed to support development of the Project.

The current site usage generates GHG emissions from vehicle trips to the Project site and daily operations activities of the commercial buildings at the site. When evaluating the Project's operational GHG impacts, it would be based on the Project-related incremental increase in GHG emissions compared to existing conditions. **Table 2, Existing Site GHG Emissions**, identifies the GHG emissions of the existing Project Site. As shown, the primary source of emissions is from mobile sources.

**TABLE 2  
EXISTING SITE GHG EMISSIONS**

<b>Source</b>	<b>CO<sub>2</sub>e (Metric Tons per Year)<sup>a, b</sup></b>
Area (Landscaping Equipment)	<1
Electricity & Natural Gas	50
Mobile Sources	414
Waste	7
Water	6
<b>Total Existing Emissions</b>	<b>478</b>

<sup>a</sup> Totals may not add up exactly due to rounding in the modeling calculations. Detailed emissions calculations are provided in Appendix A.

<sup>b</sup> CO<sub>2</sub>e emissions are calculated using the global warming potential values from the Intergovernmental Panel on Climate Change Fourth Assessment Report.

SOURCE: ESA 2020

<sup>35</sup> Parmesan, C., *Ecological and Evolutionary Response to Recent Climate Change*, 2004.

<sup>36</sup> Parmesan, C and Galbraith, H, *Observed Ecological Impacts of Climate Change in North America*. Arlington, VA: Pew. Cent. Glob. Clim. Change, 2004.

## SECTION 2

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# Regulatory Framework

## 2.1 Federal

### Federal Clean Air Act

The United States Environmental Protection Agency (USEPA) is responsible for implementing federal policy to address GHGs. The federal government administers a wide array of public-private partnerships to reduce the GHG intensity generated in the United States. These programs focus on energy efficiency, renewable energy, methane and other non-CO<sub>2</sub> gases, agricultural practices, and implementation of technologies to achieve GHG reductions. USEPA implements numerous voluntary programs that contribute to the reduction of GHG emissions. These programs (e.g., the ENERGY STAR<sup>®</sup> labeling system for energy-efficient products) play a significant role in encouraging voluntary reductions from large corporations, consumers, industrial and commercial buildings, and many major industrial sectors.

In *Massachusetts v. Environmental Protection Agency* (Docket No. 05–1120), the United States Supreme Court held in April of 2007 that the USEPA has statutory authority under Section 202 of the Clean Air Act (CAA) to regulate GHGs. The Court did not hold that the USEPA was required to regulate GHG emissions; however, it indicated that the agency must decide whether GHGs cause or contribute to air pollution that is reasonably anticipated to endanger public health or welfare. On December 7, 2009, the USEPA Administrator signed two distinct findings regarding GHGs under Section 202(a) of the CAA. The USEPA adopted a Final Endangerment Finding for the six defined GHGs (CO<sub>2</sub>, CH<sub>4</sub>, N<sub>2</sub>O, HFCs, PFCs, and SF<sub>6</sub>) on December 7, 2009. The Endangerment Finding is required before USEPA can regulate GHG emissions under Section 202(a)(1) of the CAA consistently with the United States Supreme Court decision. The USEPA also adopted a Cause or Contribute Finding in which the USEPA Administrator found that GHG emissions from new motor vehicle and motor vehicle engines are contributing to air pollution, which is endangering public health and welfare. These findings do not, by themselves, impose any requirements on industry or other entities. However, these actions were a prerequisite for implementing GHG emissions standards for vehicles.

### Energy Independence and Security Act

The Energy Independence and Security Act of 2007 (EISA) facilitates the reduction of national GHG emissions by requiring the following:

- Increasing the supply of alternative fuel sources by setting a mandatory Renewable Fuel Standard (RFS) that requires fuel producers to use at least 36 billion gallons of biofuel in 2022;

- Prescribing or revising standards affecting regional efficiency for heating and cooling products, procedures for new or amended standards, energy conservation, energy efficiency labeling for consumer electronic products, residential boiler efficiency, electric motor efficiency, and home appliances;
- Requiring approximately 25 percent greater efficiency for light bulbs by phasing out incandescent light bulbs between 2012 and 2014; requiring approximately 200 percent greater efficiency for light bulbs, or similar energy savings, by 2020; and
- While superseded by the USEPA and NHTSA actions described above, (i) establishing miles per gallon targets for cars and light trucks and (ii) directing the NHTSA to establish a fuel economy program for medium- and heavy-duty trucks and create a separate fuel economy standard for trucks.

Additional provisions of EISA address energy savings in government and public institutions, promote research for alternative energy, additional research in carbon capture, international energy programs, and the creation of green jobs.<sup>37</sup>

## Executive Order 13432

In response to the *Massachusetts v. Environmental Protection Agency* ruling, the President signed Executive Order 13432 on May 14, 2007, directing the USEPA, along with the Departments of Transportation, Energy, and Agriculture, to initiate a regulatory process that responds to the Supreme Court's decision. Executive Order 13432 was codified into law by the 2009 Omnibus Appropriations Law signed on February 17, 2009. The order sets goals in the areas of energy efficiency, acquisition, renewable energy, toxics reductions, recycling, sustainable buildings, electronics stewardship, fleets, and water conservation. Light-Duty Vehicle Greenhouse Gas and Corporate Average Fuel Economy Standards

On May 19, 2009, President Obama announced a national policy for fuel efficiency and emissions standards in the United States auto industry. The adopted federal standard applies to passenger cars and light-duty trucks for model years 2012 through 2016. The rule surpasses the prior Corporate Average Fuel Economy standards (CAFE)<sup>38</sup> and requires an average fuel economy standard of 35.5 miles per gallon (mpg) and 250 grams of CO<sub>2</sub> per mile by model year 2016, based on USEPA calculation methods. These standards were formally adopted on April 1, 2010. In August 2012, standards were adopted for model year 2017 through 2025 for passenger cars and light-duty trucks. By 2025, vehicles are required to achieve 54.5 mpg (if GHG reductions are achieved exclusively through fuel economy improvements) and 163 grams of CO<sub>2</sub> per mile. According to the USEPA, a model year 2025 vehicle would emit one-half of the GHG emissions

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<sup>37</sup> A green job, as defined by the United States Department of Labor, is a job in business that produces goods or provides services that benefit the environment or conserve natural resources.

<sup>38</sup> The Corporate Average Fuel Economy standards are regulations in the United States, first enacted by Congress in 1975, to improve the average fuel economy of cars and light trucks. The U.S Department of Transportation has delegated the National Highway Traffic Safety Administration as the regulatory agency for the Corporate Average Fuel Economy standards.

from a model year 2010 vehicle.<sup>39</sup> In 2017, the USEPA recommended no change to the GHG standards for light-duty vehicles for model years 2022-2025.

In August 2018, the USEPA and NHTSA proposed the Safer Affordable Fuel-Efficient Vehicles Rule that would, if adopted, maintain the CAFE and CO<sub>2</sub> standards applicable in model year 2020 for model years 2021 through 2026. The estimated CAFE and CO<sub>2</sub> standards for model year 2020 are 43.7 mpg and 204 grams of CO<sub>2</sub> per mile for passenger cars and 31.3 mpg and 284 grams of CO<sub>2</sub> per mile for light trucks, projecting an overall industry average of 37 mpg, as compared to 46.7 mpg under the standards issued in 2012. The proposal, if adopted, would also exclude CO<sub>2</sub>-equivalent emission improvements associated with air conditioning refrigerants and leakage (and, optionally, offsets for nitrous oxide and methane emissions) after model year 2020.<sup>40</sup>

## 2.2 State

California has promulgated a series of executive orders, laws, and regulations aimed at reducing both the level of GHGs in the atmosphere and emissions of GHGs from commercial and private activities within the State.

### Executive Order S-3-05, Executive Order B-30-15, and Executive Order B-55-18

In June, 2005, through Executive Order S-3-05,<sup>41</sup> the following GHG emission reduction targets were established:

- By 2010, California shall reduce GHG emissions to 2000 levels;
- By 2020, California shall reduce GHG emissions to 1990 levels; and
- By 2050, California shall reduce GHG emissions to 80 percent below 1990 levels.

In April, 2015, Governor Brown issued Executive Order B-30-15 that:<sup>42</sup>

- Established a new interim Statewide reduction target to reduce GHG emissions to 40 percent below 1990 levels by 2030.

<sup>39</sup> United States Environmental Protection Agency, EPA and NHTSA Set Standards to Reduce Greenhouse Gases and Improve Fuel Economy for Model Years 2017-2025 Cars and Light Trucks, August 2012, <https://nepis.epa.gov/Exe/ZyPDF.cgi/P100EZ7C.PDF?Dockkey=P100EZ7C.PDF>. Accessed December 2018.

<sup>40</sup> National Highway Traffic Safety Administration (NHTSA) and U.S. Environmental Protection Agency (USEPA), 2018. Federal Register / Vol. 83, No. 165 / Friday, August 24, 2018 / Proposed Rules, The Safer Affordable Fuel-Efficient (SAFE) Vehicles Rule for Model Years 2021–2026 Passenger Cars and Light Trucks 2018. Available at: <https://www.gpo.gov/fdsys/pkg/FR-2018-08-24/pdf/2018-16820.pdf>. Accessed March 2019.

<sup>41</sup> California Climate Change, Executive Orders, 2018, [http://www.climatechange.ca.gov/state/executive\\_orders.html](http://www.climatechange.ca.gov/state/executive_orders.html). Accessed February 2019.

<sup>42</sup> Office of Governor Edmund G. Brown Jr., Governor Brown Establishes Most Ambitious Greenhouse Gas Reduction Target in North America, 2015, <https://www.gov.ca.gov/2015/04/29/news18938/>. Accessed: February 2019.

- Ordered all state agencies with jurisdiction over sources of GHG emissions to implement measures to achieve reductions of GHG emissions to meet the 2030 and 2050 reduction targets.
- Directed CARB to update the Climate Change Scoping Plan to express the 2030 target in terms of million metric tons of carbon dioxide equivalent.

In September 2018, Governor Brown issued Executive Order B-55-18, which establishes a statewide goal of achieving carbon neutrality as soon as possible and no later than 2045.<sup>43</sup>

## Health and Safety Code, Division 25.5 – California Global Warming Solutions Act of 2006 (AB 32) and Emissions Limit (SB 32 / AB 197)

In 2006, the California State Legislature adopted Assembly Bill (AB) 32 (codified in the California Health and Safety Code (HSC), Division 25.5 – California Global Warming Solutions Act of 2006), which focuses on reducing GHG emissions in California to 1990 levels by 2020. HSC Division 25.5 defines regulated GHGs as CO<sub>2</sub>, CH<sub>4</sub>, N<sub>2</sub>O, HFCs, PFCs, and SF<sub>6</sub> and represents the first enforceable Statewide program to limit emissions of these GHGs from all major industries, with penalties for noncompliance. The law further requires that reduction measures be technologically feasible and cost effective. Under HSC Division 25.5, CARB has the primary responsibility for reducing GHG emissions. CARB is required to adopt rules and regulations directing state actions that would achieve GHG emissions reductions equivalent to 1990 Statewide levels by 2020.

In 2016, the California State Legislature adopted Senate Bill (SB) 32 and its companion bill AB 197, and both were signed by Governor Brown. SB 32 and AB 197 amend HSC Division 25.5, establish a new climate pollution reduction target of 40 percent below 1990 levels by 2030 and include provisions to ensure that the benefits of state climate policies reach into disadvantaged communities.

## California Assembly Bill No. 1493 (AB 1493, Pavley) (Chapter 200, Statutes of 2002)

In response to the transportation sector accounting for more than half of California's CO<sub>2</sub> emissions, AB 1493 (Chapter 200, Statutes of 2002), enacted on July 22, 2002, required CARB to set GHG emission standards for passenger vehicles, light duty trucks, and other vehicles whose primary use is non-commercial personal transportation manufactured in and after 2009. In setting these standards, CARB must consider cost effectiveness, technological feasibility, economic impacts, and provide maximum flexibility to manufacturers.<sup>44</sup> As discussed previously, the USEPA and USDOT have adopted federal standards for model year 2012 through 2016 light-duty vehicles. In light of the USEPA and USDOT standards, California - and states adopting California emissions standards - have agreed to defer to the proposed national standard through

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<sup>43</sup> California State Government, Executive Order B-55-18 to Achieve Carbon Neutrality, <https://www.gov.ca.gov/wp-content/uploads/2018/09/9.10.18-Executive-Order.pdf>. Accessed February 2019.

<sup>44</sup> CARB, Regulations to Control Greenhouse Gas Emissions from Motor Vehicles, Final Statement of Reasons, 2005, <https://www.arb.ca.gov/regact/grnhsgas/fsor.pdf>. Accessed February 2019.

model year 2016. The 2016 endpoint of the federal and state standards is similar, although the federal standard ramps up slightly more slowly than required under the state standard. The state standards (called the Pavley standards) require additional reductions in CO<sub>2</sub> emissions beyond model year 2016 (referred to as Pavley Phase II standards).<sup>45</sup> As noted above, the USEPA and USDOT have adopted GHG emission standards for model year 2017 through 2025 vehicles. These standards are slightly different from the Pavley Phase II standards, but the State of California has agreed not to contest these standards, in part due to the fact that while the national standard would achieve slightly lower reductions in California, it would achieve greater reductions nationally and is stringent enough to meet state GHG emission reduction goals.<sup>46</sup> On November 15, 2012, CARB approved an amendment that allows manufacturers to comply with the 2017-2025 national standards to meet state law.

## Executive Order S-01-07

Executive Order S-01-07 was enacted on January 18, 2007.<sup>47</sup> The order mandates the following: (1) that a Statewide goal be established to reduce the carbon intensity of California's transportation fuels by at least 10 percent by 2020; and (2) that a LCFS for transportation fuels be established in California. In September 2015, CARB approved the re-adoption of the LCFS, which became effective on January 1, 2016, to address procedural deficiencies in the way the original regulation was adopted.<sup>48</sup> In the proposed 2017 Climate Change Scoping Plan Update, CARB's preferred recommendation includes increasing the stringency of the LCFS by reducing the carbon intensity of transportation fuels by 18 percent by 2030, up from the current target of 10 percent by 2020.<sup>49</sup> In April 2017, the LCFS was brought before the Court of Appeal challenging the analysis of potential nitrogen dioxide impacts from biodiesel fuels. The Court directed CARB to conduct an analysis of nitrogen dioxide impacts from biodiesel fuels and froze the carbon intensity targets for diesel and biodiesel fuel provisions at 2017 levels until CARB has completed this analysis. On March 6, 2018 CARB issued its *Draft Supplemental Disclosure Discussion of Oxides of Nitrogen Potentially Caused by the Low Carbon Fuel Standard Regulation*.<sup>50</sup> CARB posted modifications to the amendments on August 13, 2018, with a public comment period through August 30, 2018. Final approval of regulatory changes from CARB's analysis of nitrogen dioxide impacts from biodiesel fuels was made on January 4, 2019.<sup>51</sup>

<sup>45</sup> On March 24, 2017, CARB voted unanimously to uphold the State's model year 2017-2025 cars and light truck emissions standards. See: CARB, CARB finds vehicle standards are achievable and cost-effective, March 24, 2017, <https://ww2.arb.ca.gov/news/carb-finds-vehicle-standards-are-achievable-and-cost-effective>. Accessed February 2019.

<sup>46</sup> CARB, Advanced Clean Cars Summary, [http://www.arb.ca.gov/msprog/clean\\_cars/acc%20summary-final.pdf](http://www.arb.ca.gov/msprog/clean_cars/acc%20summary-final.pdf). Accessed February 2019.

<sup>47</sup> Office of the Governor Arnold Schwarzenegger, Executive Order S-01-07, 2007, <https://www.arb.ca.gov/fuels/lcfs/eos0107.pdf>. Accessed February 2019.

<sup>48</sup> CARB, Low Carbon Fuel Standard, 2018, <https://www.arb.ca.gov/fuels/lcfs/lcfs.htm>. Accessed February 2019.

<sup>49</sup> CARB, AB 32 Scoping Plan, 2017, <https://www.arb.ca.gov/cc/scopingplan/scopingplan.htm>. Accessed February 2019.

<sup>50</sup> CARB, Low Carbon Fuel Standard and Alternative Diesel Fuels Regulation 2018, <https://www.arb.ca.gov/regact/2018/lcfs18/lcfs18.htm>. Accessed February 2019.

<sup>51</sup> California Air Resources Board, Low Carbon Fuel Standard and Alternative Diesel Fuels Regulation 2019.

## Senate Bill 97 (SB 97, Dutton) (Chapter 185, Statutes of 2007)

Senate Bill (SB) 97 (Chapter 185, Statutes of 2007), enacted in 2007, amended CEQA to clearly establish that GHG emissions and the effects of GHG emissions are appropriate subjects for CEQA analysis. It directed the California Office of Planning and Research (OPR) to develop revisions to the State CEQA Guidelines “for the mitigation of GHG emissions or the effects of GHG emissions” and directed the Resources Agency to certify and adopt these revised State CEQA Guidelines by January 2010. The revisions were completed in March 2010 and codified into the California Code of Regulations and became effective within 120 days pursuant to CEQA. The amendments provide regulatory guidance for the analysis and mitigation of the potential effects of GHG emissions. The CEQA Guidelines require:

- Inclusion of GHG analyses in CEQA documents;
- Determination of significance of GHG emissions; and
- If significant GHG emissions would occur, adoption of mitigation to address significant emissions.

## Senate Bill 375 (SB 375, Steinberg) (Chapter 728, Statutes of 2008)

SB 375 (Chapter 728, Statutes of 2008), which establishes mechanisms for the development of regional targets for reducing passenger vehicle greenhouse gas emissions, was adopted by the State on September 30, 2008. SB 375 finds that the “transportation sector is the single largest contributor of greenhouse gases of any sector.”<sup>52</sup> Under SB 375, CARB is required, in consultation with the Metropolitan Planning Organizations, to set regional GHG reduction targets for the passenger vehicle and light-duty truck sector for 2020 and 2035. In February 2011, CARB adopted GHG emissions reduction targets for the SCAG, which is the Metropolitan Planning Organization for the region in which the City of Culver City is located.<sup>53</sup> In March 2018, the CARB updated the SB 375 targets to require an 8 percent reduction by 2020 and a 19 percent reduction by 2035 in per capita passenger vehicle GHG emissions.<sup>54</sup> Meeting SB 375 goals and targets is crucial for the State to meet its climate goals and to reduce GHG emissions as it supports coordinated transportation and land use planning with the goal of more sustainable communities.<sup>55</sup> Under SB 375, the target must be incorporated within that region’s RTP, which is used for long-term transportation planning, in a SCS. Certain transportation planning and programming activities would then need to be consistent with the SCS; however, SB 375 expressly provides that the SCS does not regulate the use of land, and further provides that local land use plans and policies (e.g., general plans) are not required to be consistent with either the RTP or SCS.

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<sup>52</sup> State of California, Senate Bill No. 375, September 30, 2008, [https://leginfo.ca.gov/leginfo/billNavClient.xhtml?bill\\_id=200720080SB375](https://leginfo.ca.gov/leginfo/billNavClient.xhtml?bill_id=200720080SB375). Accessed February 2019.

<sup>53</sup> CARB, Sustainable Communities, March 28, 2017, <https://www.arb.ca.gov/cc/sb375/sb375.htm>. Accessed February 2019.

<sup>54</sup> CARB, SB 375 Regional Greenhouse Gas Emissions Reduction Targets, <https://www.arb.ca.gov/cc/sb375/finaltargets2018.pdf>. Accessed February 2019.

<sup>55</sup> CARB, Sustainable Communities, <https://www.arb.ca.gov/cc/sb375/sb375-rd.htm>. Accessed February 2019.

## Title 24, Building Standards Code and CALGreen Code

The California Energy Commission first adopted the Energy Efficiency Standards for Residential and Nonresidential Buildings (California Code of Regulations, Title 24, Part 6) in 1978 in response to a legislative mandate to reduce energy consumption in the state. Although not originally intended to reduce GHG emissions, increased energy efficiency, and reduced consumption of electricity, natural gas, and other fuels would result in fewer GHG emissions from residential and nonresidential buildings subject to the standard. The standards are updated periodically to allow for the consideration and inclusion of new energy efficiency technologies and methods.

Part 11 of the Title 24 Building Standards is referred to as the California Green Building Standards (CALGreen) Code. The purpose of the CALGreen Code is to “improve public health, safety and general welfare by enhancing the design and construction of buildings through the use of building concepts having a positive environmental impact and encouraging sustainable construction practices in the following categories: (1) Planning and design; (2) Energy efficiency; (3) Water efficiency and conservation; (4) Material conservation and resource efficiency; and (5) Environmental air quality.”<sup>56</sup> The CALGreen Code is not intended to substitute for or be identified as meeting the certification requirements of any green building program that is not established and adopted by the California Building Standards Commission. When the CALGreen Code went into effect in 2009, compliance through 2010 was voluntary. As of January 1, 2011, the CALGreen Code is mandatory for all new buildings constructed in the state. The CALGreen Code establishes mandatory measures for new residential and non-residential buildings. Such mandatory measures include energy efficiency, water conservation, material conservation, planning and design and overall environmental quality.<sup>57</sup> The CALGreen Code was updated in 2016 and again in 2019 to include new mandatory measures for residential as well as nonresidential uses; the new measures took effect on January 1, 2017 for the 2016 revisions and on January 1, 2020 for the 2019 revisions.

## Renewables Portfolio Standard

SB 1078 (Chapter 516, Statutes of 2002) requires retail sellers of electricity, including investor-owned utilities and community choice aggregators, to provide at least 20 percent of their supply from renewable sources by 2017. SB 107 (Chapter 464, Statutes of 2006) changed the target date to 2010. In November 2008, Executive Order S-14-08 was signed, which expands the State's Renewables Portfolio Standard (RPS) to 33 percent renewable power by 2020. Pursuant to Executive Order S-21-09, CARB was also preparing regulations to supplement the RPS with a Renewable Energy Standard that would result in a total renewable energy requirement for utilities of 33 percent by 2020. On April 12, 2011, SB X1-2 was signed to increase California's RPS to 33 percent by 2020. SB 350 (Chapter 547, Statutes of 2015) further increased the RPS to 50 percent by 2030. The legislation also included interim targets of 40 percent by 2024 and 45 percent by 2027. SB 350 was signed into law on October 7, 2015.

<sup>56</sup> California Building Standards Commission, 2010 California Green Building Standards Code, 2010.

<sup>57</sup> California Building Standards Commission, 2010 California Green Building Standards Code.

On September 10, 2018, Governor Jerry Brown signed SB 100, which further increased California’s Renewables Portfolio Standard and requires retail sellers and local publicly owned electric utilities to procure eligible renewable electricity for 44 percent of retail sales by December 31, 2024, 52 percent by December 31, 2027, and 60 percent by December 31, 2030, and that CARB should plan for 100 percent eligible renewable energy resources and zero-carbon resources by December 31, 2045.<sup>58</sup>

## Cap-and-Trade Program

The Climate Change Scoping Plan identifies a Cap-and-Trade Program as one of the strategies California would employ to reduce GHG emissions. CARB asserts that this program will help put California on the path to meet its goal of reducing GHG emissions to 1990 levels by the year 2020, and ultimately achieving an 80 percent reduction from 1990 levels by 2050. Under Cap-and-Trade, an overall limit on GHG emissions from capped sectors is established and facilities subject to the cap will be able to trade permits to emit GHGs. On July 26, 2017, former California Governor Jerry Brown signed into law Assembly Bill 398 that extends the state’s cap-and-trade program to 2030 citing it as a key part of California’s plan to reduce greenhouse gas emissions 40 percent below 1990 levels by 2030. AB 398 made design changes and amendments to the post-2020 carbon market incorporating features such as a price ceiling, price containment points, additional limits to the number and location of offset credits, limits on who can set greenhouse gas emission requirements, and specifics on industry assistance factors in order to streamline implementation and contain costs through 2030.<sup>59,60</sup>

CARB designed and adopted a California Cap-and-Trade Program<sup>61</sup> pursuant to its authority under AB 32. The development of this Program included a multi-year stakeholder process and consideration of potential impacts on disproportionately impacted communities. The Cap-and-Trade Program is designed to reduce GHG emissions from major sources (deemed “covered entities”) by setting a firm cap on Statewide GHG emissions and employing market mechanisms to achieve AB 32’s emission-reduction mandate of returning to 1990 levels of emissions by 2020. The Statewide cap for GHG emissions from the capped sectors<sup>62</sup> (e.g., electricity generation, petroleum refining, and cement production) commenced in 2013 and will decline over time, achieving GHG emission reductions throughout the Program’s duration.

Under the Cap-and-Trade Program, CARB issues allowances equal to the total amount of allowable emissions over a given compliance period and distributes these to regulated entities. Covered entities that emit more than 25,000 MTCO<sub>2</sub>e per year must comply with the Cap-and-Trade Program.<sup>63</sup> Triggering of the 25,000 MTCO<sub>2</sub>e per year “inclusion threshold” is measured

<sup>58</sup> California Legislative Information, SB-100 California Renewables Portfolio Standard Program: Emissions of Greenhouse Gases.

<sup>59</sup> California Legislative Information, Assembly Bill No. 398, [https://leginfo.ca.gov/faces/billNavClient.xhtml?bill\\_id=201720180AB398](https://leginfo.ca.gov/faces/billNavClient.xhtml?bill_id=201720180AB398). Accessed February 2019.

<sup>60</sup> Center for Climate and Energy Solutions, Summary of California’s Extension of its Cap-And-Trade Program, <https://www.c2es.org/site/assets/uploads/2017/09/summary-californias-extension-its-cap-trade-program.pdf>. Accessed February 2019.

<sup>61</sup> 17 California Code of Regulation (CCR) Section 95800 to 96023.

<sup>62</sup> See generally 17 CCR Sections 95811 and 95812.

<sup>63</sup> 17 CCR Section 95812.

against a subset of emissions reported and verified under the California Regulation for the Mandatory Reporting of Greenhouse Gas Emissions (Mandatory Reporting Rule or “MRR”).<sup>64</sup>

Each covered entity with a compliance obligation is required to surrender “compliance instruments”<sup>65</sup> for each MTCO<sub>2e</sub> of GHG they emit. Covered entities are allocated free allowances in whole or part (if eligible), buy allowances at auction, purchase allowances from others, or purchase offset credits. A “compliance period” is the time frame during which the compliance obligation is calculated. The years 2013 and 2014 are the first compliance period, the years 2015–2017 are the second compliance period, and the third compliance period is from 2018–2020. At the end of each compliance period, each facility will be required to surrender compliance instruments to CARB equivalent to their total GHG emissions throughout the compliance period. There also are requirements to surrender compliance instruments covering 30 percent of the prior year’s compliance obligation by November of each year. For example, in November 2014, a covered entity was required to submit compliance instruments to cover 30 percent of its 2013 GHG emissions.

The Cap-and-Trade Regulation provides a firm cap, ensuring that the 2020 Statewide emission limit will not be exceeded. An inherent feature of the Cap-and-Trade Program is that it does not guarantee GHG emissions reductions in any discrete location or by any particular source. Rather, GHG emissions reductions are only guaranteed on an accumulative basis. As summarized by CARB in its First Update to the Climate Change Scoping Plan:

*The Cap-and-Trade Regulation gives companies the flexibility to trade allowances with others or take steps to cost-effectively reduce emissions at their own facilities. Companies that emit more have to turn in more allowances or other compliance instruments. Companies that can cut their GHG emissions have to turn in fewer allowances. **But as the cap declines, aggregate emissions must be reduced.***<sup>66</sup>

In other words, a covered entity theoretically could increase its GHG emissions every year and still comply with the Cap-and-Trade Program. However, as climate change is a global phenomenon and the effects of GHG emissions are considered cumulative in nature, a focus on aggregate GHG emissions reductions is warranted.

Further, the reductions in GHG emissions that will be achieved by the Cap-and-Trade Program inherently are variable and, therefore, impossible to quantify with precision:

*The Cap-and-Trade Regulation is different from most of the other measures in the Scoping Plan. The [R]egulation sets a hard cap, instead of an emission limit, so the emission reductions from the program vary as our estimates of “business as usual” emissions in the future are updated. In addition, the Cap-and-Trade Program works in concert with many of the direct regulatory measures—providing an additional economic incentive to reduce emissions. Actions taken to*

<sup>64</sup> 17 CCR Sections 95100-95158.

<sup>65</sup> Compliance instruments are permits to emit, the majority of which will be “allowances,” but entities also are allowed to use CARB-approved offset credits to meet up to 8% of their compliance obligations.

<sup>66</sup> CARB, First Update to the Climate Change Scoping Plan: Building on the Framework, May 2014, page 86.

*comply with direct regulations reduce an entity's compliance obligation under the Cap-and-Trade Regulation. So, for example, increased deployment of renewable electricity sources reduces a utility's compliance obligation under the Cap-and-Trade Regulation.<sup>67</sup>*

If California's direct regulatory measures reduce GHG emissions more than expected, then the Cap-and-Trade Program will be responsible for relatively fewer emissions reductions. If California's direct regulatory measures reduce GHG emissions less than expected, then the Cap-and-Trade Program will be responsible for relatively more emissions reductions. In other words, the Cap-and-Trade Program functions sort of like an insurance policy for meeting California 2020's GHG emissions reduction mandate:

*The Cap-and-Trade Program establishes an overall limit on GHG emissions from most of the California economy—the “capped sectors.” Within the capped sectors, some of the reductions are being accomplished through direct regulations, such as improved building and appliance efficiency standards, the [Low Carbon Fuel Standard] LCFS, and the 33 percent [Renewables Portfolio Standard] RPS. Whatever additional reductions are needed to bring emissions within the cap is accomplished through price incentives posed by emissions allowance prices. Together, direct regulation and price incentives assure that emissions are brought down cost-effectively to the level of the overall cap.<sup>68</sup>*

*[T]he Cap-and-Trade Regulation provides assurance that California's 2020 limit will be met because the regulation sets a firm limit on 85 percent of California's GHG emissions.<sup>69</sup>*

In sum, the Cap-and-Trade Program will achieve aggregate, rather than site-specific or project-level, GHG emissions reductions. Also, due to the regulatory architecture adopted by CARB under AB 32, the reductions attributed to the Cap-and-Trade Program can change over time depending on the State's emissions forecasts and the effectiveness of direct regulatory measures.

The Cap-and-Trade Program covers the GHG emissions associated with electricity consumed in California, whether generated in-state or imported.<sup>70</sup> Accordingly, for projects that are subject to the California Environmental Quality Act (CEQA), GHG emissions from electricity consumption are covered by the Cap-and-Trade Program.

The Cap-and-Trade Program also covers fuel suppliers (natural gas and propane fuel providers and transportation fuel providers) to address emissions from such fuels and from combustion of other fossil fuels not directly covered at large sources in the Program's first compliance period.<sup>71</sup> While the Cap-and-Trade Program technically covered fuel suppliers as early as 2012, they did not have a compliance obligation (i.e., they were not fully regulated) until 2015:

<sup>67</sup> CARB, First Update to the Climate Change Scoping Plan: Building on the Framework, page 86.

<sup>68</sup> CARB, First Update to the Climate Change Scoping Plan: Building on the Framework, page 88.

<sup>69</sup> CARB, First Update to the Climate Change Scoping Plan: Building on the Framework, pages 86 and 87.

<sup>70</sup> 17 CCR Section 95811(b).

<sup>71</sup> 17 CCR Sections 95811 and 95812(d).

*Suppliers of natural gas, suppliers of RBOB [Reformulated Gasoline Blendstock for Oxygenate Blending] and distillate fuel oils, suppliers of liquefied petroleum gas, and suppliers of liquefied natural gas specified in sections 95811(c), (d), (e), (f), and (g) that meet or exceed the annual threshold in section 95812(d) will have a compliance obligation beginning with the second compliance period.*<sup>72</sup>

As of January 1, 2015, the Cap-and-Trade Program covered approximately 85 percent of California’s GHG emissions.

The Cap-and-Trade Program covers the GHG emissions associated with the combustion of transportation fuels in California, whether refined in-state or imported. Since 2015, fuels, such as gasoline, diesel, and natural gas, have been covered under the Cap-and-Trade Program. Fuel suppliers are required to reduce GHG emissions by supplying low carbon fuels or purchasing pollution permits, called “allowances,” to cover the GHGs produced when the conventional petroleum-based fuel they supply is combusted.<sup>73</sup>

Demonstrating the efficacy of the Cap-and-Trade Program, based on the year 2016 GHG emissions inventory, California’s GHG emissions were approximately 429 MMTCO<sub>2</sub>e, approximately 12 MMTCO<sub>2</sub>e below 2015 levels and just below the 2020 target of 431 MMTCO<sub>2</sub>e.<sup>74</sup> The largest reductions were the result of increased renewable electricity in the electricity sector, which is a covered sector in the Cap-and-Trade Program. State *CEQA Guidelines* Section 15064(h)(3) allows a Lead Agency to make a finding of non-significance for GHG emissions if a project complies with a program and/or other regulatory schemes to reduce GHG emissions.<sup>75</sup>

## California Air Resources Board

The California Air Resources Board (CARB), a part of the California Environmental Protection Agency (CalEPA), is responsible for the coordination and administration of both federal and state air pollution control programs within California. In this capacity, CARB conducts research, sets the California Ambient Air Quality Standards (CAAQS), compiles emission inventories, develops

<sup>72</sup> 17 CCR Sections 95851(b).

<sup>73</sup> CARB, California’s Cap-and-Trade Program: Fuel Facts, [https://www.arb.ca.gov/cc/capandtrade/guidance/facts\\_fuels\\_under\\_the\\_cap.pdf](https://www.arb.ca.gov/cc/capandtrade/guidance/facts_fuels_under_the_cap.pdf).

<sup>74</sup> CARB, California Greenhouse Gas Emissions for 2000 to 2016, Trends of Emissions and Other Indicators, 2018 Edition, [https://www.arb.ca.gov/cc/inventory/pubs/reports/2000\\_2016/ghg\\_inventory\\_trends\\_00-16.pdf](https://www.arb.ca.gov/cc/inventory/pubs/reports/2000_2016/ghg_inventory_trends_00-16.pdf). Accessed February 2019.

<sup>75</sup> See, for example, San Joaquin Valley Air Pollution Control District (SJVAPCD), CEQA Determinations of Significance for Projects Subject to ARB’s GHG Cap-and-Trade Regulation, APR-2025 (June 25, 2014), in which the SJVAPCD “determined that GHG emissions increases that are covered under ARB’s Cap-and-Trade regulation cannot constitute significant increases under CEQA...” Furthermore, the SCAQMD has taken this position in CEQA documents it has produced as a Lead Agency. The SCAQMD has prepared 3 Negative Declarations and one Draft Environmental Impact Report that demonstrate the SCAQMD has applied its 10,000 MTCO<sub>2</sub>e/yr significance threshold in such a way that GHG emissions covered by the Cap-and-Trade Program do not constitute emissions that must be measured against the threshold. See SCAQMD, Final Negative Declaration for Ultramar Inc. Wilmington Refinery Cogeneration Project, SHC No. 2012041014 (October 2014); SCAQMD Final Negative Declaration for Phillips 99 Los Angeles Refinery Carson Plant—Crude Oil Storage Capacity Project, SCH No. 2013091029 (December 2014); SCAQMD Final Mitigated Negative Declaration for Toxic Air Contaminant Reduction for Compliance with SCAQMD Rules 1420.1 and 1402 at the Exide Technologies Facility in Vernon, CA, SCH No. 2014101040 (December 2014); and SCAQMD Final Environmental Impact Report for the Breitburn Santa Fe Springs Blocks 400/700 Upgrade Project, SCH No. 2014121014 (August 2015).

suggested control measures, and provides oversight of local programs. CARB establishes emissions standards for motor vehicles sold in California, consumer products (such as hairspray, aerosol paints, and barbecue lighter fluid), and various types of commercial equipment. It also sets fuel specifications to further reduce vehicular emissions. CARB has primary responsibility for the development of California's State Implementation Plan (SIP), for which it works closely with the federal government and the local air districts. The SIP is required for the State to take over implementation of the federal Clean Air Act. In addition, CARB also has primary responsibility for adopting and implementing California's legislative policies and programs, including the Climate Change Scoping Plan discussed below, to reduce the State's greenhouse gas emissions to meet the State's goal of reducing GHG emissions to 1990 levels by 2020.

## Climate Change Scoping Plan

As discussed above, AB 32 and SB 32 require CARB to prepare a Climate Change Scoping Plan for achieving the maximum technologically feasible and cost-effective GHG emission reduction by 2020 for AB 32 and 2030 for SB 32 (Health and Safety Code section 38561 (h)). CARB developed its initial Scoping Plan, which was approved in 2008; it contained a mix of recommended strategies to achieve the 2020 emissions cap that combined direct regulations, market-based approaches, voluntary measures, policies, and other emission reduction programs calculated to meet the 2020 Statewide GHG emission limit and initiate the transformations needed to achieve the State's long-range climate objectives.<sup>76</sup>

As required by HSC Division 25.5, CARB approved the 1990 GHG emissions inventory, thereby establishing the emissions reduction target for 2020. The 2020 emissions reduction target was originally set at 427 million metric tons (MMT) of CO<sub>2</sub>e using the GWP values from the IPCC SAR. CARB also projected the state's 2020 GHG emissions under no-action-taken (NAT) conditions – that is, emissions that would occur without any plans, policies, or regulations to reduce GHG emissions. CARB originally used an average of the state's GHG emissions from 2002 through 2004 and projected the 2020 levels at approximately 596 MMTCO<sub>2</sub>e (using GWP values from the IPCC SAR). Therefore, under the original projections, the state would have had to reduce its 2020 NAT emissions by 28.4 percent in order to meet the 1990 target of 427 MMTCO<sub>2</sub>e.

## First Update to the Climate Change Scoping Plan

The First Update to the Scoping Plan was approved by CARB in May 2014 and built upon the initial Scoping Plan with new strategies and recommendations.<sup>77</sup> In 2014, CARB revised the target using the GWP values from the IPCC AR4 and determined the 1990 GHG emissions inventory and 2020 GHG emissions limit to be 431 MMTCO<sub>2</sub>e. CARB also updated the State's 2020 NAT emissions estimate to account for the effect of the 2007–2009 economic recession, new estimates for future fuel and energy demand, and the reductions required by regulation that

<sup>76</sup> Office of Governor Edmund G. Brown Jr., Governor Brown Establishes Most Ambitious Greenhouse Gas Reduction Target in North America.

<sup>77</sup> California Air Resources Board (CARB), First Update to the AB 32 Scoping Plan [https://www.arb.ca.gov/cc/scopingplan/2013\\_update/first\\_update\\_climate\\_change\\_scoping\\_plan.pdf](https://www.arb.ca.gov/cc/scopingplan/2013_update/first_update_climate_change_scoping_plan.pdf). Accessed February 2019.

had recently been adopted for motor vehicles and renewable energy. CARB's projected Statewide 2020 emissions estimate using the GWP values from the IPCC AR4 is 509.4 MMTCO<sub>2e</sub>.

Therefore, under the first update to the Scoping Plan, the emission reductions necessary to achieve the 2020 emissions target of 431 MMTCO<sub>2e</sub> would have been 78.4 MMTCO<sub>2e</sub>, or a reduction of GHG emissions by approximately 15.4 percent.

## 2017 Climate Change Scoping Plan

In response to the passage of SB 32 and the identification of the 2030 GHG reduction target, CARB adopted the 2017 Climate Change Scoping Plan at a public meeting held in December 2017.<sup>78</sup> The 2017 Scoping Plan outlines the strategies the State will implement to achieve the 2030 GHG reduction target of 40 percent below 1990 levels, which build on the Cap-and-Trade Regulation, the Low Carbon Fuel Standard, improved vehicle, truck and freight movement emissions standards, increasing renewable energy, and strategies to reduce methane emissions from agricultural and other wastes by using it to meet California's energy needs. Accounting for all GHG emissions sectors in the State, statewide population forecasts, and the statewide reductions necessary to achieve the 2030 statewide target under SB 32, CARB recommends statewide targets of no more than six metric tons CO<sub>2e</sub> per capita by 2030.<sup>79</sup> CARB's projected Statewide 2030 emissions takes into account 2020 GHG reduction policies and programs.<sup>80</sup> The 2017 Scoping Plan also addresses GHG emissions from natural and working lands of California, including the agriculture and forestry sectors.

CARB states that the approved Scoping Plan "is the best choice to achieve the State's climate and clean air goals."<sup>81</sup> Under the Scoping Plan, the majority of the reductions would result from the continuation of the Cap-and-Trade regulation. Additional reductions would be achieved from electricity sector standards (i.e., utility providers to supply 50 percent renewable electricity by 2030), doubling the energy efficiency savings at end uses, additional reductions from the LCFS, implementing the short-lived GHG strategy (e.g., hydrofluorocarbons), and implementing the mobile source strategy and sustainable freight action plan. In July 2017, the California Legislature voted to extend the Cap-and-Trade regulation to 2030.

The 2017 Scoping Plan discusses the role of local governments in meeting the State's greenhouse gas reductions goals because local governments have jurisdiction and land use authority related to: community-scale planning and permitting processes, local codes and actions, outreach and education programs, and municipal operations.<sup>82</sup> Furthermore, local governments may have the ability to incentivize renewable energy, energy efficiency, and water efficiency measures.<sup>83</sup>

<sup>78</sup> CARB, California's 2017 Climate Change Scoping Plan, November 2017, [https://www.arb.ca.gov/cc/scopingplan/scoping\\_plan\\_2017.pdf](https://www.arb.ca.gov/cc/scopingplan/scoping_plan_2017.pdf). Accessed February 2019.

<sup>79</sup> CARB, California's 2017 Climate Change Scoping Plan, November 2017, [https://www.arb.ca.gov/cc/scopingplan/scoping\\_plan\\_2017.pdf](https://www.arb.ca.gov/cc/scopingplan/scoping_plan_2017.pdf). Accessed February 2019.

<sup>80</sup> CARB, California's 2017 Climate Change Scoping Plan.

<sup>81</sup> CARB, California's 2017 Climate Change Scoping Plan.

<sup>82</sup> CARB, California's 2017 Climate Change Scoping Plan, page 97.

<sup>83</sup> CARB, California's 2017 Climate Change Scoping Plan, page 97.

For individual projects under CEQA, the 2017 Scoping Plan states that local governments can support climate action when considering discretionary approvals and entitlements. According to the 2017 Scoping Plan, lead agencies have the discretion to develop evidence-based numeric thresholds consistent with the Scoping Plan, the State’s long-term goals, and climate change science.<sup>84</sup>

The City of Culver City has not developed per capita targets for 2030 or 2050; however, the City recognizes that GHG emissions reductions are necessary in the public and private sectors. The City has taken the initiative in combatting climate change by developing programs such as *Green Building Program*, as discussed further below.

A summary of the GHG emissions reductions required under HSC Division 25.5 is provided in **Table 3, *Estimated Greenhouse Gas Emissions Reductions Required by HSC Division 25.5.***

**TABLE 3**  
**ESTIMATED GREENHOUSE GAS EMISSIONS REDUCTIONS REQUIRED BY HSC DIVISION 25.5**

Emissions Scenario	GHG Emissions (MMTCO <sub>2</sub> e)
<b>2008 Scoping Plan (IPCC SAR)</b>	
2020 BAU Forecast (CARB 2008 Scoping Plan Estimate)	596
2020 Emissions Target Set by AB 32 (i.e., 1990 level)	427
Reduction below Business-As-Usual necessary to achieve 1990 levels by 2020	169 (28.4%) <sup>a</sup>
<b>2011 Scoping Plan (IPCC AR4)</b>	
2020 BAU Forecast (CARB 2011 Scoping Plan Estimate)	509.4
2020 Emissions Target Set by AB 32 (i.e., 1990 level)	431
Reduction below Business-As-Usual necessary to achieve 1990 levels by 2020	78.4 (15.4%) <sup>b</sup>
<b>2017 Scoping Plan Update</b>	
2030 BAU Forecast (“Reference Scenario” which includes 2020 GHG reduction policies and programs)	389
2030 Emissions Target Set by HSC Division 25.5 (i.e., 40% below 1990 Level)	260
Reduction below Business-As-Usual Necessary to Achieve 40% below 1990 Level by 2030	129 (33.2%) <sup>c</sup>

MMTCO<sub>2</sub>e = million metric tons of carbon dioxide equivalents

a  $596 - 427 = 169 / 596 = 28.4\%$

b  $509.4 - 431 = 78.4 / 509.4 = 15.4\%$

c  $389 - 260 = 129 / 389 = 33.2\%$

SOURCE: CARB, Final Supplement to the AB 32 Scoping Plan Functional Equivalent Document (FED), Attachment D, August 19, 2011; CARB, 2020 Business-as-Usual (BAU) Emissions Projection, 2014 Edition, 2017, <http://www.arb.ca.gov/cc/inventory/data/bau.htm>. Accessed February 2019; CARB, California’s 2017 Climate Change Scoping Plan, November 2017, [https://www.arb.ca.gov/cc/scopingplan/scoping\\_plan\\_2017.pdf](https://www.arb.ca.gov/cc/scopingplan/scoping_plan_2017.pdf). Accessed February 2019.

<sup>84</sup> CARB, California’s 2017 Climate Change Scoping Plan, page 100.

Under the Scoping Plan Scenario, continuation of the Cap-and-Trade regulation (or carbon tax) is expected to cover approximately 34 to 79 MMTCO<sub>2</sub> of the 2030 reduction obligation.<sup>85</sup> The State's short-lived climate pollutants strategy, which is for GHGs that remain in the atmosphere for shorter periods of time compared to longer-lived GHGs like CO<sub>2</sub>, is expected to cover approximately 17 to 35 MMTCO<sub>2</sub>e. The Renewables Portfolio Standard with 50 percent renewable electricity by 2030 is expected to cover approximately 3 MMTCO<sub>2</sub>. The mobile source strategy and sustainable freight action plan includes maintaining the existing vehicle GHG emissions standards, increasing the number of zero emission vehicles and improving the freight system efficiency, and is expected to cover approximately 11 to 13 MMTCO<sub>2</sub>. Under the Scoping Plan Scenario, CARB expects that the reduction in GHGs from doubling of the energy efficiency savings in natural gas and electricity end uses in the CEC 2015 Integrated Energy Policy Report by 2030 would cover approximately 7 to 9 MMTCO<sub>2</sub> of the 2030 reduction obligation. The other strategies would be expected to cover the remaining 2030 reduction obligations.

The State of California has promulgated a number of regulations and policies to reduce statewide GHG emissions, including source-specific regulations focused on the energy-production sector, mobile sources, and buildings. Regulations that are relevant to the Project are described below.

## 2.3 Regional

### South Coast Air Quality Management District

The Project site is located in the South Coast Air Basin (Air Basin), which consists of Orange County, Los Angeles County (excluding the Antelope Valley portion), and the western, non-desert portions of San Bernardino and Riverside Counties, in addition to the San Geronio Pass area in Riverside County. The South Coast Air Quality Management District (SCAQMD) is responsible for air quality planning in the Air Basin and developing rules and regulations to bring the area into attainment of the ambient air quality standards. This is accomplished through air quality monitoring, evaluation, education, implementation of control measures to reduce emissions from stationary sources, permitting and inspection of pollution sources, enforcement of air quality regulations, and by supporting and implementing measures to reduce emissions from motor vehicles.

SCAQMD adopted a "Policy on Global Warming and Stratospheric Ozone Depletion" on April 6, 1990.<sup>86</sup> The policy commits SCAQMD to consider global impacts in rulemaking and in drafting revisions to the Air Quality Management Plan. In March 1992, the SCAQMD Governing Board reaffirmed this policy and adopted amendments to the policy to include the following directives:<sup>87</sup>

- Phase out the use and corresponding emissions of chlorofluorocarbons, methyl chloroform (1,1,1-trichloroethane or TCA), carbon tetrachloride, and halons by December 1995;

<sup>85</sup> CARB, California's 2017 Climate Change Scoping Plan, Appendix G, November 2017, [https://www.arb.ca.gov/cc/scopingplan/2030sp\\_appg\\_alt-ab197aq-health\\_final.pdf](https://www.arb.ca.gov/cc/scopingplan/2030sp_appg_alt-ab197aq-health_final.pdf). Accessed February 2019.

<sup>86</sup> South Coast Air Quality Management District (SCAQMD), SCAQMD's Historical Activity on Climate Change, 2014, <http://www.aqmd.gov/nav/about/initiatives/climate-change>. Accessed February 2019.

<sup>87</sup> SCAQMD, CEQA Air Quality Handbook, April 1993, pages 3-7.

- Phase out the large quantity use and corresponding emissions of hydrochlorofluorocarbons by the year 2000;
- Develop recycling regulations for hydrochlorofluorocarbons (e.g., SCAQMD Rules 1411 and 1415);
- Develop an emissions inventory and control strategy for methyl bromide; and
- Support the adoption of a California GHG emission reduction goal.

In 2008, SCAQMD released draft guidance regarding interim CEQA GHG significance thresholds.<sup>88</sup> On December 5, 2008, the SCAQMD Governing Board adopted the staff proposal for an interim GHG significance threshold for stationary source/industrial projects where SCAQMD is the Lead Agency. However, SCAQMD has not adopted a GHG significance threshold for land use development projects (e.g., mixed-use/commercial projects). A GHG Significance Threshold Working Group was formed to further evaluate potential GHG significance thresholds.<sup>89</sup> The aforementioned Working Group has been inactive since 2011, however, and SCAQMD has not formally adopted any GHG significance threshold for land use development projects.

## SCAG Regional Transportation Plan/Sustainable Communities Strategy (RTP/STS)

On September 3, 2020, the SCAG's Regional Council formally adopted the 2020-2045 RTP/SCS also known as the Connect SoCal, which is an update to the previous 2016-2040 RTP/SCS.<sup>90</sup> Using growth forecasts and economic trends, 2020-2045 RTP/SCS provides a vision for transportation throughout the region for the next several decades by considering the role of transportation in the broader context of economic, environmental, and quality-of-life goals for the future, identifying regional transportation strategies to address mobility needs. The 2020-2045 RTP/SCS describes how the region can attain the GHG emission-reduction targets set by CARB by achieving an 8 percent reduction in per capita transportation GHG emissions by 2020 and a 19 percent reduction in per capita transportation emissions by 2035 compared to the 2005 level on a per capita basis.<sup>91</sup> Compliance with and implementation of the 2020-2045 RTP/SCS policies and strategies would have co-benefits of reducing per capita criteria air pollutant emissions (e.g. nitrogen dioxide, carbon monoxide, etc.) associated with reduced per capita vehicle miles traveled (VMT).

The 2020-2045 RTP/SCS states that the SCAG region was home to approximately 18.8 million people in 2016 and included approximately 6.0 million homes and 8.4 million jobs.<sup>92</sup> By 2045, the integrated growth forecast projects that these figures will increase by 3.7 million people, with approximately 1.6 million more homes and 1.7 million more jobs. High Quality Transit Areas

<sup>88</sup> SCAQMD, Board Meeting, December 5, 2008, Agenda No. 31, <http://www3.aqmd.gov/hb/2008/December/0812ag.html>. Accessed February 2019.

<sup>89</sup> SCAQMD, Greenhouse Gases CEQA Significance Thresholds, <http://www.aqmd.gov/home/regulations/ceqa/air-quality-analysis-handbook/ghg-significance-thresholds>. Accessed February 2019.

<sup>90</sup> Southern California Association of Governments (SCAG), 2020-2045 Regional Transportation Plan/Sustainable Communities Strategy (2020-2045 RTP/SCS), September 2020, [https://scag.ca.gov/sites/main/files/file-attachments/0903fconnectsocial-plan\\_0.pdf?1606001176](https://scag.ca.gov/sites/main/files/file-attachments/0903fconnectsocial-plan_0.pdf?1606001176). Accessed November 2020.

<sup>91</sup> SCAG, 2020-2045 RTP/SCS.

<sup>92</sup> SCAG, 2020-2045 RTP/SCS Demographics and Growth Forecast Technical Report.

(HQTAs), which are defined by the 2020-2045 RTP/SCS as generally walkable transit villages or corridors that are within 0.5 mile of a well-serviced transit stop or a transit corridor with 15-minute or less service frequency during peak commute hours, will account for 2.4 percent of regional total land, but are projected to accommodate 51 percent and 60 percent of future household growth respectively between 2016 and 2045.<sup>93</sup> The 2020-2045 RTP/SCS overall land use pattern reinforces the trend of focusing new housing and employment in the region's HQTAs. HQTAs are a cornerstone of land use planning best practice in the SCAG region because they concentrate roadway repair investments, leverage transit and active transportation investments, reduce regional life cycle infrastructure costs, improve accessibility, create local jobs, and have the potential to improve public health and housing affordability.

SCAG's 2020-2045 RTP/SCS provide specific strategies for implementation. These strategies include supporting projects that encourage a diverse job opportunities for a variety of skills and education, recreation and cultures and a full-range of shopping, entertainment and services all within a relatively short distance; encouraging employment development around current and planned transit stations and neighborhood commercial centers; encouraging the implementation of a "Complete Streets" policy that meets the needs of all users of the streets, roads and highways including bicyclists, children, persons with disabilities, motorists, electric vehicles, movers of commercial goods, pedestrians, users of public transportation, and seniors; and supporting alternative fueled vehicles.<sup>94</sup>

In addition, the 2020-2045 RTP/SCS include strategies to promote active transportation, support local planning and projects that serve short trips, promote transportation investments, investments in active transportation, more walkable and bikeable communities, that will result in improved air quality and public health, and reduced greenhouse gas emissions, and supports building physical infrastructure, regional greenways and first-last mile connections to transit, including to light rail and bus stations. The 2020-2045 RTP/SCS align active transportation investments with land use and transportation strategies, increase competitiveness of local agencies for federal and state funding, and to expand the potential for all people to use active transportation. CARB has accepted the SCAG GHG quantification determinations in the 2020-2045 RTP/SCS and demonstrates achievement of the GHG emission reduction targets established by CARB.<sup>95,96</sup>

Although there are GHG emission reduction targets for passenger vehicles set by CARB for 2045, the 2020-2045 RTP/SCS GHG emission reduction trajectory shows that more aggressive GHG emission reductions are projected for 2045. By meeting and exceeding the SB 375 targets for 2020 and 2035, as well as achieving an additional 4.1-percent reduction in GHG from transportation-related sources in the ten years between 2035 and 2045, the 2020-2045 RTP/SCS is expected to

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<sup>93</sup> SCAG, 2020-2045 RTP/SCS, page 51.

<sup>94</sup> SCAG, 2025-2040 RTP/SCS, pages 48-86.

<sup>95</sup> SCAG, 2020-2045 RTP/SCS, pages 48-86.

<sup>96</sup> CARB, Southern California Association of Governments' (SCAG) 2016 Sustainable Communities Strategy (SCS) ARB Acceptance of GHG Quantification Determination, June 2016.

fulfill and exceed its portion of SB 375 compliance with respect to meeting the State's GHG emission reduction goals.<sup>97</sup>

## 2.4 Local

### City of Culver City

Culver City has not adopted a GHG significance threshold, however, the City participates in an environmental recognition program, California Green Communities. The program helps cities develop strategies to reduce carbon emissions and increase energy efficiency in their community. In addition, the City has adopted green building ordinances to reduce GHG emissions for new development. The City has adopted a Photovoltaic Requirement which requires 1 kilowatt (kw) of photovoltaic power installed per 10,000 square feet of new development.<sup>98</sup>

In 2009, the City adopted the Green Building program which for new construction totaling more than 50,000 square feet, the Green Building Program requires these developments to achieve Leadership in Energy and Environmental Design (LEED) certification.<sup>99</sup> An example of the City's Green Building Program requirements would be all lighting has to be either fluorescent, LED or other type of high-efficiency lighting.

The General Plan Land Use designation of the Project Site is General Commercial. Adjacent designations to the north and west are Residential Single Family, to the east primarily General Commercial, and to the south primarily General Industrial. The Project is therefore consistent with the long-standing zoning designation of the site as determined in the City's Land Use Element.<sup>100</sup> The City has also adopted its first comprehensive plan for bicycling and walking.

In the Land Use Element, the Land Use designation of Commercial is further specified into five subcategories: Neighborhood Serving Corridor, General Corridor, Downtown, Community Serving Center and Regional Center. The Project Site is designated subcategory Regional Corridor and has a corresponding Zone of C-3 for medium-scale commercial, automotive, hotel, restaurant, office, and retail and services development. The Project Site is located within the Sunkist Park Neighborhood in the central portion of the City. As indicated in the Land Use Element, Figure LU-12, the Project Site is located within the Southern Central Sub-Area of the City. Issues specific to the Southern Central Sub-Area pertain to maximizing the affordable housing opportunities in the sub-area by increasing occupancy in underutilized existing development, as well as developing standards for slope stabilization and hillside development as certain areas of the sub-area have experienced erosion. No specific objectives or policies were identified for or are directly applicable to this Project.

The Circulation Element provides an overview of regulatory policies, transportation agencies, and local conditions; presents a vision for mobility in the Culver City area; presents a Street System

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<sup>97</sup> SCAG, 2020-2045 RTP/SCS Public Health Technical Report, page 53.

<sup>98</sup> Culver City Municipal Code 2017. Solar Photovoltaic Systems, Chapter 15.02.1005. Accessed March 2019.

<sup>99</sup> Culver City Municipal Code 2017. Green Building Program and Requirements, Chapter 15.02.1100. Accessed March 2019.

<sup>100</sup> City of Culver City General Plan, Land Use Element, adopted 1996, amended through 2004, page LU-22.

Classification; discusses the Culver CityBus system; presents Bikeway Classifications; and provides goals, objectives, and policies to improve the local and regional transportation system. The Bicycle & Pedestrian Master Plan (adopted November 8, 2010), including existing and proposed bicycle and pedestrian facilities, is discussed below. The City has also adopted the concept of Complete Streets, which emphasizes a balanced transportation system that considers all users of the road (cyclists, pedestrians, transit riders, and vehicles) while planning development and transportation projects.<sup>101</sup> The goal of this concept is to transform the City into a place with an extensive bicycle and pedestrian network that allows travelers of all levels and abilities to feel comfortable walking and biking to their destinations.<sup>102</sup>

The Culver City Bicycle & Pedestrian Master Plan (BPMP) is a comprehensive plan for bicycling and walking in Culver City that considers all users of the road (cyclists, pedestrians, transit riders, and vehicles) while planning development and transportation projects. The BPMP provides an inventory and evaluation of the City's existing bicycle and pedestrian facilities, identifies opportunities and constraints associated with these facilities, and provides recommendations for the future development of bicycle and pedestrian facilities.<sup>103</sup> The BPMP also includes a stated goal of transforming the City into a place with an extensive bicycle and pedestrian network for travelers of all levels and abilities, and in so doing encourage more people to forgo car trips in favor of alternative forms of transportation. The BPMP identifies specific objectives, policies, and actions directed towards the City in order to achieve this goal.

As presented in the BPMP, the closest existing bicycle facility to the Project Site is the Ballona Creek Class I Bike Path/Multi-Use Path, with access off of Inglewood Boulevard.<sup>104</sup> As updated on the City's website, other bicycle facilities near the Project Site include Class II<sup>105</sup> Bike Lanes on Sawtelle Boulevard from approximately Sepulveda Boulevard to the City boundary near Ballona Creek.<sup>106</sup> As identified in the BPMP, in the vicinity of the Project Site, Segrell Way, Berryman Avenue, Hayter Avenue, Slauson Avenue, and Port Road are all designated as Bicycle Friendly Streets.<sup>107</sup> As also shown in the BPMP, a proposed pedestrian corridor is identified along Sepulveda Boulevard from Venice to Jefferson.<sup>108</sup>

<sup>101</sup> Alta Planning + Design, Culver City Bicycle & Pedestrian Master Plan, adopted by City Council, November 8, 2010, page 8.

<sup>102</sup> Alta Planning + Design, Culver City Bicycle & Pedestrian Master Plan, adopted by City Council, November 8, 2010, page 136.

<sup>103</sup> Alta Planning + Design, Culver City Bicycle & Pedestrian Master Plan, adopted by City Council, November 8, 2010, pages 1 and 2.

<sup>104</sup> Culver City Bicycle & Pedestrian Master Plan, op. cit., Table 3-1, Figure 3-1, and Map 3-1. A Class I Bike Path provides completely separated right-of-way for exclusive use by bicycles and pedestrians with cross-flow minimized.

<sup>105</sup> A Class II Bike Lane provides a striped lane (minimum width of 5 feet) for one-way bike travel on a street or highway.

<sup>106</sup> Biking in Culver City, <http://www.culvercity.org/enjoy/getting-around/biking-in-culver-city>. Accessed March 2019.

<sup>107</sup> Culver City Bicycle & Pedestrian Master Plan, op. cit., Map 5-1. A Bicycle Friendly Street designation is for predominately residential streets with relatively low traffic volumes and includes Class III Bike Route signage or Shared Roadway Bicycle Marking (sharrows), and may include custom signage and traffic calming features.

<sup>108</sup> Culver City Bicycle & Pedestrian Master Plan, op. cit., Map 5-2.

In February 2019 for residential customers and May 2019 for non-residential customers, Clean Power Alliance became the new electricity supplier for Culver City. With this change, Clean Power Alliance purchases the renewable energy resources for electricity and Southern California Edison (SCE) delivers it to Culver City customers. The Clean Power Alliance is a Joint Powers Authority made up of public agencies across Los Angeles and Ventura counties working together to bring clean, renewable power to Southern California. With the switch in energy providers, electricity customers in Culver City are automatically defaulted to have 100% renewable energy serving their electricity needs. Alternatively, customers can opt to have their electricity power consisting of 50% renewable content or 36%, or opt out of the Clean Power Alliance to remain with SCE as their provider. The Project's GHG analysis conservatively assumes the Project will remain with SCE as their electricity provider and does not take additional credit for renewable energy beyond the expected SCE renewable energy percentage for year 2022 based on the required renewables by year 2024 under SB 100.<sup>109</sup>

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<sup>109</sup> For the purposes of estimating GHG emissions in this Technical Report, the emissions analysis conservatively assumes Project would not switch electricity providers from SCE to the Clean Power Alliance (i.e., does not take any credit for 36%, 50%, or 100% renewable electricity, depending on the selected Clean Power Alliance plan). Should the Project switch electricity providers from SCE to the Clean Power Alliance, the Project's electricity-related emissions would be lower than disclosed in this Technical Report.

## SECTION 3

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### Thresholds of Significance

#### 3.1 Greenhouse Gas Emissions and Reduction Plan Considerations

The significance thresholds below are derived from the Environmental Checklist questions in Appendix G of the State *CEQA Guidelines*. Accordingly, a significant impact associated with GHGs would occur if the Project were to:

- a) **Generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment; or**
- b) **Conflict with any applicable plan, policy or regulation adopted for the purpose of reducing the emissions of GHGs.**

The City has not yet adopted a numerical significance threshold for assessing impacts related to GHG emissions and has not formally adopted a local plan for reducing GHG emission. When no guidance exists under CEQA, the lead agency may look to and assess general compliance with comparable regulatory schemes.<sup>110</sup> In its January 2008 CEQA and Climate Change white paper, the California Air Pollution Control Officer's Association (CAPCOA) identified a number of potential approaches for determining the significance of GHG emissions in CEQA documents. In its white paper, CAPCOA suggests making significance determinations on a case-by-case basis when no significance thresholds have been formally adopted by a lead agency.

The Office of Planning and Research released a technical advisory on CEQA and climate change that provided some guidance on assessing the significance of GHG emissions, and states that “lead agencies may undertake a project-by-project analysis, consistent with available guidance and current CEQA practice,” and that while “climate change is ultimately a cumulative impact, not every individual project that emits GHGs must necessarily be found to contribute to a significant cumulative impact on the environment.”<sup>111</sup> Furthermore, the technical advisory states that “CEQA authorizes reliance on previously approved plans and mitigation programs that have

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<sup>110</sup> See *Protect Historic Amador Waterways v. Amador Water Agency* (2004) 116 Cal. App. 4th 1099, 1107 [“[A] lead agency’s use of existing environmental standards in determining the significance of a project’s environmental impacts is an effective means of promoting consistency in significance determinations and integrating CEQA environmental review activities with other environmental program planning and resolution.”]. Lead agencies can, and often do, use regulatory agencies’ performance standards. A project’s compliance with these standards usually is presumed to provide an adequate level of protection for environmental resources. See, e.g., *Cadiz Land Co. v. Rail Cycle* (2000) 83 Cal.App.4th 74, 99 (upholding use of regulatory agency performance standard).

<sup>111</sup> Governor’s Office of Planning and Research, *Technical Advisory – CEQA and Climate Change: Addressing Climate Change through California Environmental Quality Act (CEQA) Review*, (2008).

adequately analyzed and mitigated GHG emissions to a less than significant level as a means to avoid or substantially reduce the cumulative impact of a project.”<sup>112</sup>

Amendments to Section 15064.4 of the CEQA Guidelines were adopted to assist lead agencies in determining the significance of the impacts of GHG emissions. Consistent with existing CEQA practice, Section 15064.4 gives lead agencies the discretion to determine whether to assess those emissions quantitatively or qualitatively. If a qualitative analysis is used, in addition to quantification, this section recommends certain qualitative factors that may be used in the determination of significance (i.e., extent to which the project may increase or reduce GHG emissions compared to the existing environment; whether the project exceeds an applicable significance threshold; and extent to which the project complies with regulations or requirements adopted to implement a reduction or mitigation of GHGs). The amendments do not establish a threshold of significance; rather, lead agencies are granted discretion to establish significance thresholds for their respective jurisdictions, including looking to thresholds developed by other public agencies, or suggested by other experts, such as the California Air Pollution Control Officers Association (CAPCOA), so long as any threshold chosen is supported by substantial evidence (see Section 15064.7(c)). The California Natural Resources Agency has also clarified that the CEQA Guidelines amendments focus on the effects of GHG emissions as cumulative impacts, and that they should be analyzed in the context of CEQA’s requirements for cumulative impact analysis (see Section 15064(h)(3)).<sup>113</sup>

Although GHG emissions can be quantified, CARB, SCAQMD, and the City of Culver City have not adopted project-level significance thresholds for GHG emissions that would be applicable to the Project. The Governor’s Office of Planning and Research (OPR) released a technical advisory on CEQA and climate change that provided some guidance on assessing the significance of GHG emissions, and states that “lead agencies may undertake a project-by-project analysis, consistent with available guidance and current CEQA practice,” and that while “climate change is ultimately a cumulative impact, not every individual project that emits GHGs must necessarily be found to contribute to a significant cumulative impact on the environment.”<sup>114</sup> Furthermore, the technical advisory states that “CEQA authorizes reliance on previously approved plans and mitigation programs that have adequately analyzed and mitigated GHG emissions to a less than significant level as a means to avoid or substantially reduce the cumulative impact of a project.”<sup>115</sup>

Per CEQA Guidelines Section 15064(h)(3), a project’s incremental contribution to a cumulative impact can be found not cumulatively considerable if the project would comply with an approved plan or mitigation program that provides specific requirements that will avoid or substantially

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<sup>112</sup> Ibid.

<sup>113</sup> See generally California Natural Resources Agency, Final Statement of Reasons for Regulatory Action (December 2009), pp. 11-13, 14, 16. [http://resources.ca.gov/ceqa/docs/Final\\_Statement\\_of\\_Reasons.pdf](http://resources.ca.gov/ceqa/docs/Final_Statement_of_Reasons.pdf). Accessed February 2017; see also Letter from Cynthia Bryant, Director of the Office of Planning and Research to Mike Chrisman, Secretary for Natural Resources, April 13, 2009. Available at [http://opr.ca.gov/docs/Transmittal\\_Letter.pdf](http://opr.ca.gov/docs/Transmittal_Letter.pdf). Accessed February 2017.

<sup>114</sup> Governor’s Office of Planning and Research, Technical Advisory – CEQA and Climate Change: Addressing Climate Change through California Environmental Quality Act (CEQA) Review, (2008).

<sup>115</sup> Governor’s Office of Planning and Research, Technical Advisory – CEQA and Climate Change: Addressing Climate Change through California Environmental Quality Act (CEQA) Review, (2008).

lessen the cumulative problem within the geographic area of the project.<sup>116</sup> To qualify, such a plan or program must be specified in law or adopted by the public agency with jurisdiction over the affected resources through a public review process to implement, interpret, or make specific the law enforced or administered by the public agency.<sup>117</sup> Examples of such programs include a “water quality control plan, air quality attainment or maintenance plan, integrated waste management plan, habitat conservation plan, natural community conservation plan, [and] plans or regulations for the reduction of greenhouse gas emissions.”<sup>118</sup> Thus, CEQA Guidelines Section 15064(h)(3) allows a lead agency to make a finding of non-significance for GHG emissions if a project complies with a program and/or other regulatory schemes to reduce GHG emissions.<sup>119</sup>

In the absence of any adopted, quantitative threshold, the Project would not have a significant effect on the environment if the Project is found to be consistent with the applicable regulatory plans and policies to reduce GHG emissions, including the emissions reduction measures discussed within CARB’s Climate Change Scoping Plan, SCAG’s RTP/SCS, and City of Culver City polices established for the purpose of increasing energy efficiency and reducing GHG emissions for new developments and the City’s Green Building Code.

## 3.2 Newhall Ranch Ruling

The California Supreme Court considered the CEQA issue of determining the significance of GHG emissions in its decision, *Center for Biological Diversity v. California Department of Fish and Wildlife and Newhall Land and Farming (CBD vs. CDFW)*. The Court questioned a common CEQA approach to GHG analyses for development projects that compares project emissions to the reductions from BAU that will be needed statewide to reduce emissions to 1990 levels by 2020, as required by AB 32. The court upheld the BAU method as valid in theory, but concluded that the BAU method was improperly applied in the case of the Newhall project because the target for the project was incorrectly deemed consistent with the statewide emission target of a percent below BAU for the year 2020 as specified in the AB 32 Scoping Plan. In other words, the court said that the percent below BAU target specified in the AB 32 Scoping Plan is intended as a measure of the GHG reduction effort required by the State as a whole, and it cannot necessarily be applied to the impacts of a specific project in a specific location. The Court provided some guidance to evaluating the cumulative significance of a proposed land use project’s GHG

<sup>116</sup> 14 CCR § 15064(h)(3).

<sup>117</sup> 14 CCR § 15064(h)(3).

<sup>118</sup> 14 CCR § 15064(h)(3).

<sup>119</sup> See, for example, San Joaquin Valley Air Pollution Control District (SJVAPCD), CEQA Determinations of Significance for Projects Subject to ARB’s GHG Cap-and-Trade Regulation, APR-2025 (June 25, 2014), in which the SJVAPCD “determined that GHG emissions increases that are covered under ABR’s Cap-and-Trade regulation cannot constitute significant increases under CEQA...” Furthermore, the SCAQMD has taken this position in CEQA documents it has produced as a lead agency. The SCAQMD has prepared three Negative Declarations and one Draft Environmental Impact Report that demonstrate the SCAQMD has applied its 10,000 MTCO<sub>2</sub>/yr significance threshold in such a way that GHG emissions covered by the Cap-and-Trade Program do not constitute emissions that must be measured against the threshold. See SCAQMD, Final Negative Declaration for Ultramar Inc. Wilmington Refinery Cogeneration Project, SHC No. 2012041014 (October 2014); SCAQMD Final Negative Declaration for Phillips 99 Los Angeles Refinery Carson Plant—Crude Oil Storage Capacity Project, SCH No. 2013091029 (December 2014); SCAQMD Final Mitigated Negative Declaration for Toxic Air Contaminant Reduction for Compliance with SCAQMD Rules 1420.1 and 1402 at the Exide Technologies Facility in Vernon, CA, SCH No. 2014101040 (December 2014); and SCAQMD Final Environmental Impact Report for the Breitburn Santa Fe Springs Blocks 400/700 Upgrade Project, SCH No. 2014121014 (August 2015).

emissions, but noted that none of the approaches could be guaranteed to satisfy CEQA for a particular project. The Court’s suggested “pathways to compliance” include:

1. Use a geographically specific GHG emission reduction plan (e.g., climate action plan) that outlines how the jurisdiction will reduce emissions consistent with State reduction targets, to provide the basis for streamlining project-level CEQA analysis, as described in CEQA § 15183.5.
2. Utilize the Scoping Plan’s business-as-usual reduction goal, but provide substantial evidence to bridge the gap between the statewide goal and the project’s emissions reductions;
3. Assess consistency with AB 32’s goal in whole or part by looking to compliance with regulatory programs designed to reduce GHG emissions from particular activities; as an example, the Court points out that projects consistent with an SB 375 Sustainable Communities Strategy (SCS) may need to re-evaluate GHG emissions from cars and light trucks.
4. Rely on existing numerical thresholds of significance for GHG emissions, such as those developed by an air district.

As described earlier, the City does not currently have an adopted GHG emission reduction plan. Thus, the Project could not meet the requirements of a CEQA-qualified CAP as described in CEQA § 15183.5 (pathway #1, referenced above).

Regarding compliance pathway #2, the Court acknowledged that “a business-as-usual comparison based on the Scoping Plan’s methodology may be possible,” and that “a lead agency might be able to determine what level of reduction from business as usual a new land use development at the proposed location must contribute in order to comply with statewide goals.”<sup>120</sup>

Compliance pathway #3 could work if it can be shown how regulatory programs or performance-based standards apply to a project’s emissions. The Project would not have a significant effect on the environment if the Project is found to be consistent with the applicable regulatory plans and policies to reduce GHG emissions, including the emissions reduction measures discussed within CARB’s Climate Change Scoping Plan, SCAG’s RTP/SCS, and City of Culver City polices established for the purpose of increasing energy efficiency and reducing GHG emissions for new developments and the City’s Green Building Code.

Compliance path #4 is the most straightforward approach to analysis, since the SCAQMD has developed the significance thresholds for GHG emissions, which include a “bright-line” project threshold of 3,000 MTCO<sub>2</sub>e/year or a per-service population threshold of 4.8 MTCO<sub>2</sub>e per service population per year (see discussion below). Service population is defined as the total count of residents plus jobs statewide. Since the Project is a commercial enterprise, for which the majority of the GHG emissions are created by the actions of guests, who are counted neither as residents or employees, the City has determined that the service population threshold is not appropriate or applicable.

The Court did not list the above pathways in order of importance or intentional sequence, nor require that they be relied upon in an analysis. However, this report considers the potential GHG emissions associated with the Project within the context of the Court's suggested pathways to compliance.

# SECTION 4

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## Methodology

The analysis of the Project's construction and operation GHG emissions has been conducted as follows. Additional details are provided in Appendix A of this report.

### 4.1 Emissions Estimates

To provide additional information to decision makers and the public, this GHG Technical Report provides an estimate of the GHG emissions from Project construction and operation. The following Project-related emission sources have been evaluated:

- Scope 1: Direct, on-site and off-site combustion of fossil fuels (e.g., natural gas, propane, gasoline, diesel, and transportation fuels).
- Scope 2: Indirect, off-site emissions associated with purchased electricity or purchased steam.
- Scope 3: Indirect emissions associated with other emissions sources, such as third-party vehicles and embodied energy.<sup>121</sup>

For purposes of this analysis, it was considered reasonable, and consistent with criteria pollutant calculations, to consider GHG emissions resulting from direct Project-related activities, including, e.g., use of vehicles, electricity, and natural gas, to be new emissions. These emissions include Project construction activities such as demolition, hauling, and construction worker trips, as well as operational emissions. This analysis also considers indirect GHG emissions from water conveyance, wastewater generation, and solid waste handling. Since potential impacts resulting from GHG emissions are long-term rather than acute, GHG emissions were calculated on an annual basis. As previously discussed, the Project would remove existing structures and associated GHG emissions. Emissions removed would be applied as a credit toward the new emissions and the Project would be evaluated on its net (Project minus Existing) increase.

GHG emissions are estimated using the California Emissions Estimator Model (CalEEMod) (Version 2016.3.2), which is a statewide land use emissions computer model designed to provide a uniform platform for government agencies, land use planners, and environmental professionals to quantify potential criteria pollutant and GHG emissions from a variety of land use projects. CalEEMod was developed in collaboration with the air districts of California. Regional data (e.g., emission factors, trip lengths, meteorology, source inventory, etc.) have been provided by the various California air districts to account for local requirements and conditions. The model is

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<sup>121</sup> Embodied energy includes energy required for water pumping and treatment for end-uses.

considered to be an accurate and comprehensive tool for quantifying air quality and GHG impacts from land use projects throughout California.<sup>122</sup>

As discussed previously, the City of Culver City has adopted and implemented a range of GHG reduction activities and strategies that would reduce GHG emissions. In addition, SCAG has adopted the 2020-2045 RTP/SCS, which is applicable to the region and outlines SCAG's plan for integrating the transportation network and related strategies with an overall land use pattern that responds to projected growth, housing needs, changing demographics, and transportation demands. The SCS focuses the majority of new housing and job growth in high-quality transit areas and other opportunity areas in existing main streets, downtowns, and commercial corridors, resulting in an improved jobs-housing balance and more opportunity for transit-oriented development and demonstrates a reduction in per capita GHG emissions relative to 2005 of nine percent in 2020 and 16 percent in 2035. The project-level analysis describes the consistency of the Project's GHG emission sources with local and regional GHG emissions reduction strategies.

## Construction

Construction emissions are forecasted by assuming a conservative estimate of construction activities from each phase of the Project and incorporated PDF-AIR-1. Construction emissions are estimated using the CalEEMod (Version 2016.3.2) software, an emissions inventory software program recommended by the SCAQMD. CalEEMod is based on outputs from OFFROAD and EMFAC, which are emissions estimation models developed by CARB and used to calculate emissions from construction activities, including off- and on-road vehicles. CalEEMod outputs construction-related GHG emissions of CO<sub>2</sub>, CH<sub>4</sub>, and CO<sub>2</sub>e. It has been assumed that construction equipment would meet USEPA Tier 4 Final emissions standards and that the Project would implement dust control measures pursuant to SCAQMD Rule 403.

The output values used in this analysis were adjusted to be Project-specific based on equipment types and the construction schedule. These values were then applied to the same construction subphasing assumptions used in the criteria pollutant analysis (see Air Quality Technical Report) to generate GHG emissions values for each construction year.

SCAQMD's *Draft Guidance Document – Interim CEQA Greenhouse Gas (GHG) Significance Threshold*, recognizes that construction-related GHG emissions from projects “occur over a relatively short-term period of time” and that “they contribute a relatively small portion of the overall lifetime project GHG emissions.”<sup>123</sup> The guidance recommends that construction project GHG emissions should be “amortized over a 30-year project lifetime, so that GHG reduction measures will address construction GHG emissions as part of the operational GHG reduction

<sup>122</sup> See: <http://www.caleemod.com>.

<sup>123</sup> South Coast Air Quality Management District, *Draft Guidance Document – Interim CEQA Greenhouse Gas (GHG) Significance Threshold*, October 2008. Available at [http://www.aqmd.gov/docs/default-source/ceqa/handbook/greenhouse-gases-\(ghg\)-ceqa-significance-thresholds/year-2008-2009/ghg-meeting-6/ghg-meeting-6-guidance-document-discussion.pdf?sfvrsn=2](http://www.aqmd.gov/docs/default-source/ceqa/handbook/greenhouse-gases-(ghg)-ceqa-significance-thresholds/year-2008-2009/ghg-meeting-6/ghg-meeting-6-guidance-document-discussion.pdf?sfvrsn=2). Accessed March 2019.

strategies.”<sup>124</sup> In accordance with that SCAQMD guidance, GHG emissions from Project construction have been amortized over the 30-year lifetime of the Project.

## Operations

Operational impacts were assessed for the Project buildout year (i.e., as early as 2022 assuming construction begins at the earliest possible time in the second quarter of 2020). CalEEMod was used to estimate operational GHG emissions from electricity, natural gas, solid waste, water and wastewater, and landscaping equipment. CalEEMod was used to estimate mobile source emissions where emissions factors from CARB’s updated version of the on-road vehicle emissions factor (EMFAC) model were input into CalEEMod to calculate mobile GHG emissions. The most recent version is EMFAC2017, which “represents CARB’s current understanding of motor vehicle travel activities and their associated emission levels.”<sup>125</sup> CalEEMod generated the vehicle miles traveled (VMT) from Project uses based on the trip rates in the Traffic Study.<sup>126</sup> Conservatively, the Project traffic study did not include transit credit from public transit stops and from walking and biking trips and used default trips rates in the Institute of Transportation Engineers, *Trip Generation, 10<sup>th</sup> Edition*.<sup>127</sup>

With regard to energy demand, the consumption of fossil fuels to generate electricity and to provide heating and hot water generates GHG emissions. Energy demand rates were estimated based on specific square footage of the new commercial uses, as well as predicted water supply needs for these uses. The Project electricity demands are supplied by SCE. CalEEMod provides default intensity factors for CO<sub>2</sub>, CH<sub>4</sub>, and N<sub>2</sub>O for SCE and calculates an overall CO<sub>2e</sub> intensity factor. The default CO<sub>2</sub> intensity factor is based on year 2012 and was adjusted to reflect an intensity factor that represents a 2022 scenario. By 2020, CPUC estimates that 41.4 percent of the energy SCE provide its customers is contracted to be generated by sources of renewable energy.<sup>128</sup> Also, as described above, SB 100 requires local publicly owned electric utilities to procure eligible renewable electricity for 44 percent of retail sales by December 31, 2024. Therefore, since the Project’s first operational year is anticipated to be 2022, the default CO<sub>2</sub> intensity factor in CalEEMod for SCE was linearly adjusted from 2020 to account for 42.4 percent renewable energy for 2022 based on the required renewables from year 2024 under SB 100. For 2012, SCE had 20.6 percent renewables and this was used to back calculate a CO<sub>2</sub> intensity factor where SCE had zero percent renewable. This value was then adjusted to reflect a CO<sub>2</sub> intensity factor with 42.4 percent renewables.

Emissions of GHGs from solid waste disposal were also calculated using CalEEMod software. The emissions are based on the waste disposal rate for the land uses, the waste diversion rate, and

<sup>124</sup> South Coast Air Quality Management District, Draft Guidance Document – Interim CEQA Greenhouse Gas (GHG) Significance Threshold, October 2008. Available at [http://www.aqmd.gov/docs/default-source/ceqa/handbook/greenhouse-gases-\(ghg\)-ceqa-significance-thresholds/year-2008-2009/ghg-meeting-6/ghg-meeting-6-guidance-document-discussion.pdf?sfvrsn=2](http://www.aqmd.gov/docs/default-source/ceqa/handbook/greenhouse-gases-(ghg)-ceqa-significance-thresholds/year-2008-2009/ghg-meeting-6/ghg-meeting-6-guidance-document-discussion.pdf?sfvrsn=2). Accessed March 2019.

<sup>125</sup> California Air Resources Board, Mobile Source Emissions Inventory. Available at <https://ww3.arb.ca.gov/msei/categories.htm#emfac2017> Accessed March 2010.

<sup>126</sup> Crain & Associates, Jefferson Hotel Project Traffic Study, 2020.

<sup>127</sup> Crain & Associates, Jefferson Hotel Project Traffic Study, 2020.

<sup>128</sup> California Public Utilities Commission. California Renewables Portfolio Standard (RPS). [http://www.cpuc.ca.gov/RPS\\_Homepage/](http://www.cpuc.ca.gov/RPS_Homepage/). Accessed March 2019.

the GHG emission factors for solid waste decomposition. The GHG emission factors, particularly for CH<sub>4</sub>, depend on characteristics of the landfill, such as the presence of a landfill gas capture system and subsequent flaring or energy recovery. In addition, it was assumed 75 percent of solid waste will be diverted from landfills as AB 341 directs CalRecycle to develop and adopt regulations for mandatory commercial recycling and sets a Statewide goal for 75 percent disposal reduction by the year 2020.<sup>129</sup>

Emissions of GHGs from water and wastewater result from the required energy to supply and distribute the water and treat the wastewater. Wastewater also results in emissions of GHGs from wastewater treatment systems. Emissions were calculated using CalEEMod and were based on the water usage rate for the land uses, the electrical intensity factors for water supply, treatment, and distribution and for wastewater treatment, the GHG emission factors for the electricity utility provider, and the emission factors for the wastewater treatment process.

Other sources of GHG emissions from operation of the Project include equipment used to maintain landscaping, such as lawnmowers and trimmers. The CalEEMod software uses landscaping equipment GHG emission factors from the CARB OFFROAD model and the CARB Technical Memo: Change in Population and Activity Factors for Lawn and Garden Equipment (6/13/2003).

Emissions calculations for the Project include credits or reductions for GHG reducing measures that are required by regulation, such as reductions in energy and water demand from the current Title 24 standards and the California Green Building Standards (CALGreen) Code as well as the Project's compliance with the portions of the City's Green Building Code and mandatory Green Building Program applicable to new developments. Physical and operational Project characteristics for which sufficient data is available to quantify the reductions from building energy and resource consumption have been included in the quantitative analysis, and include but are not limited to the following features: the City has adopted a Photovoltaic Requirement which requires 1 kilowatt (kw) of photovoltaic power installed per 10,000 square feet of new development.<sup>130</sup> Based on the Project size, the Project's photovoltaic system is estimated to generate 21,771 kwh of electricity annually.<sup>131</sup> As described above, the analysis assumes 75 percent of solid waste would be diverted from landfills. In accordance with the City's Green Building Program, the Project would be designed to meet criteria for the LEED Silver or equivalent certification level.

As previously stated operational GHG impacts are assessed based on the Project-related incremental increase in GHG emissions compared to baseline conditions and incorporation of emissions reduction strategies.

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<sup>129</sup> California Legislative Information, Assembly Bill No. 341, [https://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill\\_id=201120120AB341](https://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=201120120AB341). Accessed March 2019.

<sup>130</sup> Culver City Municipal Code 2017. Solar Photovoltaic Systems, Chapter 15.02.1005. Accessed March 2019.

<sup>131</sup> National Renewable Energy Laboratory, PVWatts Calculator, <https://pvwatts.nrel.gov/pvwatts.php>. Accessed March 2019. See Appendix A of this technical report for more details.

## Comparison to Project without GHG Reduction Characteristics, Features, and Measures

In order to evaluate the efficacy of the GHG reduction characteristics, features, and measures that would be implemented as part of the Project, this analysis compares the Project's GHG emissions to the emissions that would be generated by the Project without implementation of GHG reduction characteristics, features, and measures. This approach mirrors the concepts used in CARB's Climate Change Scoping Plan, which demonstrates GHG reductions compared to a BAU scenario. This comparison is provided only to evaluate the Project's efficiency with respect to GHG emissions but is not a threshold of significance. As detailed in the CARB Final Supplement to the AB 32 Scoping Plan Functional Equivalent Document (FED), the updated projected 2020 emissions estimate in the absence of GHG reduction measures in the Climate Change Scoping Plan is based on statewide data from the 2009 to 2011 period and accounts for the effect of the 2007–2009 economic recession on future growth, updated estimates for future fuel and energy demand, and the reductions required by regulation that were adopted for motor vehicles and renewable energy.<sup>132</sup> The Project's GHG emissions in comparison to the emissions that would be generated by the Project without implementation of GHG reduction characteristics, features, and measures is consistent with CARB's approach in the Scoping Plan FED. Furthermore, the specific Project Site characteristics are not included as they encompass GHG reduction strategies and features that would be consistent with state, regional, and local GHG reduction plans and policies or would go above and beyond regulatory requirements. These Project Site characteristics include Project GHG reductions from energy efficiency measures that would exceed the Title 24 Building Standards Code, such as LEED Silver or equivalent certification level measures. The emissions are estimated using the CalEEMod software, and the model inputs are adjusted to account for the specific and defined circumstances and described above. The analysis assumes the Project without implementation of GHG reduction characteristics, features, and measures would incorporate the same land uses and building square footage as the proposed Project.

## 4.2 Consistency with Greenhouse Gas Reduction Plan, Policies, and Actions

The Project's GHG emissions are also evaluated by assessing the Project's consistency with applicable GHG reduction strategies and actions adopted by the State and City. As discussed previously, the City has adopted strategies and policies to reduce GHG emissions through its Green Building Program.

In the latest CEQA Guidelines amendments, which went into effect on March 18, 2010, the Office of Planning and Research encourages lead agencies to make use of programmatic mitigation plans and programs from which to tier when they perform individual project analyses. The City does not have a programmatic mitigation plan to tier from, such as a Greenhouse Gas Emissions Reduction Plan as recommended in the relevant amendments to the CEQA Guidelines. However, the City has adopted the Green Building Program and Green Building Code that

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<sup>132</sup> California Air Resources Board, Final Supplement to the AB 32 Scoping Plan Functional Equivalent Document (FED), Attachment D, August 19, 2011.

encourage and require applicable projects to implement energy efficiency measures. In addition, the California CAT Report provides recommendations for specific emission reduction strategies for reducing GHG emissions and reaching the targets established in HSC Division 25.5. Thus, if the Project is designed in accordance with these policies and regulations, it would result in a less than significant impact, because it would be consistent with the overarching State regulations on GHG reductions.

## SECTION 5

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# Environmental Impacts

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**Threshold a)** A significant impact would occur if the Project would generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment.

**Threshold b):** A significant impact would occur if the Project would conflict with any applicable plan, policy, regulation, or recommendation of an agency adopted for the purpose of reducing the emissions of GHGs.

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**Impact Statement a) and b):** The Project would generate GHG emissions due to construction and operational activities. The Project's annual direct and indirect GHG emissions would be generated from development that is located and designed to be consistent with relevant goals and actions to reduce Project emissions as much as feasibly possible, as well as consistent with the HSC Division 25.5 goals and CARB guidelines for assessing GHG emissions. Therefore, the Project's GHG emissions and associated impacts would be less than significant.

### 5.1 Construction Emissions

As explained above, the emissions of GHGs associated with construction of the Project were calculated for each year of construction activity assuming use of USEPA Tier 4 Final equipment and implementation of SCAQMD Rule 403 dust control requirements. Results of the Project's construction phase GHG emissions calculations are presented in **Table 4, Project Construction Greenhouse Gas Emissions**. Although construction-related GHGs are one-time emissions, any assessment of Project emissions should include construction emissions. The SCAQMD recommends that a project's construction-related GHG emissions be amortized over the project's 30-year lifetime in order to include these emissions as part of the project's annualized lifetime total emissions, so that GHG reduction measures will address construction GHG emissions as part of the operational GHG reduction strategies. As indicated in Table 4, Project construction emissions during the approximate 26-month construction period would generate an estimated 1,125 MTCO<sub>2</sub>e, or 37 MTCO<sub>2</sub>e amortized over a 30-year period. A complete listing of the equipment by phase, emission factors, and calculation parameters used in this analysis is included within the emissions calculation worksheets that are provided in Appendix A of this report.

**TABLE 4**  
**PROJECT CONSTRUCTION GREENHOUSE GAS EMISSIONS**

Emission Source	CO <sub>2</sub> e (Metric Tons) <sup>a,b</sup>
Construction Year 2020	558
Construction Year 2021	369
Construction Year 2022	198
<b>Total Construction Emissions</b>	<b>1,125</b>
<b>Amortized Construction Emissions (30-years)</b>	<b>37</b>

<sup>a</sup> Totals may not add up exactly due to rounding in the modeling calculations Detailed emissions calculations are provided in Appendix A.

<sup>b</sup> CO<sub>2</sub>e emissions are calculated using the GWP values from the IPCC Fourth Assessment Report.

SOURCE: ESA 2019

## 5.2 Operational Emissions

As previously stated, the Project would demolish the existing uses. **Table 5, Existing Site GHG Emissions to be Removed**, summarizes the emissions to be applied as a credit to evaluate the Project's net increase in GHG emissions. As indicated therein, the GHG emissions associated with the existing on-site uses to be removed under the Project would be an estimated 314 metric tons of CO<sub>2</sub>e. Details of the calculations are provided in Appendix A of this report.

**TABLE 5**  
**EXISTING SITE GHG EMISSIONS TO BE REMOVED**

Emissions Sources	CO <sub>2</sub> e (Metric Tons per Year) <sup>a</sup>
Area (Landscaping Equipment)	<1
Electricity and Natural Gas	50
Mobile Sources	253
Waste	6
Water	3
<b>Total Existing Emissions</b>	<b>314</b>

<sup>a</sup> Totals may not add up exactly due to rounding in the modeling calculations Detailed emissions calculations are provided in Appendix A.

SOURCE: ESA 2020

As explained above, the emissions of GHGs associated with operation of the Project were calculated using CalEEMod, taking into account the Project's compliance with the portions of the City's Green Building Code and mandatory Green Building Program applicable to new developments. Physical and operational Project characteristics for which sufficient data is available to quantify the reductions from building energy and resource consumption have been included in the quantitative analysis, and include but are not limited to the following features:

generation of photovoltaic power and diversion of approximately 75 percent of solid waste from landfills. In addition, the Project would be designed to meet criteria for the LEED Silver or equivalent certification level.

Maximum annual net GHG emissions resulting from motor vehicles, energy (i.e., electricity, natural gas), water conveyance, and waste sources were calculated for the expected first operating year, 2022. The maximum first operating year GHG emissions from operation of the Project are shown in **Table 6**, *Estimated Annualized Unmitigated Project Greenhouse Gas Emissions*. With the implementation of the Project's green building measures, the Project would achieve GHG reductions for electricity and water as compared to a scenario without GHG reducing features and measures.

**TABLE 6**  
**ESTIMATED ANNUALIZED UNMITIGATED PROJECT GREENHOUSE GAS EMISSIONS**

Emissions Sources	Operational Emissions CO <sub>2</sub> e (Metric Tons per Year) <sup>a</sup>	
	Proposed Project	Project Without GHG Reduction Characteristics, Features, and Measures
<b>Opening Operational Year (2022)</b>		
Electricity <sup>b</sup>	256	359
Natural Gas	157	157
Mobile Sources	1,223	1,223
Solid Waste	12	48
Water	21	26
Area	<1	<1
Amortized Construction Emissions	37	37
Project Emissions	1,706	1,851
Existing Site Emissions	314	314
<b>Total Net Project Emissions</b>	<b>1,392</b>	<b>1,537</b>

<sup>a</sup> Totals may not add up exactly due to rounding in the modeling calculations. Detailed emissions calculations are provided in Appendix A.

<sup>b</sup> For the purposes of estimating GHG emissions in this Technical Report, the emissions analysis conservatively assumes Project would not switch electricity providers from SCE to the Clean Power Alliance (i.e., does not take any credit for 36%, 50%, or 100% renewable electricity, depending on the selected Clean Power Alliance plan). Should the Project switch electricity providers from SCE to the Clean Power Alliance, the Project's electricity-related emissions would be lower than disclosed in this Technical Report.

SOURCE: ESA 2020

Project operational-related GHG emissions would decline in future years as emissions reductions from the State's Cap-and-Trade program are fully realized. Emissions reductions from the

Project's two highest GHG-emitting sources, mobile and electricity, would occur over the next decade, and beyond, ensuring that the Project's total GHG emissions would be further reduced. Emissions from electricity would decline as utility providers, including SCE, meet their Renewables Portfolio Standard obligations to provide 60 percent of their electricity from renewable electricity sources by 2030 consistent with SB 100, which would achieve additional reductions in emissions from electricity demand although the actual reduction will depend on the mix of fossil fuels that SCE will replace with renewables and the relative CO<sub>2</sub> intensities of those fossil fuels. Project emissions from mobile sources would also decline in future years as older vehicles are replaced with newer vehicles resulting in a greater percentage of the vehicle fleet meeting more stringent combustion emissions standards, such as the model year 2017-2025 Pavley Phase II standards.

## 5.3 Consistency with State Plans, Policies, or Regulations

### Consistency with AB 32

In support of AB 32, the state has promulgated specific laws aimed at GHG reductions applicable to the Project. The heating, ventilation, and air conditioning (HVAC) system would be sized and designed in compliance with the CALGreen Code and the City's Green Building Program to maximize energy efficiency caused by heat loss and heat gain. The Project Site is also located in an established commercial area with access to public transportation, which minimizes trips and trip lengths reducing mobile source GHG emissions. Therefore, the Project would be consistent with State efforts to reduce motor vehicle emissions and congestion. The Project would generate GHG emissions due to construction and operational activities; however, its annual GHG emissions, would be generated due to development located and designed to be consistent with relevant goals and actions designed to encourage development that results in the efficient use of public and private resources. Therefore, the Project's GHG emissions and associated impacts would be less than significant.

### Project Consistency with Regional and Local Trip and VMT Reduction Goals, Actions, and Recommendations

The significance of the Project's GHG emissions was first evaluated based on whether the emissions would be generated in connection with development located and designed consistent with relevant regional and local goals, actions, and recommendations designed to encourage development to reduce trips and VMTs. Transportation-related GHG emissions are the largest source of GHG emissions from the Project. This Project characteristic is consistent with the assumption in many regional plans, such as the SCAG RTP/SCS, which recognizes that the transportation sector is the largest contributor to the State's GHG emissions.

Consistent with SCAG's RTP/SCS alignment of transportation, land use, and housing strategies, the Project would accommodate projected increases in travel demand by implementing smart land use strategies. As discussed previously, the Project would result in a hotel development with commercial uses located in close proximity to existing public transit stops, which would result in

reduced VMT, as well as being within a reasonable walking distance from the Westfield Culver City shopping mall. The Project would create a pedestrian-friendly environment with direct access to the Westfield Culver City shopping mall and clear linkages to regional and local transportation systems. Within walking distance of several bus stops, including the Culver City Transit Center Bus Station that is located approximately 900 feet southeast of the Project Site that is served by the Culver City bus routes 3,4 and 6 and the Metro bus routes 108, 110 and 217, the Project would promote alternate modes of transit. In addition, the Project would be consistent with the RTP/SCS strategies to promote active transportation and supports improvements in local bike networks as the Project promotes the use of bicycles as it is located close to many Culver City bike paths. Conservatively, the Project traffic study did not include transit credit from public transit stops and from walking and biking trips and used default trips rates in the Institute of Transportation Engineers, *Trip Generation, 10<sup>th</sup> Edition*.<sup>133</sup>

The 2020-2045 RTP/SCS states that 38 percent of all trips in the region are less than 3 miles.<sup>134</sup> The RTP/SCS intends to decrease these trips by extending local bikeway networks. The Project would be consistent with this RTP/SCS goal by installing the CALGreen Code required number of bicycle parking spots. Therefore, the Project would be consistent with the SCAG 2016 RTP/SCS regional and local trip and VMT reduction goals.

## Project Consistency with City Goals and Actions

The significance of the Project's GHG emissions is also evaluated based on whether they would be generated in connection with a design that is consistent with relevant City of Culver City goals and actions designed to encourage development that results in the efficient use of public and private resources. **Table 7, *Project Consistency with Applicable Culver City Green Building Program Requirements*** contains mandatory items the Project would implement that would increase energy efficiency and reduce energy consumption, thus reducing Project GHG emissions. As discussed in Table 7, the Project is consistent with the applicable requirements. Therefore, as the Project's GHG emissions would be generated in connection with a development located and designed to be consistent with the applicable City goals and actions for GHG emission reductions, and the impact would result in less than significant impacts.

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<sup>133</sup> Crain & Associates, Jefferson Hotel Project Traffic Study, 2020.

<sup>134</sup> SCAG, 2020-2045 RTP/SCS.

**TABLE 7**  
**PROJECT CONSISTENCY WITH APPLICABLE CULVER CITY GREEN BUILDING PROGRAM REQUIREMENTS**

Source	Category / Description	Consistency Analysis
Culver City Green Building Program	Requires all new buildings of 10,000 or more of gross floor area to install 1kW of solar photovoltaic systems per 10,000 square feet of gross floor area	<b>Consistent:</b> The Project would consist of approximately 111,000 sf of new construction and would install a solar photovoltaic system that meets criteria for the LEED Silver or equivalent certification level and City requirements.
	Requires all new construction, additions, and major renovations of 50,000 square feet and greater of affected area are required to comply with Category 2 requirements, excluding single family and two family structures, where prior to the issuance of a construction permit, the permit applicant shall submit the following: <ol style="list-style-type: none"> <li>1. Evidence that a LEED-AP (Leadership in Energy and Environmental Design Accredited Professional) is one of the members of the project design team.</li> <li>2. Evidence that the project has been registered with the appropriate USGBC (United States Green Building Council) LEED program.</li> <li>3. A copy of the appropriate LEED checklist, which demonstrates that the project meets the appropriate LEED rating system at a "Certified" performance level or higher.</li> <li>4. A signed declaration from the LEED-AP member of the project design team, stating that the plans and details have been reviewed for conformance with the appropriate LEED program and that the project meets the intent of the criteria for certification of the selected LEED program at the "Certified" performance level or higher.</li> <li>5. Qualifying projects shall comply with a USGBC "3 point margin of error" for a minimum LEED "Certified" performance level.</li> <li>6. The construction permit applicant shall submit to the Building Safety Division copies of all submissions and correspondence between the project team and the USGBC regarding the qualifying project.</li> </ol>	<b>Consistent:</b> The Project would provide evidence that a LEED-AP (Leadership in Energy and Environmental Design Accredited Professional) is one of the members of the Project design team. The Project would provide evidence that the project has been registered with the appropriate USGBC LEED program. The Project would be designed to meet criteria for the LEED Silver or equivalent certified level. The Project would provide a signed declaration from the LEED-AP member of the Project design team, stating that the plans and details have been reviewed for conformance with the appropriate LEED program and that the project meets the intent of the criteria LEED Silver or equivalent certified level. The Project applicant shall submit to the Building Safety Division copies of all submissions and correspondence between the Project team and the USGBC.

SOURCE: ESA 2020. This table lists applicable City of Culver City requirements for Category 2 projects.

## Consistency with Plans, Policies, Regulations, or Recommendations to Reduce GHG Emissions

The Project would also be consistent with statewide, regional and local plan, policies, regulations, and recommendations to reduce GHG emissions from development. The primary focus of many of the statewide and regional mandates, plans, policies and regulations is to address worldwide

climate change. According to CAPCOA, “GHG impacts are exclusively cumulative impacts; there are no non-cumulative GHG emission impacts from a climate change perspective.”<sup>135</sup> Due to the complex physical, chemical and atmospheric mechanisms involved in global climate change, there is no basis for concluding that the Project’s annual GHG emissions would cause a measurable change in global GHG emissions sufficient to create a significant Project level impact on global climate change. Newer construction materials and practices, energy efficiency requirements, and newer appliances tend to emit lower levels of air pollutant emissions, including GHGs, as compared to those built years ago; however, the net effect is difficult to quantify. The GHG emissions of the Project alone is not expected to cause a direct physical change in the environment. It is global GHG emissions in their aggregate that contribute to climate change, not any single source of GHG emissions alone. Because of the lack of evidence indicating that the Project’s GHG emissions would cause a measurable change in global GHG emissions sufficient to create a significant project-level impact on global climate change, and the fact that the Project incorporates physical and operational Project characteristics that would ensure its consistency with City goals and actions, Project emissions are not anticipated to contribute considerably to global climate change. The Project is also considered to be consistent with the GHG reduction goals of HSC Division 25.5 and associated GHG reduction plans such as SCAG’s RTP/SCS, and it is not expected that Project development would impede their goals. In fact, as discussed above, the Project’s location and development comply with the recommendations in these documents and would meet their goals.

As discussed above, the Project is located in close proximity to existing public transit stops, which would result in reduced VMT, as well as being within a reasonable walking distance from the Westfield Culver City shopping mall. The Project would create a pedestrian-friendly environment with direct access to the Westfield Culver City shopping mall and clear linkages to regional and local transportation systems. Within walking distance of several bus stops, including the Culver City Transit Center Bus Station that is located approximately 900 southeast of the Project Site that is served by the Culver City bus routes 3,4 and 6 and the Metro bus routes 108, 110 and 217, the Project would promote alternate modes of transit. In addition, the Project would be consistent with the RTP/SCS strategies to promote active transportation and supports improvements in local bike networks as the Project promotes the use of bicycles as it is located close to many Culver City bike paths. The Project would be consistent with and support the goals of the 2020-2045 RTP/SCS, which seeks improved access and mobility by placing destinations closer together, thereby decreasing the time and cost of traveling between them and has “strategies to prioritize areas for new development, like near destinations and mobility options.”<sup>136</sup> According to SCAG, expanding transportation choices “may shift trips to less environmentally damaging modes, minimize negative environmental impacts associated with current vehicle use, increase system efficiency, improve safety, and reduce auto-related collisions and fatalities.”<sup>137</sup>

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<sup>135</sup> California Air Pollution Control Officers Association, CEQA & Climate change: Evaluating and Addressing Greenhouse Gas Emissions from Projects Subject to the California Environmental Quality Act, (2008).

<sup>136</sup> SCAG, 2020-2045 RTP/SCS, page 47.

<sup>137</sup> SCAG, 2020-2045 RTP/SCS, page 41.

**Table 8, Project Consistency with Applicable Greenhouse Gas Reduction Strategies**, contains a list of statewide GHG emission reduction strategies and describes the Project’s consistency. Furthermore, not only is the Project consistent with currently applicable GHG emission reduction strategies, but the Project also would not conflict with or impede the future statewide GHG emission reductions goals. CARB has outlined a number of potential strategies for achieving the 2030 reduction target of 40 percent below 1990 levels. These potential strategies include renewable resources for 60 percent of the State’s electricity by 2030, increasing the fuel economy of vehicles and the number of zero-emission or hybrid vehicles, reducing the rate of growth in VMT, supporting and other alternative transportation options, and use of high efficiency appliances, water heaters, and HVAC systems.<sup>138</sup> The Project would benefit from statewide and utility-provider efforts toward increasing the portion of electricity provided from renewable resources. The Project would also benefit from statewide efforts toward increasing the fuel economy standards of vehicles. The Project would be consistent with reducing the rate of growth in VMT by providing onsite bicycle parking facilities, being located in close proximity to public transit, and being located in an area with other commercial, retail, and residential land uses within walking distance. The Project would utilize energy-efficient lighting and equipment and would reduce its building energy consumption via compliance with City Green Building Program and the CALGreen Code.

**TABLE 8  
PROJECT CONSISTENCY WITH APPLICABLE GREENHOUSE GAS REDUCTION STRATEGIES**

Source	Category / Description	Consistency Analysis
AB 1493 (Pavley Regulations)	Reduces greenhouse gas emissions in new passenger vehicles from model year 2012 through 2016 (Phase I) and model year 2017-2025 (Phase II). Also reduces gasoline consumption to a rate of 31 percent of 1990 gasoline consumption (and associated GHG emissions) by 2020.	<b>Consistent.</b> The Project would be consistent with this regulation and would not conflict with implementation of the vehicle emissions standards.
SB 1368	Establishes an emissions performance standard for power plants within the State of California.	<b>Consistent.</b> The Project would be consistent with this regulation and would not conflict with implementation of the emissions standards for power plants.
Low Carbon Fuel Standard	Establishes protocols for measuring life-cycle carbon intensity of transportation fuels and helps to establish use of alternative fuels.	<b>Consistent.</b> The Project would be consistent with this regulation and would not conflict with implementation of the transportation fuel standards.
California Green Building Standards Code Requirements	All bathroom exhaust fans shall be ENERGY STAR compliant.	<b>Consistent.</b> The Project would meet or exceed the energy standards in the Title 24 Building Energy Efficiency Standards.
	HVAC Systems will be designed to meet ASHRAE standards.	<b>Consistent.</b> The Project would utilize energy efficient equipment and would meet or exceed the energy standards in ASHRAE 90.1-2013, Appendix G and the Title 24 Building Energy Efficiency Standards.
	Energy commissioning shall be performed for buildings larger than 10,000 square feet.	<b>Consistent.</b> The Project would meet this requirement as part of its compliance with the CALGreen Code.
	Refrigerants used in newly installed HVAC systems shall not contain any CFCs.	<b>Consistent.</b> The Project would meet this requirement as part of its compliance with the CALGreen Code.

<sup>138</sup> Energy + Environmental Economics, Summary of the California State Agencies’ PATHWAYS Project: Long-term Greenhouse Gas Reduction Scenarios, April 6, 2015. Available at: February 2018.

Source	Category / Description	Consistency Analysis
	<p>Parking spaces shall be designed for carpool or alternative fueled vehicles. Up to eight percent of total parking spaces will be designed for such vehicles.</p> <p>Long-term and short-term bike parking shall be provided for up to five percent of vehicle trips.</p> <p>Indoor water usage must be reduced by 20% compared to current California Building Code Standards for maximum flow.</p> <p>All irrigation controllers must be installed with weather sensing or soil moisture sensors.</p> <p>Wastewater usage shall be reduced by 20 percent compared to current California Building Standards.</p> <p>Requires a minimum of 65 percent recycle or reuse of nonhazardous construction and demolition debris.</p> <p>Requires documentation of types of waste recycled, diverted or reused.</p> <p>Requires use of low VOC coatings consistent with AQMD Rule 1168.</p> <p>100 percent of vegetation, rocks, soils from land clearing shall be reused or recycled.</p> <p>Requires installation of electrical conduit for future uses of electric vehicle charging parking spaces up to 6% of total parking spaces.</p>	<p><b>Consistent.</b> The Project would meet this requirement as part of its compliance with the CALGreen Code.</p> <p><b>Consistent.</b> The Project would meet this requirement as part of its compliance with the CALGreen Code.</p> <p><b>Consistent.</b> The Project would meet this requirement as part of its compliance with the CALGreen Code by using low-flow water fixtures.</p> <p><b>Consistent.</b> The Project would meet this requirement as part of its compliance with the CALGreen Code and would use water efficient techniques, such as drip irrigation.</p> <p><b>Consistent.</b> The Project would meet or exceed this requirement as part of its compliance with the CALGreen Code by installing infrastructure for future grey water uses.</p> <p><b>Consistent.</b> The Project would meet or exceed this requirement as part of its compliance with the CALGreen Code.</p> <p><b>Consistent.</b> The Project would meet this requirement as part of its compliance with the CALGreen Code.</p> <p><b>Consistent.</b> The Project would be consistent with this regulation and would meet or exceed the low VOC coating requirements.</p> <p><b>Consistent.</b> The Project would meet this requirement as part of its compliance with the CALGreen Code.</p> <p><b>Consistent.</b> The Project would meet this requirement as part of its compliance with the CALGreen Code.</p>
Climate Action Team	<p>Achieve California's 50 percent waste diversion mandate (Integrated Waste Management Act of 1989) to reduce GHG emissions associated with virgin material extraction</p> <p>Implement efficient water management practices and incentives, as saving water saves energy and GHG emissions.</p> <p>The California Energy Commission updates building energy efficiency standards that apply to newly constructed buildings and additions to and alterations to existing buildings. Both the Energy Action Plan and the Integrated Energy Policy Report call for ongoing updating of the standards.</p> <p>Reduce GHG emissions from electricity by reducing energy demand. The California Energy Commission updates appliance energy efficiency standards that apply to electrical devices or equipment sold in California. Recent policies have established specific goals for updating the standards; new standards are currently in development</p> <p>Apply strategies that integrate transportation and land-use decisions, including but not limited to promoting jobs/housing proximity, high-density residential/commercial development along transit corridors, and implementing intelligent transportation systems.</p>	<p><b>Consistent.</b> CALGreen Code implements this goal, and the Project would be consistent with the requirements.</p> <p><b>Consistent.</b> CALGreen Code implements this goal, and the Project would be consistent with the requirements.</p> <p><b>Consistent.</b> CALGreen Code implements this goal, and the Project would be consistent with the requirements.</p> <p><b>Consistent.</b> CALGreen Code implements this goal, and the Project would be consistent with the requirements.</p> <p><b>Consistent.</b> The Project would be located in an infill location in proximity to existing residential and commercial businesses, which would minimize trip lengths and associated emissions.</p>

Source	Category / Description	Consistency Analysis
SOURCE: ESA 2020		

Because the Project’s location, land use characteristics, and design render it consistent with statewide and regional climate change mandates, plans, policies, and recommendations, and with the City’s Green Building Program and CAL Green Code, the Project would be consistent with and would not conflict with any applicable plan, policy, regulation or recommendation to reduce GHG emissions. Therefore, impacts would be less than significant.

## Consistency with Executive Orders S-3-05 and B-30-15

At the state level, Executive Orders S-3-05 and B-30-15 establish goals for reducing GHG emissions. Executive Order S-3-05’s goal to reduce GHG emissions to 1990 levels by 2020 was codified by the Legislature as AB 32. As analyzed above, the Project would be consistent with AB 32. Therefore, the Project does not conflict with the 2020 component of Executive Orders S-3-05 and B-30-15.

The Executive Orders S-3-05 and B-30-15 also establish goals to reduce GHG emissions to 40 percent below 1990 levels by 2030, and 80 percent below 1990 levels by 2050. These goals have not yet been codified by the Legislature. However, studies have shown that, to meet the 2030 and 2050 targets, aggressive technologies in the transportation and energy sectors, including electrification and the decarbonization of fuel, will be required. In its Climate Change Scoping Plan, CARB acknowledged that the “measures needed to meet the 2050 goal are too far in the future to define in detail.”<sup>139</sup> In the First Update, however, CARB generally described the type of activities required to achieve the 2050 target: “energy demand reduction through efficiency and activity changes; large-scale electrification of on-road vehicles, buildings, and industrial machinery; decarbonizing electricity and fuel supplies; and rapid market penetration of efficiency and clean energy technologies that requires significant efforts to deploy and scale markets for the cleanest technologies immediately.”<sup>140</sup> Due to the technological shifts required and the unknown parameters of the regulatory framework and market conditions in 2030 and 2050, as well as uncertainties regarding the exact regulations that CARB will ultimately adopt for achieving the 2030 and 2050 reduction goal, quantitatively analyzing the Project’s impacts further relative to the 2030 and especially the 2050 goals currently is speculative for purposes of CEQA.

Despite thorough investigation, due to the uncertainties regarding specific state and local actions and regulations that will be adopted to achieve the 2030 and 2050 GHG emission reduction targets, such as future Title 24 building energy standards and future vehicle emission standards beyond vehicle model year 2025, calculating Project emissions levels for 2030 and 2050 would be highly speculative. Nonetheless, statewide efforts are underway to facilitate the State’s achievement of those goals and it is reasonable to expect the Project’s emissions level to decline as the regulatory initiatives identified by CARB in the First Update and strategies in the 2017 Scoping Plan are refined and implemented, and other technological innovations occur. Stated

<sup>139</sup> CARB, Climate Change Scoping Plan, p. 117, December 2008

<sup>140</sup> CARB, First Update, p. 32, May 2014

differently, the Project’s emissions total at buildout represents the maximum emissions inventory for the Project as California’s emissions sources are being regulated (and foreseeably expected to continue to be regulated in the future) in furtherance of the State’s environmental policy objectives. As such, given the reasonably anticipated decline in Project emissions once fully constructed and operational, the Project would be consistent with the Executive Orders’ goals.

The Climate Change Scoping Plan recognizes that HSC Division 25.5 establishes an emissions reduction trajectory that will allow California to achieve the more stringent 2050 target: “These [greenhouse gas emission reduction] measures also put the state on a path to meet the long-term 2050 goal of reducing California’s greenhouse gas emissions to 80 percent below 1990 levels. This trajectory is consistent with the reductions that are needed globally to stabilize the climate.”<sup>141</sup> Also, CARB’s First Update provides that it “lays the foundation for establishing a broad framework for continued emission reductions beyond 2020, on the path to 80 percent below 1990 levels by 2050,” and many of the emission reduction strategies recommended by CARB would serve to reduce the Project’s emissions level to the extent applicable by law: <sup>142, 143</sup>

- **Energy Sector:** Continued improvements in California’s appliance and building energy efficiency programs and initiatives, such as the State’s zero net energy building goals, would serve to reduce the Project’s emissions level.<sup>144</sup> Additionally, further additions to California’s renewable resource portfolio would favorably influence the Project’s emissions level.<sup>145</sup>
- **Transportation Sector:** Anticipated deployment of improved vehicle efficiency, zero emission technologies, lower carbon fuels, and improvement of existing transportation systems all will serve to reduce the Project’s emissions level.<sup>146</sup>
- **Water Sector:** The Project’s emissions level will be reduced as a result of further enhancements to water conservation technologies.<sup>147</sup>
- **Waste Management Sector:** Plans to further improve recycling, reuse, and reduction of solid waste will beneficially reduce the Project’s emissions level.<sup>148</sup>

Under AB 398, the Cap-and-Trade Program has been extended to 2030. The Cap-and-Trade Program extension is built on the “recommended action” in the First Update to the Climate Change Scoping Plan for the Cap-and-Trade Program, which was to: “Develop a plan for a post-2020 Cap-and-Trade Program, including cost containment, to provide market certainty and address a mid-term emissions target.”<sup>149</sup>

<sup>141</sup> CARB, Climate Change Proposed Scoping Plan, p. 15, October 2008

<sup>142</sup> CARB, First Update, p. 4, May 2014. See also id. at pp. 32–33 [recent studies show that achieving the 2050 goal will require that the “electricity sector will have to be essentially zero carbon; and that electricity or hydrogen will have to power much of the transportation sector, including almost all passenger vehicles.”]

<sup>143</sup> Ibid., at Table 6: Summary of Recommended Actions by Sector, pp. 94-99, May 2014.

<sup>144</sup> Ibid., at pp. 37-39, 85, May 2014.

<sup>145</sup> Ibid., at pp. 40-41, May 2014.

<sup>146</sup> Ibid., at pp. 55-56, May 2014.

<sup>147</sup> CARB, First Update, p. 65, May 2014.

<sup>148</sup> Ibid., at p. 69, May 2014.

<sup>149</sup> California Air Resources Board, First Update to the Climate Change Scoping Plan: Building on the Framework, May 2014, page 98.

In addition to CARB's First Update, in January 2015 during his inaugural address, Governor Jerry Brown expressed a commitment to achieve "3 ambitious goals" that he would like to see accomplished by 2030 to reduce the State's GHG emissions: (1) increasing the State's Renewables Portfolio Standard from 33 percent in 2020 to 50 percent in 2030; (2) cutting the petroleum use in cars and trucks in half; and (3) doubling the efficiency of existing buildings and making heating fuels cleaner.<sup>150</sup> These expressions of Executive Branch policy may be manifested in adopted legislative or regulatory action through the state agencies and departments responsible for achieving the State's environmental policy objectives, particularly those relating to global climate change. As discussed previously, the Governor signed into law SB 350 (Chapter 547, Statutes of 2015), which increased the Renewables Portfolio Standard to 50 percent by 2030 and included interim targets of 40 percent by 2024 and 45 percent by 2027. The utility provider for the Project Site, SCE, has committed providing an increasing percentage of electricity from renewable sources in compliance with the Renewables Portfolio Standard with 41.4 percent by 2020. The Project would also include the installation of on-site solar photovoltaic systems consistent with City requirements to increase energy efficiency and reduce GHG emissions.

Further, the State's existing and proposed regulatory framework can allow the State to reduce its GHG emissions level to 40 percent below 1990 levels by 2030, and to 80 percent below 1990 levels by 2050. According to the 2017 Scoping Plan (adopted in December 2017), reductions needed to achieve the 2030 target are expected to be achieved by targeting specific emission sectors, including those sectors that are not directly controlled or influenced by the Project, but nonetheless contribute to Project-related GHG emissions. For instance, the Project itself is not subject to the Cap-and-Trade regulation; however, Project-related emissions would decline pursuant to the regulation as utility providers and transportation fuel producers are subject to renewable energy standards, Cap-and-Trade, and the LCFS. The 2017 Scoping Plan also calls for the doubling of the energy efficiency savings, including demand-response flexibility for 10 percent of residential and commercial electric space heating, water heating, air conditioning and refrigeration. The strategy is in the process of being designed specifically to accommodate existing residential and commercial uses under the CEC's Existing Building Energy Efficiency Action Plan.<sup>151</sup> This strategy requires the CEC in collaboration with the CPUC to establish the framework for the energy savings target setting outlines the necessary actions that will need to occur in future years, including workforce education and training institutions engaging with the building industry, mapping industry priorities for efficiency to major occupations that will provide services, identifying workforce competency gaps, and quantifying the work needed to build a workforce to implement high-quality efficiency projects at scale.<sup>152</sup> Even though these studies did not provide an exact regulatory and technological roadmap to achieve the 2030 and 2050 goals, they demonstrated that various combinations of policies could allow the statewide emissions level to remain very low through 2050, suggesting that the combination of new

<sup>150</sup> Los Angeles Times, Transcript: Governor Jerry Brown's January 5, 2015, Inaugural Address, <http://www.latimes.com/local/political/la-me-pc-brown-speech-text-20150105-story.html>. Accessed February 2018.

<sup>151</sup> California Energy Commission, 2016 Existing Buildings Energy Efficiency Plan Update, December 2016, [https://www.energy.ca.gov/efficiency/existing\\_buildings/16-EBP-01/](https://www.energy.ca.gov/efficiency/existing_buildings/16-EBP-01/). df. Accessed March 2019.

<sup>152</sup> California Energy Commission, 2016 Existing Buildings Energy Efficiency Plan Update, December 2016, [https://www.energy.ca.gov/efficiency/existing\\_buildings/16-EBP-01/](https://www.energy.ca.gov/efficiency/existing_buildings/16-EBP-01/). Accessed March 2019.

technologies and other regulations not analyzed in the study could allow the State to meet the 2030 and 2050 targets.<sup>153</sup>

For the reasons described above, the Project's emissions trajectory is expected to follow a declining trend, consistent with the establishment of the 2030 and 2050 targets. Therefore, given the Project's GHG emissions efficiency and the Project's consistency with applicable GHG plans, policies and regulations adopted for the purpose of reducing GHG emissions, impacts regarding GHG emissions and reduction plans would be less than significant.

## 5.4 Cumulative Impacts

Worldwide man-made emissions of GHGs were approximately 49,000 MMTCO<sub>2</sub>e in 2010 including ongoing emissions from industrial and agricultural sources and emissions from land use changes (e.g., deforestation).<sup>154</sup> Emissions of CO<sub>2</sub> from fossil fuel use and industrial processes account for 65 percent of the total while CO<sub>2</sub> emissions from all sources accounts for 76 percent of the total GHG emissions. Methane emissions account for 16 percent and N<sub>2</sub>O emissions for 6.2 percent. In 2013, the United States was the world's second largest emitter of carbon dioxide at 5,300 MMT (China was the largest emitter of carbon dioxide at 10,300 MMT).<sup>155</sup>

CARB compiles GHG inventories for the State of California. As previously stated, based on the 2015 GHG inventory data California emitted 1.5 MMTCO<sub>2</sub>e less GHG emissions compared to 2014 and has been on a declining trend since 2007. Also, the population and economic activities have increased substantially between 1990 and 2015. Despite the population and economic growth, California's net GHG emissions only grew by approximately 2 percent. According to CARB, the declining trend coupled with the state's GHG reduction programs (such as the Renewables Portfolio Standard, LCFS, vehicle efficiency standards, and declining caps under the Cap and Trade Program) demonstrate that California is on track to meet the 2020 GHG reduction target in California HSC, Division 25.5, also known as The Global Warming Solutions Act of 2006 (AB 32).<sup>156</sup> As indicated previously, Table 1 identifies and quantifies statewide anthropogenic GHG emissions and sinks (e.g., carbon sequestration due to forest growth) in 1990

<sup>153</sup> Energy + Environmental Economics (E3), Summary of the California State Agencies' PATHWAYS Project: Long-Term Greenhouse Gas Reduction Scenarios, April 2015; Greenblatt, Jeffrey, "Modeling California Impacts on Greenhouse Gas Emissions," Energy Policy, Vol. 78, pages 158-172. The California Air Resources Board, California Energy Commission, California Public Utilities Commission, and the California Independent System Operator engaged E3 to evaluate the feasibility and cost of a range of potential 2030 targets along the way to the state's goal of reducing GHG emissions to 80% below 1990 levels by 2050. With input from the agencies, E3 developed scenarios that explore the potential pace at which emission reductions can be achieved as well as the mix of technologies and practices deployed. E3 conducted the analysis using its California PATHWAYS model. Enhanced specifically for this study, the model encompasses the entire California economy with detailed representations of the buildings, industry, transportation, and electricity sectors.

<sup>154</sup> Intergovernmental Panel on Climate Change, Fifth Assessment Report Synthesis Report, 2014.

<sup>155</sup> PBL Netherlands Environmental Assessment Agency and the European Commission Joint Research Center, Trends in Global CO<sub>2</sub> Emissions 2014 Report, 2014.

<sup>156</sup> California Air Resources Board, Frequently Asked Questions for the 2016 Edition California Greenhouse Gas Emission Inventory, (2016). Available: [https://www.arb.ca.gov/cc/inventory/pubs/reports/2000\\_2014/ghg\\_inventory\\_faq\\_20160617.pdf](https://www.arb.ca.gov/cc/inventory/pubs/reports/2000_2014/ghg_inventory_faq_20160617.pdf). Accessed March 2019.

and 2018. As shown in the table, the transportation sector is the largest contributor to statewide GHG emissions at 40 percent in 2018.

CEQA requires that lead agencies consider the cumulative impacts of GHG emissions from even relatively small (on a global basis) increases in GHG emissions. Small contributions to this cumulative impact (from which significant effects are occurring and are expected to worsen over time) may be potentially considerable and therefore significant. In the case of global climate change, the proximity of the Project to other GHG emissions generating activities is not directly relevant to the determination of a cumulative impact because climate change is a global condition. As stated above, GHG emission impacts are, by their very nature cumulative, as both the California Natural Resources Agency and CAPCOA have recognized.<sup>157</sup> Therefore, an analysis of a project's GHG emission impacts also serves as a cumulative impact assessment.

Although HSC Division 25.5 sets a statewide target for statewide 2020 and 2030 GHG emission levels, its implementing tools (e.g., CARB's *Climate Change Scoping Plan*) make clear that the reductions are not expected to occur uniformly from all sources or sectors. CARB has set targets specific to the transportation sector (land use-related transportation emissions), for example, and under SB 375, SCAG must incorporate these GHG-reduction goals into its Regional Transportation Plan and demonstrate that its Sustainable Communities Strategy is consistent with the Regional Housing Needs Assessment. One of the goals of this process is to ensure that the efforts of State, regional and local planning agencies accommodate the contemporaneous increase in population and employment with a decrease in overall GHG emissions. For example, adopting zoning designations that reduce density in areas which are expected to experience growth in population and housing needs, is seen as inconsistent with anti-sprawl goals of sustainable planning. Although development under a reduced density scenario would result in lower GHG emissions from the use of that individual parcel of land compared to what is currently or hypothetically allowed (by creating fewer units and fewer attributable vehicle trips), total regional GHG emissions would likely fail to decrease at the desired rate or, worse, would increase if regional housing and employment needs of an area were then met with a larger number of less-intensive development projects. Therefore, it is not simply a cumulative increase in regional development or the resultant GHG emissions that potentially threatens GHG reduction goals, but the configuration and design of that development.

With implementation of good planning policies, the land use sector can accommodate growth and still be consistent with statewide plans to reduce GHG emissions. To that end, various agencies are required to develop programs to guide future building and transportation development toward minimizing resource consumption and reducing resultant pollution. As discussed above, the City has adopted a Green Building Code that includes mandatory measures to minimize and reduce GHG emissions from energy consumption.

As discussed above, the Project's design and location would be consistent with applicable GHG reduction strategies recommended by the State, region, and City. In addition, the Project would support and be consistent with relevant and applicable GHG emission reduction strategies in

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<sup>157</sup> California Air Pollution Control Officers Association, *CEQA & Climate change: Evaluating and Addressing Greenhouse Gas Emissions from Projects Subject to the California Environmental Quality Act*, (2008).

SCAG's RTP/SCS. The Project is an urban infill location and within a relatively short distance of existing transit stops; providing employment near current transit stops and neighborhood commercial centers. As a result, the Project would be consistent with SCAG's RTP/SCS policies for the concentration of growth in proximity to transit.

Furthermore, the overwhelming majority of the Project-related GHG emissions are from two highly regulated source sectors, including electricity generation and transportation fuels. These sectors are already covered entities under the Renewables Portfolio Standard and the Cap-and-Trade Program and as such would be reduced sector-wide in accordance with the GHG reduction targets of HSC Division 25.5, in addition to the previously discussed GHG emissions reductions from the Project-specific energy efficiency design features, and substantial VMT-reducing land use characteristics of the Project. As indicated above, the CEQA Guidelines were amended in response to SB 97. In particular, the CEQA Guidelines were amended to specify that compliance with a GHG emissions reduction program renders a cumulative impact insignificant. Per CEQA Guidelines Section 15064(h)(3), a project's incremental contribution to a cumulative impact can be found not cumulatively considerable if the project would comply with an approved plan or mitigation program that provides specific requirements that will avoid or substantially lessen the cumulative problem within the geographic area of the project.<sup>158</sup> To qualify, such a plan or program must be specified in law or adopted by the public agency with jurisdiction over the affected resources through a public review process to implement, interpret, or make specific the law enforced or administered by the public agency.<sup>159</sup> Examples of such programs include a "water quality control plan, air quality attainment or maintenance plan, integrated waste management plan, habitat conservation plan, natural community conservation plan, [and] **plans or regulations for the reduction of greenhouse gas emissions**" (emphasis added).<sup>160</sup> Put another way, CEQA Guidelines Section 15064(h)(3) allows a lead agency to make a finding of non-significance for GHG emissions if a project complies with the California Cap-and-Trade Program or other regulatory schemes to reduce GHG emissions.

Given that the Project would generate GHG emissions consistent with applicable reduction plans and policies, and given that GHG emission impacts are cumulative in nature, the Project's incremental contribution to cumulatively significant GHG emissions would be less than cumulatively considerable, and impacts would be less than significant.

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<sup>158</sup> 14 CCR § 15064(h)(3).

<sup>159</sup> 14 CCR § 15064(h)(3).

<sup>160</sup> 14 CCR § 15064(h)(3).

## SECTION 6

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### Summary of Results

GHG emissions associated with the Project have been evaluated to determine the level of impact from construction activities and future operations of the Project. The Project would be consistent with the requirements of the City's Green Building Program which would increase building energy efficiency and reduce energy consumption, leading to reductions in GHG emissions. This would be consistent with applicable SCAG RTP/SCS policies intended to meet the region's GHG reduction targets as assigned by CARB. Thus the Project's GHG emissions are consistent with regulatory schemes intended to reduce GHG emissions.

Construction of the Project would result in temporary and incremental increases to GHG emissions through the use of heavy-duty construction equipment and through vehicle trips generated from construction workers traveling to and from the Project Site. GHG emissions associated with Project operations would be generated by the consumption of electricity, natural gas, and water, vehicle trips to and from the site, waste production, and landscaping.

The Project would be consistent with applicable GHG reduction strategies recommended by the State. In addition, the Project would support and be consistent with relevant and applicable GHG emission reduction strategies in SCAG's Sustainable Communities Strategy, including providing commuters the CALGreen Code required number of bicycle parking spaces to encourage alternative modes of transportation and reducing single occupancy vehicle transit, thus reducing VMT and GHG emissions. The Project Site is also within a relatively short distance of existing transit stops. The Project would be designed to meet criteria for the LEED Silver or equivalent certification level which would meet or exceed the current Title 24 Energy standards.

In summary, construction and operation of the proposed Project would result in GHG emissions that would not result in a significant impact on the environment. The Project would be consistent with local, regional, and State's plans and programs adopted for the purpose of reducing the emissions of GHGs. Accordingly, the Project would not result in a cumulatively considerable impact to global climate change.

Appendix A  
**The Jeff Hotel Project  
Greenhouse Gas Emissions  
Worksheets**



# **A-1 Project Construction Emissions**

11469 Jefferson Hotel

Project - Greenhouse Gas Summary

Project Operations Summary (Full Buildout Year 2022)	
Category	MTCO <sub>2</sub> e/yr
Mobile	1,223
Area	0.01
Electricity	256
Natural Gas	157
Waste	12
Water	21
Construction	37
<b>Project Subtotal</b>	<b>1,706</b>
Existing	314
<b>Project Net Total GHG Emissions</b>	<b>1,392</b>

MTCO<sub>2</sub>e=Metric Tons Carbon Dioxide equivalents

Existing Emissions Summary	
Category	MTCO <sub>2</sub> e/yr
On Road Mobile Sources	253.0897
Area	9.00E-04
Energy (Electricity and Natural Gas)	50.4225
Water Conveyance and Wastewater Treatment	3.5128
Solid Waste	6.4934
<b>Total Existing Emissions</b>	<b>314</b>

11469 Jefferson Hotel

Project - Greenhouse Gas Summary

No GHG Reduction Features

Project Operations Summary (Full Buildout Year 2022)	
Category	MTCO <sub>2</sub> e/yr
Mobile	1,223
Area	0
Electricity	359
Natural Gas	157
Waste	48
Water	26
Construction	37
<b>Project Subtotal</b>	<b>1,851</b>
Existing	314
<b>Project Net Total GHG Emissions</b>	<b>1,537</b>

MTCO<sub>2</sub>e=Metric Tons Carbon Dioxide equivalents

Existing Emissions Summary	
Category	MTCO <sub>2</sub> e/yr
On Road Mobile Sources	253.0897
Area	9.00E-04
Energy (Electricity and Natural Gas)	50.4225
Water Conveyance and Wastewater Treatment	3.5128
Solid Waste	6.4934
<b>Total Existing Emissions</b>	<b>314</b>

## 11469 Jefferson Hotel

### Construction GHG Emissions Summary

Year	Project Area Emissions	Project Mobile Emissions	Project Total
2020	192.95	365.27	558.22
2021	202.77	166.03	368.80
2022	110.32	87.30	197.62
Project Total			1,125
<b>30 Year-Amortization</b>			<b>37</b>

MTCO<sub>2</sub>e=Metric Tons Carbon Dioxide equivalents

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**11469 Jefferson - Construction**

South Coast AQMD Air District, Annual

**1.0 Project Characteristics**

**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Enclosed Parking with Elevator	199.00	Space	0.28	33,817.00	0
Hotel	175.00	Room	0.50	122,000.00	0

**1.2 Other Project Characteristics**

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	31
Climate Zone	11	Operational Year	2022	Utility Company	Southern California Edison
CO2 Intensity (lb/MWhr)	702.44	CH4 Intensity (lb/MWhr)	0.029	N2O Intensity (lb/MWhr)	0.006

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

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Project Characteristics -

Land Use - see construction assumptions

Construction Phase - see construction assumptions

Off-road Equipment - see construction assumptions

Trips and VMT - construction mobile emissions calculated outside CalEEMod

Demolition -

Grading - see construction assumptions

Construction Off-road Equipment Mitigation - All Diesel equipment >50 HP would meet Tier 4 Final engine standards

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	5.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	7.00

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tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstructionPhase	NumDays	5.00	77.00
tblConstructionPhase	NumDays	100.00	79.00
tblConstructionPhase	NumDays	100.00	6.00
tblConstructionPhase	NumDays	100.00	468.00
tblConstructionPhase	NumDays	10.00	53.00
tblConstructionPhase	NumDays	2.00	75.00
tblConstructionPhase	NumDays	5.00	11.00
tblConstructionPhase	NumDaysWeek	5.00	6.00
tblConstructionPhase	NumDaysWeek	5.00	6.00
tblConstructionPhase	NumDaysWeek	5.00	6.00
tblConstructionPhase	NumDaysWeek	5.00	6.00
tblConstructionPhase	NumDaysWeek	5.00	6.00
tblConstructionPhase	NumDaysWeek	5.00	6.00
tblConstructionPhase	NumDaysWeek	5.00	6.00
tblConstructionPhase	NumDaysWeek	5.00	6.00
tblGrading	AcresOfGrading	0.00	0.78
tblGrading	MaterialExported	0.00	31,312.00
tblLandUse	LandUseSquareFeet	83,200.00	33,817.00

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tblLandUse	LandUseSquareFeet	254,100.00	122,000.00
tblLandUse	LotAcreage	1.87	0.28
tblLandUse	LotAcreage	5.83	0.50
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	4.00	8.00
tblOffRoadEquipment	UsageHours	4.00	8.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	1.00	8.00
tblOffRoadEquipment	UsageHours	1.00	8.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblTripsAndVMT	HaulingTripNumber	155.00	0.00
tblTripsAndVMT	HaulingTripNumber	3,914.00	0.00
tblTripsAndVMT	VendorTripNumber	26.00	0.00
tblTripsAndVMT	VendorTripNumber	26.00	0.00
tblTripsAndVMT	VendorTripNumber	26.00	0.00
tblTripsAndVMT	WorkerTripNumber	10.00	0.00
tblTripsAndVMT	WorkerTripNumber	13.00	0.00

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tblTripsAndVMT	WorkerTripNumber	65.00	0.00
tblTripsAndVMT	WorkerTripNumber	65.00	0.00
tblTripsAndVMT	WorkerTripNumber	65.00	0.00
tblTripsAndVMT	WorkerTripNumber	20.00	0.00
tblTripsAndVMT	WorkerTripNumber	13.00	0.00

**2.0 Emissions Summary**

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**2.1 Overall Construction**  
**Unmitigated Construction**

Year	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBIO- CO2	Total CO2	CH4	N2O	CO2e
2020	0.1815	1.8098	1.3055	2.1900e-003	0.2448	0.0984	0.3432	0.1270	0.0917	0.2187	0.0000	191.6590	191.6590	0.0517	0.0000	192.9514
2021	0.1877	1.7126	1.3545	2.3600e-003	0.0000	0.0889	0.0889	0.0000	0.0828	0.0828	0.0000	201.3119	201.3119	0.0584	0.0000	202.7713
2022	0.6619	0.8081	0.7275	1.2800e-003	0.0000	0.0407	0.0407	0.0000	0.0381	0.0381	0.0000	109.5962	109.5962	0.0291	0.0000	110.3229
Maximum	0.6619	1.8098	1.3545	2.3600e-003	0.2448	0.0984	0.3432	0.1270	0.0917	0.2187	0.0000	201.3119	201.3119	0.0584	0.0000	202.7713
tons/yr											MT/yr					

**Mitigated Construction**

Year	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBIO- CO2	Total CO2	CH4	N2O	CO2e
2020	0.0258	0.1119	1.3550	2.1900e-003	0.0955	3.4400e-003	0.0989	0.0495	3.4400e-003	0.0530	0.0000	191.6588	191.6588	0.0517	0.0000	192.9512
2021	0.0723	0.3467	1.4674	2.3600e-003	0.0000	0.0151	0.0151	0.0000	0.0151	0.0151	0.0000	201.3116	201.3116	0.0584	0.0000	202.7711
2022	0.6047	0.1703	0.7930	1.2800e-003	0.0000	6.7100e-003	6.7100e-003	0.0000	6.7100e-003	6.7100e-003	0.0000	109.5961	109.5961	0.0291	0.0000	110.3228
Maximum	0.6047	0.3467	1.4674	2.3600e-003	0.0955	0.0151	0.0989	0.0495	0.0151	0.0530	0.0000	201.3116	201.3116	0.0584	0.0000	202.7711
tons/yr											MT/yr					

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	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
Percent Reduction	31.83	85.48	-6.73	0.00	61.00	88.95	74.48	61.00	88.15	78.00	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	5-4-2020	8-3-2020	0.8337	0.0542
2	8-4-2020	11-3-2020	0.7868	0.0559
3	11-4-2020	2-3-2021	0.5189	0.0629
4	2-4-2021	5-3-2021	0.4491	0.0989
5	5-4-2021	8-3-2021	0.4642	0.1022
6	8-4-2021	11-3-2021	0.4791	0.1056
7	11-4-2021	2-3-2022	0.5117	0.1307
8	2-4-2022	5-3-2022	1.0246	0.6498
9	5-4-2022	8-3-2022	0.2648	0.0638
		Highest	1.0246	0.6498

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**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	0.5005	4.0000e-005	4.9000e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	9.5100e-003	9.5100e-003	3.0000e-005	0.0000	0.0101
Energy	0.0158	0.1434	0.1205	8.6000e-004		0.0109	0.0109		0.0109	0.0109	0.0000	513.9078	513.9078	0.0178	5.9200e-003	516.1156
Mobile	0.3510	1.9137	4.1511	0.0152	1.2465	0.0122	1.2587	0.3340	0.0114	0.3454	0.0000	1,408.1369	1,408.1369	0.0708	0.0000	1,409.9063
Waste						0.0000	0.0000		0.0000	0.0000	19.4486	0.0000	19.4486	1.1494	0.0000	48.1830
Water						0.0000	0.0000		0.0000	0.0000	1.4084	20.1632	21.5715	0.1455	3.5900e-003	26.2778
<b>Total</b>	<b>0.8673</b>	<b>2.0572</b>	<b>4.2765</b>	<b>0.0161</b>	<b>1.2465</b>	<b>0.0231</b>	<b>1.2696</b>	<b>0.3340</b>	<b>0.0223</b>	<b>0.3563</b>	<b>20.8569</b>	<b>1,942.2174</b>	<b>1,963.0744</b>	<b>1.3834</b>	<b>9.5100e-003</b>	<b>2,000.4927</b>

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**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	0.5005	4.0000e-005	4.9000e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	9.5100e-003	9.5100e-003	3.0000e-005	0.0000	0.0101
Energy	0.0158	0.1434	0.1205	8.6000e-004		0.0109	0.0109		0.0109	0.0109	0.0000	513.9078	513.9078	0.0178	5.9200e-003	516.1156
Mobile	0.3510	1.9137	4.1511	0.0152	1.2465	0.0122	1.2587	0.3340	0.0114	0.3454	0.0000	1,408.1369	1,408.1369	0.0708	0.0000	1,409.9063
Waste						0.0000	0.0000		0.0000	0.0000	19.4486	0.0000	19.4486	1.1494	0.0000	48.1830
Water						0.0000	0.0000		0.0000	0.0000	1.4084	20.1632	21.5715	0.1455	3.5900e-003	26.2778
<b>Total</b>	<b>0.8673</b>	<b>2.0572</b>	<b>4.2765</b>	<b>0.0161</b>	<b>1.2465</b>	<b>0.0231</b>	<b>1.2696</b>	<b>0.3340</b>	<b>0.0223</b>	<b>0.3563</b>	<b>20.8569</b>	<b>1,942.2174</b>	<b>1,963.0744</b>	<b>1.3834</b>	<b>9.5100e-003</b>	<b>2,000.4927</b>

	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
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**

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Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	5/4/2020	7/3/2020	6	53	
2	Excavation	Grading	7/6/2020	9/30/2020	6	75	
3	Foundations	Building Construction	10/1/2020	12/31/2020	6	79	
4	Continuous Concrete Pour	Building Construction	11/2/2020	11/7/2020	6	6	
5	Building Construction	Building Construction	1/2/2021	7/1/2022	6	468	
6	Paving	Paving	11/1/2021	11/12/2021	6	11	
7	Architectural Coating	Architectural Coating	2/1/2022	4/30/2022	6	77	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0.28

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 183,000; Non-Residential Outdoor: 61,000; Striped Parking Area: 2,029 (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	2	8.00	97	0.37
Excavation	Concrete/Industrial Saws	1	8.00	81	0.73
Excavation	Excavators	1	8.00	158	0.38
Excavation	Graders	0	8.00	187	0.41
Excavation	Rubber Tired Dozers	1	8.00	247	0.40
Excavation	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Foundations	Concrete/Industrial Saws	0	8.00	81	0.73

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Foundations	Cranes	1	8.00	231	0.29
Foundations	Forklifts	2	8.00	89	0.20
Foundations	Rubber Tired Dozers	0	1.00	247	0.40
Foundations	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Continuous Concrete Pour	Cranes	0	4.00	231	0.29
Continuous Concrete Pour	Forklifts	0	6.00	89	0.20
Continuous Concrete Pour	Pumps	3	8.00	84	0.74
Continuous Concrete Pour	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Building Construction	Cement and Mortar Mixers	0	6.00	9	0.56
Building Construction	Cranes	1	8.00	231	0.29
Building Construction	Forklifts	2	8.00	89	0.20
Building Construction	Pavers	0	7.00	130	0.42
Building Construction	Rollers	0	7.00	80	0.38
Building Construction	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Air Compressors	0	6.00	78	0.48
Paving	Cement and Mortar Mixers	4	8.00	9	0.56
Paving	Forklifts	1	8.00	89	0.20
Paving	Pavers	1	8.00	130	0.42
Paving	Pumps	1	8.00	84	0.74
Paving	Rollers	1	8.00	80	0.38
Paving	Tractors/Loaders/Backhoes	0	7.00	97	0.37
Architectural Coating	Air Compressors	1	8.00	78	0.48

**Trips and VMT**

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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	4	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Excavation	5	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Foundations	5	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Continuous Concrete Pour	3	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	5	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	8	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

**3.1 Mitigation Measures Construction**

Use Cleaner Engines for Construction Equipment

Use Soil Stabilizer

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

**3.2 Demolition - 2020**

**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					0.0167	0.0000	0.0167	2.5300e-003	0.0000	2.5300e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0508	0.4993	0.3280	5.6000e-004		0.0270	0.0270		0.0253	0.0253	0.0000	48.5987	48.5987	0.0120	0.0000	48.8990
<b>Total</b>	<b>0.0508</b>	<b>0.4993</b>	<b>0.3280</b>	<b>5.6000e-004</b>	<b>0.0167</b>	<b>0.0270</b>	<b>0.0437</b>	<b>2.5300e-003</b>	<b>0.0253</b>	<b>0.0278</b>	<b>0.0000</b>	<b>48.5987</b>	<b>48.5987</b>	<b>0.0120</b>	<b>0.0000</b>	<b>48.8990</b>

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**3.2 Demolition - 2020**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	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
<b>Total</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>							

**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					6.5300e-003	0.0000	6.5300e-003	9.9000e-004	0.0000	9.9000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	6.4400e-003	0.0279	0.3280	5.6000e-004		8.6000e-004	8.6000e-004		8.6000e-004	8.6000e-004	0.0000	48.5987	48.5987	0.0120	0.0000	48.8990
<b>Total</b>	<b>6.4400e-003</b>	<b>0.0279</b>	<b>0.3280</b>	<b>5.6000e-004</b>	<b>6.5300e-003</b>	<b>8.6000e-004</b>	<b>7.3900e-003</b>	<b>9.9000e-004</b>	<b>8.6000e-004</b>	<b>1.8500e-003</b>	<b>0.0000</b>	<b>48.5987</b>	<b>48.5987</b>	<b>0.0120</b>	<b>0.0000</b>	<b>48.8990</b>

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**3.2 Demolition - 2020**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	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
<b>Total</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>							

**3.3 Excavation - 2020**

**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					0.2280	0.0000	0.2280	0.1245	0.0000	0.1245	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0811	0.7970	0.5867	9.8000e-004		0.0426	0.0426		0.0398	0.0398	0.0000	85.7855	85.7855	0.0225	0.0000	86.3481
<b>Total</b>	<b>0.0811</b>	<b>0.7970</b>	<b>0.5867</b>	<b>9.8000e-004</b>	<b>0.2280</b>	<b>0.0426</b>	<b>0.2706</b>	<b>0.1245</b>	<b>0.0398</b>	<b>0.1642</b>	<b>0.0000</b>	<b>85.7855</b>	<b>85.7855</b>	<b>0.0225</b>	<b>0.0000</b>	<b>86.3481</b>

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**3.3 Excavation - 2020**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	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
<b>Total</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>							

**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					0.0889	0.0000	0.0889	0.0485	0.0000	0.0485	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0115	0.0498	0.6110	9.8000e-004		1.5300e-003	1.5300e-003		1.5300e-003	1.5300e-003	0.0000	85.7854	85.7854	0.0225	0.0000	86.3479
<b>Total</b>	<b>0.0115</b>	<b>0.0498</b>	<b>0.6110</b>	<b>9.8000e-004</b>	<b>0.0889</b>	<b>1.5300e-003</b>	<b>0.0905</b>	<b>0.0485</b>	<b>1.5300e-003</b>	<b>0.0501</b>	<b>0.0000</b>	<b>85.7854</b>	<b>85.7854</b>	<b>0.0225</b>	<b>0.0000</b>	<b>86.3479</b>

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**3.3 Excavation - 2020**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	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
<b>Total</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>							

**3.4 Foundations - 2020**

**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	0.0458	0.4818	0.3569	5.9000e-004		0.0269	0.0269		0.0248	0.0248	0.0000	52.1879	52.1879	0.0169	0.0000	52.6099
<b>Total</b>	<b>0.0458</b>	<b>0.4818</b>	<b>0.3569</b>	<b>5.9000e-004</b>		<b>0.0269</b>	<b>0.0269</b>		<b>0.0248</b>	<b>0.0248</b>	<b>0.0000</b>	<b>52.1879</b>	<b>52.1879</b>	<b>0.0169</b>	<b>0.0000</b>	<b>52.6099</b>

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**3.4 Foundations - 2020**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	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
<b>Total</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>							

**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	7.2900e-003	0.0316	0.3795	5.9000e-004		9.7000e-004	9.7000e-004		9.7000e-004	9.7000e-004	0.0000	52.1879	52.1879	0.0169	0.0000	52.6098
<b>Total</b>	<b>7.2900e-003</b>	<b>0.0316</b>	<b>0.3795</b>	<b>5.9000e-004</b>		<b>9.7000e-004</b>	<b>9.7000e-004</b>		<b>9.7000e-004</b>	<b>9.7000e-004</b>	<b>0.0000</b>	<b>52.1879</b>	<b>52.1879</b>	<b>0.0169</b>	<b>0.0000</b>	<b>52.6098</b>

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**3.4 Foundations - 2020**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	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
<b>Total</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>							

**3.5 Continuous Concrete Pour - 2020**

**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	3.8100e-003	0.0318	0.0339	6.0000e-005		1.8600e-003	1.8600e-003		1.8600e-003	1.8600e-003	0.0000	5.0869	5.0869	3.0000e-004	0.0000	5.0945
<b>Total</b>	<b>3.8100e-003</b>	<b>0.0318</b>	<b>0.0339</b>	<b>6.0000e-005</b>		<b>1.8600e-003</b>	<b>1.8600e-003</b>		<b>1.8600e-003</b>	<b>1.8600e-003</b>	<b>0.0000</b>	<b>5.0869</b>	<b>5.0869</b>	<b>3.0000e-004</b>	<b>0.0000</b>	<b>5.0945</b>

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**3.5 Continuous Concrete Pour - 2020**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	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
<b>Total</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>							

**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	5.9000e-004	2.5700e-003	0.0365	6.0000e-005		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005	0.0000	5.0869	5.0869	3.0000e-004	0.0000	5.0945
<b>Total</b>	<b>5.9000e-004</b>	<b>2.5700e-003</b>	<b>0.0365</b>	<b>6.0000e-005</b>		<b>8.0000e-005</b>	<b>8.0000e-005</b>		<b>8.0000e-005</b>	<b>8.0000e-005</b>	<b>0.0000</b>	<b>5.0869</b>	<b>5.0869</b>	<b>3.0000e-004</b>	<b>0.0000</b>	<b>5.0945</b>

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**3.5 Continuous Concrete Pour - 2020**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	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
<b>Total</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>							

**3.6 Building Construction - 2021**

**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	0.1812	1.6555	1.2944	2.2600e-003		0.0858	0.0858		0.0799	0.0799	0.0000	192.9181	192.9181	0.0567	0.0000	194.3361
<b>Total</b>	<b>0.1812</b>	<b>1.6555</b>	<b>1.2944</b>	<b>2.2600e-003</b>		<b>0.0858</b>	<b>0.0858</b>		<b>0.0799</b>	<b>0.0799</b>	<b>0.0000</b>	<b>192.9181</b>	<b>192.9181</b>	<b>0.0567</b>	<b>0.0000</b>	<b>194.3361</b>

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**3.6 Building Construction - 2021**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	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
<b>Total</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>							

**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	0.0701	0.3345	1.4014	2.2600e-003		0.0146	0.0146		0.0146	0.0146	0.0000	192.9179	192.9179	0.0567	0.0000	194.3359
<b>Total</b>	<b>0.0701</b>	<b>0.3345</b>	<b>1.4014</b>	<b>2.2600e-003</b>		<b>0.0146</b>	<b>0.0146</b>		<b>0.0146</b>	<b>0.0146</b>	<b>0.0000</b>	<b>192.9179</b>	<b>192.9179</b>	<b>0.0567</b>	<b>0.0000</b>	<b>194.3359</b>

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**3.6 Building Construction - 2021**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	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
<b>Total</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>							

**3.6 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	0.0813	0.7357	0.6344	1.1300e-003		0.0365	0.0365		0.0340	0.0340	0.0000	96.4895	96.4895	0.0282	0.0000	97.1949
<b>Total</b>	<b>0.0813</b>	<b>0.7357</b>	<b>0.6344</b>	<b>1.1300e-003</b>		<b>0.0365</b>	<b>0.0365</b>		<b>0.0340</b>	<b>0.0340</b>	<b>0.0000</b>	<b>96.4895</b>	<b>96.4895</b>	<b>0.0282</b>	<b>0.0000</b>	<b>97.1949</b>

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**3.6 Building Construction - 2022**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	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
<b>Total</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>							

**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	0.0330	0.1636	0.6989	1.1300e-003		6.5100e-003	6.5100e-003		6.5100e-003	6.5100e-003	0.0000	96.4894	96.4894	0.0282	0.0000	97.1948
<b>Total</b>	<b>0.0330</b>	<b>0.1636</b>	<b>0.6989</b>	<b>1.1300e-003</b>		<b>6.5100e-003</b>	<b>6.5100e-003</b>		<b>6.5100e-003</b>	<b>6.5100e-003</b>	<b>0.0000</b>	<b>96.4894</b>	<b>96.4894</b>	<b>0.0282</b>	<b>0.0000</b>	<b>97.1948</b>

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**3.6 Building Construction - 2022**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	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
<b>Total</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>							

**3.7 Paving - 2021**

**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	6.4900e-003	0.0571	0.0601	1.0000e-004		3.0900e-003	3.0900e-003		2.9400e-003	2.9400e-003	0.0000	8.3938	8.3938	1.6600e-003	0.0000	8.4352
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>6.4900e-003</b>	<b>0.0571</b>	<b>0.0601</b>	<b>1.0000e-004</b>		<b>3.0900e-003</b>	<b>3.0900e-003</b>		<b>2.9400e-003</b>	<b>2.9400e-003</b>	<b>0.0000</b>	<b>8.3938</b>	<b>8.3938</b>	<b>1.6600e-003</b>	<b>0.0000</b>	<b>8.4352</b>

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**3.7 Paving - 2021**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	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
<b>Total</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>							

**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	2.2500e-003	0.0123	0.0660	1.0000e-004		4.4000e-004	4.4000e-004		4.4000e-004	4.4000e-004	0.0000	8.3938	8.3938	1.6600e-003	0.0000	8.4352
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>2.2500e-003</b>	<b>0.0123</b>	<b>0.0660</b>	<b>1.0000e-004</b>		<b>4.4000e-004</b>	<b>4.4000e-004</b>		<b>4.4000e-004</b>	<b>4.4000e-004</b>	<b>0.0000</b>	<b>8.3938</b>	<b>8.3938</b>	<b>1.6600e-003</b>	<b>0.0000</b>	<b>8.4352</b>

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**3.7 Paving - 2021**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	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
<b>Total</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>							

**3.8 Architectural Coating - 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					
Archit. Coating	0.5702					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0105	0.0723	0.0931	1.5000e-004		4.1900e-003	4.1900e-003		4.1900e-003	4.1900e-003	0.0000	13.1067	13.1067	8.5000e-004	0.0000	13.1280
<b>Total</b>	<b>0.5807</b>	<b>0.0723</b>	<b>0.0931</b>	<b>1.5000e-004</b>		<b>4.1900e-003</b>	<b>4.1900e-003</b>		<b>4.1900e-003</b>	<b>4.1900e-003</b>	<b>0.0000</b>	<b>13.1067</b>	<b>13.1067</b>	<b>8.5000e-004</b>	<b>0.0000</b>	<b>13.1280</b>

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**3.8 Architectural Coating - 2022**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	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
<b>Total</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>							

**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	0.5702					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.5300e-003	6.6100e-003	0.0941	1.5000e-004		2.0000e-004	2.0000e-004		2.0000e-004	2.0000e-004	0.0000	13.1067	13.1067	8.5000e-004	0.0000	13.1280
<b>Total</b>	<b>0.5717</b>	<b>6.6100e-003</b>	<b>0.0941</b>	<b>1.5000e-004</b>		<b>2.0000e-004</b>	<b>2.0000e-004</b>		<b>2.0000e-004</b>	<b>2.0000e-004</b>	<b>0.0000</b>	<b>13.1067</b>	<b>13.1067</b>	<b>8.5000e-004</b>	<b>0.0000</b>	<b>13.1280</b>

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**3.8 Architectural Coating - 2022**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	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
<b>Total</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>							

**4.0 Operational Detail - Mobile**

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**4.1 Mitigation Measures Mobile**

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	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	0.3510	1.9137	4.1511	0.0152	1.2465	0.0122	1.2587	0.3340	0.0114	0.3454	0.0000	1,408.1369	1,408.1369	0.0708	0.0000	1,409.9063
Unmitigated	0.3510	1.9137	4.1511	0.0152	1.2465	0.0122	1.2587	0.3340	0.0114	0.3454	0.0000	1,408.1369	1,408.1369	0.0708	0.0000	1,409.9063

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Enclosed Parking with Elevator	0.00	0.00	0.00		
Hotel	1,429.75	1,433.25	1,041.25	3,280,389	3,280,389
Total	1,429.75	1,433.25	1,041.25	3,280,389	3,280,389

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	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
Enclosed Parking with Elevator	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Hotel	16.60	8.40	6.90	19.40	61.60	19.00	58	38	4

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Enclosed Parking with Elevator	0.549559	0.042893	0.201564	0.118533	0.015569	0.005846	0.021394	0.034255	0.002099	0.001828	0.004855	0.000709	0.000896
Hotel	0.549559	0.042893	0.201564	0.118533	0.015569	0.005846	0.021394	0.034255	0.002099	0.001828	0.004855	0.000709	0.000896

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**5.0 Energy Detail**

Historical Energy Use: N

**5.1 Mitigation Measures Energy**

	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	357.7888	357.7888	0.0148	3.0600e-003	359.0688
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	357.7888	357.7888	0.0148	3.0600e-003	359.0688
NaturalGas Mitigated	0.0158	0.1434	0.1205	8.6000e-004		0.0109	0.0109		0.0109	0.0109	0.0000	156.1190	156.1190	2.9900e-003	2.8600e-003	157.0468
NaturalGas Unmitigated	0.0158	0.1434	0.1205	8.6000e-004		0.0109	0.0109		0.0109	0.0109	0.0000	156.1190	156.1190	2.9900e-003	2.8600e-003	157.0468

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**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					
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hotel	2.92556e+006	0.0158	0.1434	0.1205	8.6000e-004		0.0109	0.0109		0.0109	0.0109	0.0000	156.1190	156.1190	2.9900e-003	2.8600e-003	157.0468
<b>Total</b>		<b>0.0158</b>	<b>0.1434</b>	<b>0.1205</b>	<b>8.6000e-004</b>		<b>0.0109</b>	<b>0.0109</b>		<b>0.0109</b>	<b>0.0109</b>	<b>0.0000</b>	<b>156.1190</b>	<b>156.1190</b>	<b>2.9900e-003</b>	<b>2.8600e-003</b>	<b>157.0468</b>

**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					
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hotel	2.92556e+006	0.0158	0.1434	0.1205	8.6000e-004		0.0109	0.0109		0.0109	0.0109	0.0000	156.1190	156.1190	2.9900e-003	2.8600e-003	157.0468
<b>Total</b>		<b>0.0158</b>	<b>0.1434</b>	<b>0.1205</b>	<b>8.6000e-004</b>		<b>0.0109</b>	<b>0.0109</b>		<b>0.0109</b>	<b>0.0109</b>	<b>0.0000</b>	<b>156.1190</b>	<b>156.1190</b>	<b>2.9900e-003</b>	<b>2.8600e-003</b>	<b>157.0468</b>

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**5.3 Energy by Land Use - Electricity**

**Unmitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Enclosed Parking with Elevator	198168	63.1405	2.6100e-003	5.4000e-004	63.3663
Hotel	924760	294.6484	0.0122	2.5200e-003	295.7025
<b>Total</b>		<b>357.7888</b>	<b>0.0148</b>	<b>3.0600e-003</b>	<b>359.0688</b>

**Mitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Enclosed Parking with Elevator	198168	63.1405	2.6100e-003	5.4000e-004	63.3663
Hotel	924760	294.6484	0.0122	2.5200e-003	295.7025
<b>Total</b>		<b>357.7888</b>	<b>0.0148</b>	<b>3.0600e-003</b>	<b>359.0688</b>

**6.0 Area Detail**

**6.1 Mitigation Measures Area**

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	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	0.5005	4.0000e-005	4.9000e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	9.5100e-003	9.5100e-003	3.0000e-005	0.0000	0.0101
Unmitigated	0.5005	4.0000e-005	4.9000e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	9.5100e-003	9.5100e-003	3.0000e-005	0.0000	0.0101

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	0.0570					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.4430					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	4.6000e-004	4.0000e-005	4.9000e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	9.5100e-003	9.5100e-003	3.0000e-005	0.0000	0.0101
<b>Total</b>	<b>0.5005</b>	<b>4.0000e-005</b>	<b>4.9000e-003</b>	<b>0.0000</b>		<b>2.0000e-005</b>	<b>2.0000e-005</b>		<b>2.0000e-005</b>	<b>2.0000e-005</b>	<b>0.0000</b>	<b>9.5100e-003</b>	<b>9.5100e-003</b>	<b>3.0000e-005</b>	<b>0.0000</b>	<b>0.0101</b>

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**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	0.0570					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.4430					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	4.6000e-004	4.0000e-005	4.9000e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	9.5100e-003	9.5100e-003	3.0000e-005	0.0000	0.0101
<b>Total</b>	<b>0.5005</b>	<b>4.0000e-005</b>	<b>4.9000e-003</b>	<b>0.0000</b>		<b>2.0000e-005</b>	<b>2.0000e-005</b>		<b>2.0000e-005</b>	<b>2.0000e-005</b>	<b>0.0000</b>	<b>9.5100e-003</b>	<b>9.5100e-003</b>	<b>3.0000e-005</b>	<b>0.0000</b>	<b>0.0101</b>

**7.0 Water Detail**

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**7.1 Mitigation Measures Water**

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	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	21.5715	0.1455	3.5900e-003	26.2778
Unmitigated	21.5715	0.1455	3.5900e-003	26.2778

**7.2 Water by Land Use**

**Unmitigated**

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Enclosed Parking with Elevator	0 / 0	0.0000	0.0000	0.0000	0.0000
Hotel	4.43918 / 0.493243	21.5715	0.1455	3.5900e-003	26.2778
<b>Total</b>		<b>21.5715</b>	<b>0.1455</b>	<b>3.5900e-003</b>	<b>26.2778</b>

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**7.2 Water by Land Use**

**Mitigated**

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Enclosed Parking with Elevator	0 / 0	0.0000	0.0000	0.0000	0.0000
Hotel	4.43918 / 0.493243	21.5715	0.1455	3.5900e-003	26.2778
<b>Total</b>		<b>21.5715</b>	<b>0.1455</b>	<b>3.5900e-003</b>	<b>26.2778</b>

**8.0 Waste Detail**

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**8.1 Mitigation Measures Waste**

**Category/Year**

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	19.4486	1.1494	0.0000	48.1830
Unmitigated	19.4486	1.1494	0.0000	48.1830

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**8.2 Waste by Land Use**

**Unmitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
Hotel	95.81	19.4486	1.1494	0.0000	48.1830
<b>Total</b>		<b>19.4486</b>	<b>1.1494</b>	<b>0.0000</b>	<b>48.1830</b>

**Mitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
Hotel	95.81	19.4486	1.1494	0.0000	48.1830
<b>Total</b>		<b>19.4486</b>	<b>1.1494</b>	<b>0.0000</b>	<b>48.1830</b>

**9.0 Operational Offroad**

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

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**Fire Pumps and Emergency Generators**

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

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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**User Defined Equipment**

Equipment Type	Number
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**11.0 Vegetation**

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**Jefferson Hotel Project  
On-Road Worker, Vendor and Haul Truck Regional Emissions**

**Total On-Road Emissions**

Construction Phase	Source	Year	Daily One-Way Truck Trips	Haul Days per Phase (days)	Work Hours per Day (hours/day)	One-Way Trip Distance per Day (miles)	Regional Emissions CO2e (metric tons/year)
Demolition							18.99
Worker	LDA,LDT1,LDT2	2020	10	53	8	14.7	2.49
Hauling	HHDT	2020	10	53	8	20	16.50
Excavation							279.36
Worker	LDA,LDT1,LDT2	2020	14	75	8	14.7	4.94
Hauling	HHDT	2020	118	75	8	20	274.43
Foundations							23.53
Worker	LDA,LDT1,LDT2	2020	14	79	8	14.7	5.20
Vendor	MHDT,HHDT	2020	26	79	8	6.9	18.33
Concrete Pour							43.39
Worker	LDA,LDT1,LDT2	2020	8	6	8	14.7	0.23
Hauling	HHDT	2020	232	6	8	20	43.16
Building Construction							247.53
Worker	LDA,LDT1,LDT2	2021	66	468	8	14.7	141.21
Vendor	MHDT,HHDT	2021	26	468	8	6.9	106.32
Paving							1.01
Worker	LDA,LDT1,LDT2	2021	20	11	8	14.7	1.01
Architectural Coating							4.79
Worker	LDA,LDT1,LDT2	2022	14	77	8	14.7	4.79

**Jefferson Hotel Project**

**On-Road Worker, Vendor and Haul Truck Regional Emissions**

**On-Road Regional Running Emissions**

Construction Phase	Source	Year	Daily	Haul Days	Work Hours	One-Way	Running Emissions Factor	Regional Emissions
			One-Way Truck Trips	per Phase (days)	per Day (hours/day)	Trip Distance per Day (miles)	(grams/mile)  CO2e	CO2e (metric tons/year)
Demolition								
Worker	LDA,LDT1,LDT2	2020	10	53	8	14.7	3.20E+02	2.49
Hauling	HHDT	2020	10	53	8	20	1.55E+03	16.43
Excavation								
Worker	LDA,LDT1,LDT2	2020	14	75	8	14.7	3.20E+02	4.94
Hauling	HHDT	2020	118	75	8	20	1.55E+03	274.41
Foundations								
Worker	LDA,LDT1,LDT2	2020	14	79	8	14.7	3.20E+02	5.20
Vendor	MHDT,HHDT	2020	26	79	8	6.9	1.29E+03	18.33
Concrete Pour								
Worker	LDA,LDT1,LDT2	2020	8	6	8	14.7	3.20E+02	0.23
Hauling	HHDT	2020	232	6	8	20	1.55E+03	43.16
Building Construction								
Worker	LDA,LDT1,LDT2	2021	66	468	8	14.7	3.11E+02	141.21
Vendor	MHDT,HHDT	2021	26	468	8	6.9	1.27E+03	106.31
Paving								
Worker	LDA,LDT1,LDT2	2021	20	11	8	14.7	3.11E+02	1.01
Architectural Coating								
Worker	LDA,LDT1,LDT2	2022	14	77	8	14.7	3.02E+02	4.79

**Jefferson Hotel Project**  
**On-Road Worker, Vendor and Haul Truck Regional Emissions**

**On-Road Idling Emissions**

Construction Phase	Source	Year	Daily One-Way Truck Trips	Haul Days per Phase (days)	Work Hours per Day (hours/day)	Idling Time per Truck (minutes)	Emissions Factor (g/min) CO2e	Regional Emissions CO2e (metric tons/year)
Demolition								
Worker	LDA,LDT1,LDT2	2020	10	53	8			
Hauling	HHDT	2020	10	53	8	15	8.87E+00	0.07
Excavation								
Worker	LDA,LDT1,LDT2	2020	14	75	8			
Hauling	HHDT	2020	118	75	8	15	8.87E+00	0.02
Foundations								
Worker	LDA,LDT1,LDT2	2020	14	79	8			
Vendor	MHDT,HHDT	2020	26	79	8	15	4.74E+00	0.00
Concrete Pour								
Worker	LDA,LDT1,LDT2	2020	8	6	8			
Hauling	HHDT	2020	232	6	8	15	8.87E+00	0.00
Building Construction								
Worker	LDA,LDT1,LDT2	2021	66	468	8			
Vendor	HHDT	2021	26	468	8	15	4.79E+00	0.01
Paving								
Worker	LDA,LDT1,LDT2	2021	20	11	8			
Architectural Coating								
Worker	LDA,LDT1,LDT2	2022	14	77	8			

Row Labels	ROG	NOX	CO	SOX	PM10 Exhaust	PM10 TireWear	PM10 BrakeWear	PM2.5 Exhaust	PM2.5 TireWear	PM2.5 BrakeWear	CO2	CH4	N2O	
Vehicle Category	Running Exhaust Emission Factor (g/mile)													
2020	LDA	0.014835706	0.050767361	0.830943159	0.002832956	0.001839387	0.008000002	0.036750011	0.0016913	0.002000001	0.015750005	286.2783069	0.003700284	0.005335457
	LDT1	0.042779726	0.15304714	1.766833932	0.003293435	0.00293049	0.008000002	0.036750011	0.002694741	0.002000001	0.015750005	332.8110335	0.009530355	0.010791132
	LDT2	0.02415523	0.107735579	1.176733253	0.003603081	0.00193807	0.008000002	0.036750011	0.001782081	0.002000001	0.015750005	364.1016687	0.005783537	0.0083685
2021	LDA	0.012620648	0.044024016	0.759761649	0.002763981	0.001741313	0.008000002	0.036750011	0.001601106	0.002000001	0.015750005	279.3081476	0.003215674	0.004872989
	LDT1	0.037019286	0.132697667	1.57153653	0.003215391	0.002693598	0.008000002	0.036750011	0.002476858	0.002000001	0.015750005	324.9244479	0.008311445	0.009625649
	LDT2	0.021253604	0.093291449	1.071322135	0.003482925	0.001838833	0.008000002	0.036750011	0.001690806	0.002000001	0.015750005	351.9595074	0.005150357	0.00750331
2022	LDA	0.010807584	0.03867161	0.701626991	0.002691066	0.001649979	0.008000002	0.036750011	0.001517114	0.002000001	0.015750005	271.9398747	0.002812828	0.004493468
	LDT1	0.031959652	0.115457882	1.403423642	0.003134269	0.002476444	0.008000002	0.036750011	0.002277129	0.002000001	0.015750005	316.7268879	0.00724046	0.008633663
	LDT2	0.018748117	0.081381107	0.983936842	0.003362871	0.001746336	0.008000002	0.036750011	0.001605737	0.002000001	0.015750005	339.8277789	0.004595676	0.00677134
2023	LDA	0.009319438	0.0343324	0.65413422	0.002617338	0.001576628	0.008000002	0.036750011	0.001449663	0.002000001	0.015750005	264.4894889	0.002478104	0.004178635
	LDT1	0.027556162	0.100619867	1.257693874	0.00305326	0.002288845	0.008000002	0.036750011	0.002104575	0.002000001	0.015750005	308.5406546	0.006307315	0.007776862
	LDT2	0.016560315	0.071382738	0.908940719	0.003246213	0.001670427	0.008000002	0.036750011	0.001535919	0.002000001	0.015750005	328.0390937	0.00410963	0.006150751
2024	LDA	0.008191101	0.030920638	0.617004881	0.002553397	0.001534772	0.008000002	0.036750011	0.001411166	0.002000001	0.015750005	258.0280953	0.002223257	0.003928912
	LDT1	0.024176011	0.08846207	1.14346608	0.002984855	0.002154311	0.008000002	0.036750011	0.001980836	0.002000001	0.015750005	301.628134	0.005582338	0.007068493
	LDT2	0.014898486	0.063376454	0.852096973	0.00314581	0.001627581	0.008000002	0.036750011	0.001496509	0.002000001	0.015750005	317.8931034	0.003737712	0.005650086
2025	LDA	0.00718125	0.028153498	0.582839439	0.002478635	0.001483172	0.008000002	0.036750011	0.001363722	0.002000001	0.015750005	250.4731482	0.001983743	0.003719174
	LDT1	0.021014544	0.078037148	1.040104807	0.002904279	0.002015703	0.008000002	0.036750011	0.001853364	0.002000001	0.015750005	293.4856913	0.004898226	0.006457782
	LDT2	0.013325358	0.056721868	0.800438292	0.003035546	0.001574096	0.008000002	0.036750011	0.001447323	0.002000001	0.015750005	306.7506205	0.003379599	0.005232051

Composite Light-Duty Running Emission Factors (g/mile)

Row Labels	ROG	NOX	CO	SOX	PM10 Exhaust	PM10 TireWear	PM10 BrakeWear	PM2.5 Exhaust	PM2.5 TireWear	PM2.5 BrakeWear	CO2	CH4	N2O	CO2e
Vehicle Category	Running Exhaust Emission Factor (g/mile)													
2020	2.42E-02	9.06E-02	1.15E+00	3.14E-03	2.14E-03	8.00E-03	3.68E-02	1.96E-03	2.00E-03	1.58E-02	3.17E+02	5.68E-03	7.46E-03	3.20E+02
2021	2.09E-02	7.85E-02	1.04E+00	3.06E-03	2.00E-03	8.00E-03	3.68E-02	1.84E-03	2.00E-03	1.58E-02	3.09E+02	4.97E-03	6.72E-03	3.11E+02
2022	1.81E-02	6.85E-02	9.48E-01	2.97E-03	1.88E-03	8.00E-03	3.68E-02	1.73E-03	2.00E-03	1.58E-02	3.00E+02	4.37E-03	6.10E-03	3.02E+02
2023	1.57E-02	6.02E-02	8.69E-01	2.88E-03	1.78E-03	8.00E-03	3.68E-02	1.63E-03	2.00E-03	1.58E-02	2.91E+02	3.84E-03	5.57E-03	2.93E+02
2024	1.39E-02	5.34E-02	8.07E-01	2.81E-03	1.71E-03	8.00E-03	3.68E-02	1.57E-03	2.00E-03	1.58E-02	2.84E+02	3.44E-03	5.14E-03	2.86E+02
2025	1.22E-02	4.78E-02	7.52E-01	2.72E-03	1.64E-03	8.00E-03	3.68E-02	1.51E-03	2.00E-03	1.58E-02	2.75E+02	3.06E-03	4.78E-03	2.77E+02

Composite Light-Duty Running Emission Factors (lb/mile)

Row Labels	ROG	NOX	CO	SOX	PM10 Exhaust	PM10 TireWear	PM10 BrakeWear	PM2.5 Exhaust	PM2.5 TireWear	PM2.5 BrakeWear	CO2	CH4	N2O
Vehicle Category	Running Exhaust Emission Factor (lb/mile)												
2020	5.32E-05	2.00E-04	2.54E-03	6.92E-06	4.71E-06	1.76E-05	8.10E-05	4.33E-06	4.41E-06	3.47E-05	7.00E-01	1.25E-05	1.64E-05
2021	4.60E-05	1.73E-04	2.29E-03	6.74E-06	4.42E-06	1.76E-05	8.10E-05	4.06E-06	4.41E-06	3.47E-05	6.81E-01	1.10E-05	1.48E-05
2022	3.99E-05	1.51E-04	2.09E-03	6.55E-06	4.15E-06	1.76E-05	8.10E-05	3.81E-06	4.41E-06	3.47E-05	6.62E-01	9.62E-06	1.34E-05
2023	3.46E-05	1.33E-04	1.92E-03	6.36E-06	3.92E-06	1.76E-05	8.10E-05	3.60E-06	4.41E-06	3.47E-05	6.42E-01	8.47E-06	1.23E-05
2024	3.06E-05	1.18E-04	1.78E-03	6.19E-06	3.78E-06	1.76E-05	8.10E-05	3.47E-06	4.41E-06	3.47E-05	6.26E-01	7.59E-06	1.13E-05
2025	2.68E-05	1.05E-04	1.66E-03	6.01E-06	3.61E-06	1.76E-05	8.10E-05	3.32E-06	4.41E-06	3.47E-05	6.07E-01	6.75E-06	1.05E-05

Vehicle Category	Fleet Distribution <sup>1</sup>
LDA	50%
LDT1	25%
LDT2	25%

<sup>1</sup> CalEEMod User's Guide, Appendix A, p. 15-16

Row Labels	ROG	NOX	CO	SOX	PM10 Exhaust	PM10 TireWear	PM10 BrakeWear	PM2.5 Exhaust	PM2.5 TireWear	PM2.5 BrakeWear	CO2	CH4	N2O
Vehicle Category	Running Exhaust Emission Factor (g/mile)												
2020	0.131688113	4.292150071	0.519052787	0.013989881	0.06248521	0.035494772	0.060873534	0.059782127	0.008873693	0.026088657	1480.801786	0.006116572	0.232761419
MHDT	0.146882294	3.020982787	0.509585607	0.009347875	0.089019631	0.012000003	0.130340037	0.085168681	0.003000001	0.055860016	989.4544505	0.006822302	0.155528461
2021	0.107097094	3.846775489	0.443215059	0.013700867	0.052203787	0.035493526	0.060871398	0.049945475	0.008873382	0.026087742	1450.210238	0.004974383	0.227952854
MHDT	0.117825541	2.541827261	0.420894314	0.009150946	0.072767455	0.012000003	0.130340037	0.069619567	0.003000001	0.055860016	968.6099243	0.005472691	0.152525191
2022	0.066311067	3.285140382	0.307101864	0.013295811	0.029646183	0.035492432	0.060869521	0.028363702	0.008873108	0.026086937	1407.335867	0.003079977	0.22121136
MHDT	0.058435145	1.769634249	0.234510134	0.008848701	0.038704027	0.012000003	0.130340037	0.037029708	0.003000001	0.055860016	936.6178281	0.002714161	0.147223279
2023	0.01908827	2.447133573	0.194616837	0.012553132	0.020709531	0.035491216	0.060867436	0.019813646	0.008872804	0.026086044	1328.724736	0.000886601	0.208857025
MHDT	0.007626521	1.136879227	0.070457074	0.008473463	0.007417883	0.012000003	0.130340037	0.007096989	0.003000001	0.055860016	896.8996296	0.000354232	0.140980132
2024	0.019258186	2.468044923	0.199062667	0.012372176	0.020749449	0.035489893	0.060865166	0.019851837	0.008872473	0.026085071	1309.570869	0.000894493	0.205846304
MHDT	0.007669227	1.15610439	0.071999387	0.008365714	0.007461463	0.012000003	0.130340037	0.007138683	0.003000001	0.055860016	885.4946598	0.000356216	0.139187429
2025	0.019256612	2.452985576	0.200028864	0.012137461	0.02079027	0.035488069	0.060862038	0.019890892	0.008872017	0.026083731	1284.726689	0.00089442	0.201941145
MHDT	0.007643831	1.161079005	0.072350697	0.008225821	0.00753276	0.012000003	0.130340037	0.007206896	0.003000001	0.055860016	870.68719	0.000355036	0.136859901

Composite MHDT/HHDT Running Emission Factors (g/mile)

Row Labels	ROG	NOX	CO	SOX	PM10 Exhaust	PM10 TireWear	PM10 BrakeWear	PM2.5 Exhaust	PM2.5 TireWear	PM2.5 BrakeWear	CO2	CH4	N2O	CO2E
Vehicle Category	Running Exhaust Emission Factor (g/mile)													
2020	1.39E-01	3.66E+00	5.14E-01	1.17E-02	7.58E-02	2.37E-02	9.56E-02	7.25E-02	5.94E-03	4.10E-02	1.24E+03	6.47E-03	1.94E-01	1.29E+03
2021	1.12E-01	3.19E+00	4.32E-01	1.14E-02	6.25E-02	2.37E-02	9.56E-02	5.98E-02	5.94E-03	4.10E-02	1.21E+03	5.22E-03	1.90E-01	1.27E+03
2022	6.24E-02	2.53E+00	2.71E-01	1.11E-02	3.42E-02	2.37E-02	9.56E-02	3.27E-02	5.94E-03	4.10E-02	1.17E+03	2.90E-03	1.84E-01	1.23E+03
2023	1.34E-02	1.79E+00	1.33E-01	1.05E-02	1.41E-02	2.37E-02	9.56E-02	1.35E-02	5.94E-03	4.10E-02	1.11E+03	6.20E-04	1.75E-01	1.16E+03
2024	1.35E-02	1.81E+00	1.36E-01	1.04E-02	1.41E-02	2.37E-02	9.56E-02	1.35E-02	5.94E-03	4.10E-02	1.10E+03	6.25E-04	1.73E-01	1.15E+03
2025	1.35E-02	1.81E+00	1.36E-01	1.02E-02	1.42E-02	2.37E-02	9.56E-02	1.35E-02	5.94E-03	4.10E-02	1.08E+03	6.25E-04	1.69E-01	1.13E+03

Composite MHDT/HHDT Running Emission Factors (lb/mile)

Row Labels	ROG	NOX	CO	SOX	PM10 Exhaust	PM10 TireWear	PM10 BrakeWear	PM2.5 Exhaust	PM2.5 TireWear	PM2.5 BrakeWear	CO2	CH4	N2O
Vehicle Category	Running Exhaust Emission Factor (lb/mile)												
2020	3.07E-04	8.06E-03	1.13E-03	2.57E-05	1.67E-04	5.24E-05	2.11E-04	1.60E-04	1.31E-05	9.03E-05	2.72E+00	1.43E-05	4.28E-04
2021	2.48E-04	7.04E-03	9.53E-04	2.52E-05	1.38E-04	5.24E-05	2.11E-04	1.32E-04	1.31E-05	9.03E-05	2.67E+00	1.15E-05	4.19E-04
2022	1.38E-04	5.57E-03	2.44E-05	7.53E-05	7.53E-05	5.24E-05	2.11E-04	7.21E-05	1.31E-05	9.03E-05	2.58E+00	6.39E-06	4.06E-04
2023	2.94E-05	3.95E-03	2.92E-04	2.32E-05	3.10E-05	5.23E-05	2.11E-04	2.97E-05	1.31E-05	9.03E-05	2.45E+00	1.37E-06	3.86E-04
2024	2.97E-05	3.99E-03	2.29E-04	2.29E-05	3.11E-05	5.23E-05	2.11E-04	2.98E-05	1.31E-05	9.03E-05	2.42E+00	1.38E-06	3.80E-04
2025	2.97E-05	3.98E-03	3.00E-04	2.24E-05	3.12E-05	5.23E-05	2.11E-04	2.99E-05	1.31E-05	9.03E-05	2.38E+00	1.38E-06	3.73E-04

Vehicle Category	Fleet Distribution <sup>1</sup>
HHDT	50%
MHDT	50%

<sup>1</sup> CalEEMod User's Guide, Appendix A, p. 15-16

Row Labels	ROG	NOX	CO	SOX	PM10	PM2.5	CO2	CH4	N2O
Vehicle Category	Idling Exhaust Emission Factor (g/vehicle/day)								
2020									
HHDT	5.025090373	67.49360078	60.92842872	0.115231476	0.137872295	0.131908001	12197.02832	0.233402433	1.917202999
MHDT	0.126731896	8.510544834	2.375961793	0.007960362	0.031339142	0.029983424	842.5888829	0.005886368	0.132443239
2021									
HHDT	5.006426889	67.12856953	63.9754825	0.116680488	0.09626202	0.092097767	12350.40341	0.232535562	1.941311427
MHDT	0.114149781	7.710579886	2.384456103	0.007798781	0.025647597	0.024538093	825.4858732	0.005301962	0.129754884
2022									
HHDT	4.953559592	66.75346503	67.54376867	0.118539891	0.037331856	0.035716897	12547.21771	0.230080013	1.972247894
MHDT	0.091276741	6.441753291	2.354049319	0.007603378	0.0151735	0.014517101	804.8028346	0.004239568	0.126503798
2023									
HHDT	4.947315841	60.96427464	72.40695471	0.113820135	0.029866803	0.028574779	12047.64061	0.229790007	1.893721133
MHDT	0.067142904	4.698567679	2.427476101	0.00727638	0.004327591	0.004140381	770.1907694	0.003118614	0.121063263
2024									
HHDT	4.961259019	60.88429323	72.67893025	0.112725772	0.02904266	0.027786287	11931.8044	0.230437632	1.875513492
MHDT	0.065522439	4.514410137	2.431108027	0.007126089	0.003711093	0.003550553	754.2826862	0.003043348	0.118562734
2025									
HHDT	4.973913864	60.82592843	72.92399746	0.111347323	0.028320005	0.027094894	11785.89829	0.231025416	1.852579082
MHDT	0.06415984	4.356358656	2.434988977	0.00698602	0.003188244	0.003050322	739.4566874	0.002980058	0.116232294

Row Labels	ROG	NOX	CO	SOX	PM10	PM2.5	CO2	CH4	N2O
Vehicle Category	Idling Exhaust Emission Factor (g/vehicle/day)								
2020	2.575911135	38.00207281	31.65219526	0.061595919	0.084605719	0.080945713	6519.808604	0.119644401	1.024823119
2021	2.560288335	37.41957471	33.1799693	0.062239634	0.060954808	0.05831793	6587.944644	0.118918762	1.035533155
2022	2.522418167	36.59760916	34.94890899	0.063071635	0.026252678	0.025116999	6676.010272	0.117159791	1.049375846
2023	2.507229372	32.83142116	37.41721541	0.060548258	0.017097197	0.01635758	6408.915688	0.116454311	1.007392297
2024	2.513390729	32.69935168	37.55501914	0.05992593	0.016376877	0.01566842	6343.043545	0.11674049	0.997038113
2025	2.519036852	32.59114354	37.67949322	0.059166672	0.015754124	0.015072608	6262.677487	0.117002737	0.984405688

Composite MHDT/HHDT Idling Emission Factors (g/min)

Row Labels	ROG	NOX	CO	SOX	PM10	PM2.5	CO2	CH4	N2O	CO2e
Vehicle Category	Idling Exhaust Emission Factor (g/min)									
2020	1.79E-03	2.64E-02	2.20E-02	4.28E-05	5.88E-05	5.62E-05	4.53E+00	8.31E-05	7.12E-04	4.74E+00
2021	1.78E-03	2.60E-02	2.30E-02	4.32E-05	4.23E-05	4.05E-05	4.57E+00	8.26E-05	7.19E-04	4.79E+00
2022	1.75E-03	2.54E-02	2.43E-02	4.38E-05	1.82E-05	1.74E-05	4.64E+00	8.14E-05	7.29E-04	4.86E+00
2023	1.74E-03	2.28E-02	2.60E-02	4.20E-05	1.19E-05	1.14E-05	4.45E+00	8.09E-05	7.00E-04	4.66E+00
2024	1.75E-03	2.27E-02	2.61E-02	4.16E-05	1.14E-05	1.09E-05	4.40E+00	8.11E-05	6.92E-04	4.61E+00
2025	1.75E-03	2.26E-02	2.62E-02	4.11E-05	1.09E-05	1.05E-05	4.35E+00	8.13E-05	6.84E-04	4.55E+00

Composite MHDT/HHDT Idling Emission Factors (lb/min)

Row Labels	ROG	NOX	CO	SOX	PM10	PM2.5	CO2	CH4	N2O
Vehicle Category	Idling Exhaust Emission Factor (lb/min)								
2020	3.94E-06	5.82E-05	4.85E-05	9.43E-08	1.30E-07	1.24E-07	9.98E-03	1.83E-07	1.57E-06
2021	3.92E-06	5.73E-05	5.08E-05	9.53E-08	9.33E-08	8.93E-08	1.01E-02	1.82E-07	1.59E-06
2022	3.86E-06	5.60E-05	5.35E-05	9.66E-08	4.02E-08	3.85E-08	1.02E-02	1.79E-07	1.61E-06
2023	3.84E-06	5.03E-05	5.73E-05	9.27E-08	2.62E-08	2.50E-08	9.81E-03	1.78E-07	1.54E-06
2024	3.85E-06	5.01E-05	5.75E-05	9.17E-08	2.51E-08	2.40E-08	9.71E-03	1.79E-07	1.53E-06
2025	3.86E-06	4.99E-05	5.77E-05	9.06E-08	2.41E-08	2.31E-08	9.59E-03	1.79E-07	1.51E-06

Vehicle Category	Fleet Distribution <sup>1</sup>
HHDT	50%
MHDT	50%

<sup>1</sup>CalEEMod User's Guide, Appendix A, p. 15-16

Row Labels	ROG	NOX	CO	SOX	PM10 Exhaust	PM10 TireWear	PM10 BrakeWear	PM2.5 Exhaust	PM2.5 TireWear	PM2.5 BrakeWear	CO2	CH4	N2O
Vehicle Category	Running Exhaust Emission Factor (g/mile)												
2020	0.131688113	4.292150071	0.519052787	0.013989881	0.06248521	0.035494772	0.060873534	0.059782127	0.008873693	0.026088657	1480.801786	0.006116572	0.232761419
2021	0.107097094	3.846775489	0.443215059	0.013700867	0.052203787	0.035493526	0.060871398	0.049945475	0.008873382	0.026087742	1450.210238	0.004974383	0.227952854
2022	0.066311067	3.285140382	0.307101864	0.013295811	0.029646183	0.035492432	0.060869521	0.028363702	0.008873108	0.026086937	1407.335867	0.003079977	0.2212136
2023	0.01908827	2.447133573	0.194616837	0.012553132	0.020709531	0.035491216	0.060867436	0.019813646	0.008872804	0.026086044	1328.724736	0.000886601	0.208857025
2024	0.019258186	2.468044923	0.199062667	0.012372176	0.020749449	0.035489893	0.060865166	0.019851837	0.008872473	0.026085071	1309.570869	0.000894493	0.205846304
2025	0.019256612	2.452985576	0.200028864	0.012137461	0.02079027	0.035488069	0.060862038	0.019890892	0.008872017	0.026083731	1284.726689	0.00089442	0.201941145

HHDT Running Emission Factors (g/mile)

Row Labels	ROG	NOX	CO	SOX	PM10 Exhaust	PM10 TireWear	PM10 BrakeWear	PM2.5 Exhaust	PM2.5 TireWear	PM2.5 BrakeWear	CO2	CH4	N2O	CO2e
Vehicle Category	Running Exhaust Emission Factor (g/mile)													
2020	1.32E-01	4.29E+00	5.19E-01	1.40E-02	6.25E-02	3.55E-02	6.09E-02	5.98E-02	8.87E-03	2.61E-02	1.48E+03	6.12E-03	2.33E-01	1.55E+03
2021	1.07E-01	3.85E+00	4.43E-01	1.37E-02	5.22E-02	3.55E-02	6.09E-02	4.99E-02	8.87E-03	2.61E-02	1.45E+03	4.97E-03	2.28E-01	1.52E+03
2022	6.63E-02	3.29E+00	3.07E-01	1.33E-02	2.96E-02	3.55E-02	6.09E-02	2.84E-02	8.87E-03	2.61E-02	1.41E+03	3.08E-03	2.21E-01	1.47E+03
2023	1.91E-02	2.45E+00	1.95E-01	1.26E-02	2.07E-02	3.55E-02	6.09E-02	1.98E-02	8.87E-03	2.61E-02	1.33E+03	8.87E-04	2.09E-01	1.39E+03
2024	1.93E-02	2.47E+00	1.99E-01	1.24E-02	2.07E-02	3.55E-02	6.09E-02	1.99E-02	8.87E-03	2.61E-02	1.31E+03	8.94E-04	2.06E-01	1.37E+03
2025	1.93E-02	2.45E+00	2.00E-01	1.21E-02	2.08E-02	3.55E-02	6.09E-02	1.99E-02	8.87E-03	2.61E-02	1.28E+03	8.94E-04	2.02E-01	1.34E+03

HHDT Running Emission Factors (lb/mile)

Row Labels	ROG	NOX	CO	SOX	PM10 Exhaust	PM10 TireWear	PM10 BrakeWear	PM2.5 Exhaust	PM2.5 TireWear	PM2.5 BrakeWear	CO2	CH4	N2O
Vehicle Category	Running Exhaust Emission Factor (lb/mile)												
2020	2.90E-04	9.46E-03	1.14E-03	3.08E-05	1.38E-04	7.83E-05	1.34E-04	1.32E-04	1.96E-05	5.75E-05	3.26E+00	1.35E-05	5.13E-04
2021	2.36E-04	8.48E-03	9.77E-04	3.02E-05	1.15E-04	7.82E-05	1.34E-04	1.10E-04	1.96E-05	5.75E-05	3.20E+00	1.10E-05	5.03E-04
2022	1.46E-04	7.24E-03	6.77E-04	2.93E-05	6.54E-05	7.82E-05	1.34E-04	6.25E-05	1.96E-05	5.75E-05	3.10E+00	6.79E-06	4.88E-04
2023	4.21E-05	5.39E-03	4.29E-04	2.77E-05	4.57E-05	7.82E-05	1.34E-04	4.37E-05	1.96E-05	5.75E-05	2.93E+00	1.95E-06	4.60E-04
2024	4.25E-05	5.44E-03	4.39E-04	2.73E-05	4.57E-05	7.82E-05	1.34E-04	4.38E-05	1.96E-05	5.75E-05	2.89E+00	1.97E-06	4.54E-04
2025	4.25E-05	5.41E-03	4.41E-04	2.68E-05	4.58E-05	7.82E-05	1.34E-04	4.39E-05	1.96E-05	5.75E-05	2.83E+00	1.97E-06	4.45E-04

Row Labels	ROG	NOX	CO	SOX	PM10	PM2.5	CO2	CH4	N2O
Vehicle Category	Idling Exhaust Emission Factor (g/vehicle/day)								
2020	5.025090373	67.49360078	60.92842872	0.115231476	0.137872295	0.131908001	12197.02832	0.233402433	1.917202999
2021	5.006426889	67.12856953	63.9754825	0.116680488	0.09626202	0.092097767	12350.40341	0.232535562	1.941311427
2022	4.953559592	66.75346503	67.54376867	0.118539891	0.037331856	0.035716897	12547.21771	0.230080013	1.972247894
2023	4.947315841	60.96427464	72.40695471	0.113820135	0.029866803	0.028574779	12047.64061	0.229790007	1.89372133
2024	4.961259019	60.88429323	72.67893025	0.112725772	0.02904266	0.027786287	11931.8044	0.230437632	1.875513492
2025	4.973913864	60.82592843	72.92399746	0.111347323	0.028320005	0.027094894	11785.89829	0.231025416	1.852579082

Row Labels	ROG	NOX	CO	SOX	PM10	PM2.5	CO2	CH4	N2O
Vehicle Category	Idling Exhaust Emission Factor (g/vehicle/day)								
2020	5.025090373	67.49360078	60.92842872	0.115231476	0.137872295	0.131908001	12197.02832	0.233402433	1.917202999
2021	5.006426889	67.12856953	63.9754825	0.116680488	0.09626202	0.092097767	12350.40341	0.232535562	1.941311427
2022	4.953559592	66.75346503	67.54376867	0.118539891	0.037331856	0.035716897	12547.21771	0.230080013	1.972247894
2023	4.947315841	60.96427464	72.40695471	0.113820135	0.029866803	0.028574779	12047.64061	0.229790007	1.89372133
2024	4.961259019	60.88429323	72.67893025	0.112725772	0.02904266	0.027786287	11931.8044	0.230437632	1.875513492
2025	4.973913864	60.82592843	72.92399746	0.111347323	0.028320005	0.027094894	11785.89829	0.231025416	1.852579082

Composite MHDH/HHDT Idling Emission Factors (g/min)

Row Labels	ROG	NOX	CO	SOX	PM10	PM2.5	CO2	CH4	N2O	CO2e
Vehicle Category	Idling Exhaust Emission Factor (g/min)									
2020	3.49E-03	4.69E-02	4.23E-02	8.00E-05	9.57E-05	9.16E-05	8.47E+00	1.62E-04	1.33E-03	8.87E+00
2021	3.48E-03	4.66E-02	4.44E-02	8.10E-05	6.68E-05	6.40E-05	8.58E+00	1.61E-04	1.35E-03	8.98E+00
2022	3.44E-03	4.64E-02	4.69E-02	8.23E-05	2.59E-05	2.48E-05	8.71E+00	1.60E-04	1.37E-03	9.13E+00
2023	3.44E-03	4.23E-02	5.03E-02	7.90E-05	2.07E-05	1.98E-05	8.37E+00	1.60E-04	1.32E-03	8.76E+00
2024	3.45E-03	4.23E-02	5.05E-02	7.83E-05	2.02E-05	1.93E-05	8.29E+00	1.60E-04	1.30E-03	8.68E+00
2025	3.45E-03	4.22E-02	5.06E-02	7.73E-05	1.97E-05	1.88E-05	8.18E+00	1.60E-04	1.29E-03	8.57E+00

Composite MHDH/HHDT Idling Emission Factors (lb/min)

Row Labels	ROG	NOX	CO	SOX	PM10	PM2.5	CO2	CH4	N2O
Vehicle Category	Idling Exhaust Emission Factor (lb/min)								
2020	7.69E-06	1.03E-04	9.33E-05	1.76E-07	2.11E-07	2.02E-07	1.87E-02	3.57E-07	2.94E-06
2021	7.66E-06	1.03E-04	9.79E-05	1.79E-07	1.47E-07	1.41E-07	1.89E-02	3.56E-07	2.97E-06
2022	7.58E-06	1.02E-04	1.03E-04	1.81E-07	5.72E-08	5.47E-08	1.92E-02	3.52E-07	3.02E-06
2023	7.57E-06	9.33E-05	1.11E-04	1.74E-07	4.57E-08	4.37E-08	1.84E-02	3.52E-07	2.90E-06
2024	7.60E-06	9.32E-05	1.11E-04	1.73E-07	4.45E-08	4.25E-08	1.83E-02	3.53E-07	2.87E-06
2025	7.61E-06	9.31E-05	1.12E-04	1.70E-07	4.34E-08	4.15E-08	1.80E-02	3.54E-07	2.84E-06

## **A-2 Existing Site Operational Emissions**

11469 Jefferson - South Coast AQMD Air District, Annual

**11469 Jefferson**  
**South Coast AQMD Air District, Annual**

**1.0 Project Characteristics**

**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Parking Lot	20.52	1000sqft	0.39	20,516.00	0
Strip Mall	13.30	1000sqft	0.39	13,301.00	0

**1.2 Other Project Characteristics**

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>	2.2	<b>Precipitation Freq (Days)</b>	31
<b>Climate Zone</b>	11			<b>Operational Year</b>	2018
<b>Utility Company</b>	Southern California Edison				
<b>CO2 Intensity (lb/MWhr)</b>	578.93	<b>CH4 Intensity (lb/MWhr)</b>	0.029	<b>N2O Intensity (lb/MWhr)</b>	0.006

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

Project Characteristics - see operational assumptions

Land Use - see operational assumptions

Vehicle Trips - Trip rates from Project traffic study. Trip percentages adjusted to account for 25% pass-by trips in traffic study.

Vehicle Emission Factors - Updated to EMFAC2017 EFs

Energy Use - see operational assumptions

Waste Mitigation -

Table Name	Column Name	Default Value	New Value
tblEnergyUse	LightingElect	0.88	0.35
tblEnergyUse	LightingElect	7.56	6.26
tblEnergyUse	T24E	5.17	4.01
tblEnergyUse	T24NG	1.33	1.15
tblFleetMix	HHD	0.03	8.8816e-003
tblFleetMix	HHD	0.03	8.8816e-003
tblFleetMix	LDA	0.54	0.54
tblFleetMix	LDA	0.54	0.54
tblFleetMix	LDT1	0.04	0.06
tblFleetMix	LDT1	0.04	0.06
tblFleetMix	LDT2	0.20	0.18
tblFleetMix	LDT2	0.20	0.18
tblFleetMix	LHD1	0.02	0.02
tblFleetMix	LHD1	0.02	0.02
tblFleetMix	LHD2	5.8790e-003	5.7440e-003
tblFleetMix	LHD2	5.8790e-003	5.7440e-003
tblFleetMix	MCY	4.6560e-003	0.02
tblFleetMix	MCY	4.6560e-003	0.02
tblFleetMix	MDV	0.13	0.14
tblFleetMix	MDV	0.13	0.14
tblFleetMix	MH	1.0290e-003	4.2203e-003
tblFleetMix	MH	1.0290e-003	4.2203e-003
tblFleetMix	MHD	0.02	0.01
tblFleetMix	MHD	0.02	0.01
tblFleetMix	OBUS	1.9580e-003	8.7399e-004
tblFleetMix	OBUS	1.9580e-003	8.7399e-004
tblFleetMix	SBUS	7.0200e-004	7.3985e-004
tblFleetMix	SBUS	7.0200e-004	7.3985e-004
tblFleetMix	UBUS	2.1130e-003	5.4209e-004

tblFleetMix	UBUS	2.1130e-003	5.4209e-004
tblLandUse	LandUseSquareFeet	20,520.00	20,516.00
tblLandUse	LandUseSquareFeet	13,300.00	13,301.00
tblLandUse	LotAcreage	0.47	0.39
tblLandUse	LotAcreage	0.31	0.39
tblProjectCharacteristics	CO2IntensityFactor	702.44	578.93
tblVehicleEF	HHD	0.88	0.03
tblVehicleEF	HHD	0.08	0.08
tblVehicleEF	HHD	0.13	0.00
tblVehicleEF	HHD	3.32	5.23
tblVehicleEF	HHD	1.00	0.92
tblVehicleEF	HHD	3.42	0.01
tblVehicleEF	HHD	5,009.33	1,138.51
tblVehicleEF	HHD	1,669.20	1,568.92
tblVehicleEF	HHD	10.19	0.14
tblVehicleEF	HHD	26.37	6.76
tblVehicleEF	HHD	4.88	5.24
tblVehicleEF	HHD	19.76	1.39
tblVehicleEF	HHD	0.03	0.02
tblVehicleEF	HHD	0.06	0.06
tblVehicleEF	HHD	0.04	0.04
tblVehicleEF	HHD	0.03	0.09
tblVehicleEF	HHD	1.6200e-004	7.0000e-006
tblVehicleEF	HHD	0.03	0.02
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	8.8190e-003	8.8740e-003
tblVehicleEF	HHD	0.02	0.09
tblVehicleEF	HHD	1.5200e-004	6.0000e-006
tblVehicleEF	HHD	1.5700e-004	1.7000e-005
tblVehicleEF	HHD	7.4750e-003	8.7300e-004

tblVehicleEF	HHD	0.84	0.49
tblVehicleEF	HHD	1.0600e-004	1.1000e-005
tblVehicleEF	HHD	0.15	0.20
tblVehicleEF	HHD	5.9700e-004	3.6760e-003
tblVehicleEF	HHD	0.12	2.0000e-006
tblVehicleEF	HHD	0.05	0.01
tblVehicleEF	HHD	0.02	0.01
tblVehicleEF	HHD	1.6000e-004	1.0000e-006
tblVehicleEF	HHD	1.5700e-004	1.7000e-005
tblVehicleEF	HHD	7.4750e-003	8.7300e-004
tblVehicleEF	HHD	0.98	0.57
tblVehicleEF	HHD	1.0600e-004	1.1000e-005
tblVehicleEF	HHD	0.25	0.30
tblVehicleEF	HHD	5.9700e-004	3.6760e-003
tblVehicleEF	HHD	0.13	2.0000e-006
tblVehicleEF	HHD	0.83	0.03
tblVehicleEF	HHD	0.08	0.08
tblVehicleEF	HHD	0.13	4.0673e-007
tblVehicleEF	HHD	2.42	5.03
tblVehicleEF	HHD	1.00	0.92
tblVehicleEF	HHD	3.26	9.5472e-003
tblVehicleEF	HHD	5,302.12	1,144.85
tblVehicleEF	HHD	1,669.20	1,568.92
tblVehicleEF	HHD	10.19	0.14
tblVehicleEF	HHD	27.20	6.67
tblVehicleEF	HHD	4.61	4.96
tblVehicleEF	HHD	19.75	1.39
tblVehicleEF	HHD	0.03	0.02
tblVehicleEF	HHD	0.06	0.06
tblVehicleEF	HHD	0.04	0.04

tblVehicleEF	HHD	0.03	0.09
tblVehicleEF	HHD	1.6200e-004	6.5633e-006
tblVehicleEF	HHD	0.03	0.02
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	8.8190e-003	8.8738e-003
tblVehicleEF	HHD	0.02	0.09
tblVehicleEF	HHD	1.5200e-004	6.1762e-006
tblVehicleEF	HHD	2.5700e-004	2.8311e-005
tblVehicleEF	HHD	7.7700e-003	8.9460e-004
tblVehicleEF	HHD	0.79	0.50
tblVehicleEF	HHD	1.7300e-004	1.8720e-005
tblVehicleEF	HHD	0.15	0.20
tblVehicleEF	HHD	5.9300e-004	3.6711e-003
tblVehicleEF	HHD	0.12	2.1473e-006
tblVehicleEF	HHD	0.05	0.01
tblVehicleEF	HHD	0.02	0.01
tblVehicleEF	HHD	1.5700e-004	1.4234e-006
tblVehicleEF	HHD	2.5700e-004	2.8311e-005
tblVehicleEF	HHD	7.7700e-003	8.9460e-004
tblVehicleEF	HHD	0.92	0.58
tblVehicleEF	HHD	1.7300e-004	1.8720e-005
tblVehicleEF	HHD	0.25	0.30
tblVehicleEF	HHD	5.9300e-004	3.6711e-003
tblVehicleEF	HHD	0.13	2.3510e-006
tblVehicleEF	HHD	0.94	0.03
tblVehicleEF	HHD	0.08	0.08
tblVehicleEF	HHD	0.14	4.2799e-007
tblVehicleEF	HHD	4.55	5.50
tblVehicleEF	HHD	1.00	0.92
tblVehicleEF	HHD	3.44	0.01

tblVehicleEF	HHD	4,605.00	1,129.76
tblVehicleEF	HHD	1,669.20	1,568.92
tblVehicleEF	HHD	10.19	0.14
tblVehicleEF	HHD	25.21	6.87
tblVehicleEF	HHD	4.81	5.17
tblVehicleEF	HHD	19.77	1.39
tblVehicleEF	HHD	0.04	0.03
tblVehicleEF	HHD	0.06	0.06
tblVehicleEF	HHD	0.04	0.04
tblVehicleEF	HHD	0.03	0.09
tblVehicleEF	HHD	1.6200e-004	6.5633e-006
tblVehicleEF	HHD	0.04	0.02
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	8.8190e-003	8.8738e-003
tblVehicleEF	HHD	0.02	0.09
tblVehicleEF	HHD	1.5200e-004	6.1762e-006
tblVehicleEF	HHD	1.5700e-004	1.8150e-005
tblVehicleEF	HHD	8.7800e-003	1.0977e-003
tblVehicleEF	HHD	0.90	0.48
tblVehicleEF	HHD	1.0500e-004	1.1380e-005
tblVehicleEF	HHD	0.15	0.20
tblVehicleEF	HHD	6.3800e-004	3.8771e-003
tblVehicleEF	HHD	0.12	2.2515e-006
tblVehicleEF	HHD	0.04	0.01
tblVehicleEF	HHD	0.02	0.01
tblVehicleEF	HHD	1.6000e-004	1.4325e-006
tblVehicleEF	HHD	1.5700e-004	1.8150e-005
tblVehicleEF	HHD	8.7800e-003	1.0977e-003
tblVehicleEF	HHD	1.05	0.55
tblVehicleEF	HHD	1.0500e-004	1.1380e-005

tblVehicleEF	HHD	0.25	0.30
tblVehicleEF	HHD	6.3800e-004	3.8771e-003
tblVehicleEF	HHD	0.13	2.4651e-006
tblVehicleEF	LDA	7.3040e-003	5.0710e-003
tblVehicleEF	LDA	9.2160e-003	0.07
tblVehicleEF	LDA	0.85	1.02
tblVehicleEF	LDA	1.72	2.36
tblVehicleEF	LDA	308.31	297.50
tblVehicleEF	LDA	64.95	59.50
tblVehicleEF	LDA	0.07	0.07
tblVehicleEF	LDA	0.12	0.24
tblVehicleEF	LDA	2.1480e-003	1.9570e-003
tblVehicleEF	LDA	2.3680e-003	2.1220e-003
tblVehicleEF	LDA	1.9830e-003	1.8040e-003
tblVehicleEF	LDA	2.1790e-003	1.9520e-003
tblVehicleEF	LDA	0.06	0.08
tblVehicleEF	LDA	0.14	0.13
tblVehicleEF	LDA	0.05	0.07
tblVehicleEF	LDA	0.02	0.02
tblVehicleEF	LDA	0.05	0.26
tblVehicleEF	LDA	0.12	0.33
tblVehicleEF	LDA	3.0910e-003	2.9430e-003
tblVehicleEF	LDA	6.7900e-004	5.8900e-004
tblVehicleEF	LDA	0.06	0.08
tblVehicleEF	LDA	0.14	0.13
tblVehicleEF	LDA	0.05	0.07
tblVehicleEF	LDA	0.03	0.03
tblVehicleEF	LDA	0.05	0.26
tblVehicleEF	LDA	0.14	0.36
tblVehicleEF	LDA	7.8020e-003	5.4409e-003

tblVehicleEF	LDA	8.1630e-003	0.06
tblVehicleEF	LDA	0.95	1.14
tblVehicleEF	LDA	1.48	2.02
tblVehicleEF	LDA	324.75	312.83
tblVehicleEF	LDA	64.95	58.84
tblVehicleEF	LDA	0.07	0.06
tblVehicleEF	LDA	0.11	0.22
tblVehicleEF	LDA	0.04	0.04
tblVehicleEF	LDA	8.0000e-003	8.0000e-003
tblVehicleEF	LDA	2.1480e-003	1.9572e-003
tblVehicleEF	LDA	2.3680e-003	2.1223e-003
tblVehicleEF	LDA	0.02	0.02
tblVehicleEF	LDA	2.0000e-003	2.0000e-003
tblVehicleEF	LDA	1.9830e-003	1.8043e-003
tblVehicleEF	LDA	2.1790e-003	1.9524e-003
tblVehicleEF	LDA	0.09	0.12
tblVehicleEF	LDA	0.15	0.14
tblVehicleEF	LDA	0.07	0.10
tblVehicleEF	LDA	0.02	0.02
tblVehicleEF	LDA	0.05	0.24
tblVehicleEF	LDA	0.11	0.29
tblVehicleEF	LDA	3.2560e-003	3.0950e-003
tblVehicleEF	LDA	6.7500e-004	5.8229e-004
tblVehicleEF	LDA	0.09	0.12
tblVehicleEF	LDA	0.15	0.14
tblVehicleEF	LDA	0.07	0.10
tblVehicleEF	LDA	0.03	0.03
tblVehicleEF	LDA	0.05	0.24
tblVehicleEF	LDA	0.12	0.32
tblVehicleEF	LDA	7.1500e-003	4.9639e-003

tblVehicleEF	LDA	9.4290e-003	0.07
tblVehicleEF	LDA	0.82	0.99
tblVehicleEF	LDA	1.77	2.43
tblVehicleEF	LDA	302.95	292.47
tblVehicleEF	LDA	64.95	59.64
tblVehicleEF	LDA	0.07	0.07
tblVehicleEF	LDA	0.12	0.24
tblVehicleEF	LDA	0.04	0.04
tblVehicleEF	LDA	8.0000e-003	8.0000e-003
tblVehicleEF	LDA	2.1480e-003	1.9572e-003
tblVehicleEF	LDA	2.3680e-003	2.1223e-003
tblVehicleEF	LDA	0.02	0.02
tblVehicleEF	LDA	2.0000e-003	2.0000e-003
tblVehicleEF	LDA	1.9830e-003	1.8043e-003
tblVehicleEF	LDA	2.1790e-003	1.9524e-003
tblVehicleEF	LDA	0.06	0.07
tblVehicleEF	LDA	0.15	0.15
tblVehicleEF	LDA	0.05	0.06
tblVehicleEF	LDA	0.02	0.02
tblVehicleEF	LDA	0.05	0.29
tblVehicleEF	LDA	0.13	0.34
tblVehicleEF	LDA	3.0360e-003	2.8935e-003
tblVehicleEF	LDA	6.8000e-004	5.9019e-004
tblVehicleEF	LDA	0.06	0.07
tblVehicleEF	LDA	0.15	0.15
tblVehicleEF	LDA	0.05	0.06
tblVehicleEF	LDA	0.03	0.03
tblVehicleEF	LDA	0.05	0.29
tblVehicleEF	LDA	0.14	0.37
tblVehicleEF	LDT1	0.02	0.01

tblVehicleEF	LDT1	0.02	0.10
tblVehicleEF	LDT1	2.23	2.30
tblVehicleEF	LDT1	4.22	2.66
tblVehicleEF	LDT1	366.68	349.65
tblVehicleEF	LDT1	76.41	71.10
tblVehicleEF	LDT1	0.21	0.21
tblVehicleEF	LDT1	0.25	0.37
tblVehicleEF	LDT1	3.8900e-003	3.4440e-003
tblVehicleEF	LDT1	4.1360e-003	3.4350e-003
tblVehicleEF	LDT1	3.5850e-003	3.1720e-003
tblVehicleEF	LDT1	3.8060e-003	3.1600e-003
tblVehicleEF	LDT1	0.18	0.20
tblVehicleEF	LDT1	0.35	0.29
tblVehicleEF	LDT1	0.13	0.15
tblVehicleEF	LDT1	0.06	0.06
tblVehicleEF	LDT1	0.22	1.00
tblVehicleEF	LDT1	0.31	0.56
tblVehicleEF	LDT1	3.6970e-003	3.4600e-003
tblVehicleEF	LDT1	8.3900e-004	7.0400e-004
tblVehicleEF	LDT1	0.18	0.20
tblVehicleEF	LDT1	0.35	0.29
tblVehicleEF	LDT1	0.13	0.15
tblVehicleEF	LDT1	0.08	0.09
tblVehicleEF	LDT1	0.22	1.00
tblVehicleEF	LDT1	0.34	0.61
tblVehicleEF	LDT1	0.02	0.01
tblVehicleEF	LDT1	0.02	0.09
tblVehicleEF	LDT1	2.44	2.53
tblVehicleEF	LDT1	3.60	2.27
tblVehicleEF	LDT1	384.83	365.37

tblVehicleEF	LDT1	76.41	70.25
tblVehicleEF	LDT1	0.19	0.18
tblVehicleEF	LDT1	0.23	0.34
tblVehicleEF	LDT1	0.04	0.04
tblVehicleEF	LDT1	8.0000e-003	8.0000e-003
tblVehicleEF	LDT1	3.8900e-003	3.4442e-003
tblVehicleEF	LDT1	4.1360e-003	3.4353e-003
tblVehicleEF	LDT1	0.02	0.02
tblVehicleEF	LDT1	2.0000e-003	2.0000e-003
tblVehicleEF	LDT1	3.5850e-003	3.1720e-003
tblVehicleEF	LDT1	3.8060e-003	3.1604e-003
tblVehicleEF	LDT1	0.29	0.33
tblVehicleEF	LDT1	0.38	0.32
tblVehicleEF	LDT1	0.21	0.23
tblVehicleEF	LDT1	0.06	0.07
tblVehicleEF	LDT1	0.20	0.94
tblVehicleEF	LDT1	0.27	0.49
tblVehicleEF	LDT1	3.8820e-003	3.6155e-003
tblVehicleEF	LDT1	8.2800e-004	6.9522e-004
tblVehicleEF	LDT1	0.29	0.33
tblVehicleEF	LDT1	0.38	0.32
tblVehicleEF	LDT1	0.21	0.23
tblVehicleEF	LDT1	0.08	0.09
tblVehicleEF	LDT1	0.20	0.94
tblVehicleEF	LDT1	0.30	0.54
tblVehicleEF	LDT1	0.02	0.01
tblVehicleEF	LDT1	0.02	0.11
tblVehicleEF	LDT1	2.16	2.22
tblVehicleEF	LDT1	4.34	2.75
tblVehicleEF	LDT1	360.66	344.38

tblVehicleEF	LDT1	76.41	71.27
tblVehicleEF	LDT1	0.21	0.20
tblVehicleEF	LDT1	0.25	0.37
tblVehicleEF	LDT1	0.04	0.04
tblVehicleEF	LDT1	8.0000e-003	8.0000e-003
tblVehicleEF	LDT1	3.8900e-003	3.4442e-003
tblVehicleEF	LDT1	4.1360e-003	3.4353e-003
tblVehicleEF	LDT1	0.02	0.02
tblVehicleEF	LDT1	2.0000e-003	2.0000e-003
tblVehicleEF	LDT1	3.5850e-003	3.1720e-003
tblVehicleEF	LDT1	3.8060e-003	3.1604e-003
tblVehicleEF	LDT1	0.17	0.20
tblVehicleEF	LDT1	0.40	0.33
tblVehicleEF	LDT1	0.13	0.14
tblVehicleEF	LDT1	0.05	0.06
tblVehicleEF	LDT1	0.26	1.18
tblVehicleEF	LDT1	0.32	0.57
tblVehicleEF	LDT1	3.6360e-003	3.4078e-003
tblVehicleEF	LDT1	8.4100e-004	7.0528e-004
tblVehicleEF	LDT1	0.17	0.20
tblVehicleEF	LDT1	0.40	0.33
tblVehicleEF	LDT1	0.13	0.14
tblVehicleEF	LDT1	0.08	0.09
tblVehicleEF	LDT1	0.26	1.18
tblVehicleEF	LDT1	0.35	0.63
tblVehicleEF	LDT2	9.7170e-003	7.7360e-003
tblVehicleEF	LDT2	0.01	0.09
tblVehicleEF	LDT2	1.12	1.47
tblVehicleEF	LDT2	2.16	3.09
tblVehicleEF	LDT2	419.10	387.91

tblVehicleEF	LDT2	88.11	79.13
tblVehicleEF	LDT2	0.12	0.15
tblVehicleEF	LDT2	0.20	0.42
tblVehicleEF	LDT2	1.9820e-003	2.0310e-003
tblVehicleEF	LDT2	2.2910e-003	2.1190e-003
tblVehicleEF	LDT2	1.8240e-003	1.8700e-003
tblVehicleEF	LDT2	2.1080e-003	1.9500e-003
tblVehicleEF	LDT2	0.06	0.09
tblVehicleEF	LDT2	0.14	0.16
tblVehicleEF	LDT2	0.06	0.09
tblVehicleEF	LDT2	0.03	0.03
tblVehicleEF	LDT2	0.07	0.49
tblVehicleEF	LDT2	0.15	0.45
tblVehicleEF	LDT2	4.2020e-003	3.8380e-003
tblVehicleEF	LDT2	9.1800e-004	7.8300e-004
tblVehicleEF	LDT2	0.06	0.09
tblVehicleEF	LDT2	0.14	0.16
tblVehicleEF	LDT2	0.06	0.09
tblVehicleEF	LDT2	0.04	0.05
tblVehicleEF	LDT2	0.07	0.49
tblVehicleEF	LDT2	0.16	0.49
tblVehicleEF	LDT2	0.01	8.2578e-003
tblVehicleEF	LDT2	9.8690e-003	0.08
tblVehicleEF	LDT2	1.24	1.63
tblVehicleEF	LDT2	1.86	2.65
tblVehicleEF	LDT2	440.61	403.95
tblVehicleEF	LDT2	88.11	78.25
tblVehicleEF	LDT2	0.11	0.13
tblVehicleEF	LDT2	0.19	0.39
tblVehicleEF	LDT2	0.04	0.04

tblVehicleEF	LDT2	8.0000e-003	8.0000e-003
tblVehicleEF	LDT2	1.9820e-003	2.0313e-003
tblVehicleEF	LDT2	2.2910e-003	2.1194e-003
tblVehicleEF	LDT2	0.02	0.02
tblVehicleEF	LDT2	2.0000e-003	2.0000e-003
tblVehicleEF	LDT2	1.8240e-003	1.8705e-003
tblVehicleEF	LDT2	2.1080e-003	1.9499e-003
tblVehicleEF	LDT2	0.10	0.15
tblVehicleEF	LDT2	0.15	0.17
tblVehicleEF	LDT2	0.09	0.13
tblVehicleEF	LDT2	0.03	0.04
tblVehicleEF	LDT2	0.07	0.46
tblVehicleEF	LDT2	0.13	0.40
tblVehicleEF	LDT2	4.4190e-003	3.9968e-003
tblVehicleEF	LDT2	9.1300e-004	7.7439e-004
tblVehicleEF	LDT2	0.10	0.15
tblVehicleEF	LDT2	0.15	0.17
tblVehicleEF	LDT2	0.09	0.13
tblVehicleEF	LDT2	0.04	0.05
tblVehicleEF	LDT2	0.07	0.46
tblVehicleEF	LDT2	0.15	0.43
tblVehicleEF	LDT2	9.5180e-003	7.5799e-003
tblVehicleEF	LDT2	0.01	0.09
tblVehicleEF	LDT2	1.08	1.42
tblVehicleEF	LDT2	2.23	3.19
tblVehicleEF	LDT2	411.95	382.52
tblVehicleEF	LDT2	88.11	79.32
tblVehicleEF	LDT2	0.12	0.14
tblVehicleEF	LDT2	0.20	0.42
tblVehicleEF	LDT2	0.04	0.04

tblVehicleEF	LDT2	8.0000e-003	8.0000e-003
tblVehicleEF	LDT2	1.9820e-003	2.0313e-003
tblVehicleEF	LDT2	2.2910e-003	2.1194e-003
tblVehicleEF	LDT2	0.02	0.02
tblVehicleEF	LDT2	2.0000e-003	2.0000e-003
tblVehicleEF	LDT2	1.8240e-003	1.8705e-003
tblVehicleEF	LDT2	2.1080e-003	1.9499e-003
tblVehicleEF	LDT2	0.06	0.09
tblVehicleEF	LDT2	0.16	0.17
tblVehicleEF	LDT2	0.05	0.08
tblVehicleEF	LDT2	0.03	0.03
tblVehicleEF	LDT2	0.09	0.57
tblVehicleEF	LDT2	0.15	0.46
tblVehicleEF	LDT2	4.1300e-003	3.7847e-003
tblVehicleEF	LDT2	9.2000e-004	7.8490e-004
tblVehicleEF	LDT2	0.06	0.09
tblVehicleEF	LDT2	0.16	0.17
tblVehicleEF	LDT2	0.05	0.08
tblVehicleEF	LDT2	0.04	0.05
tblVehicleEF	LDT2	0.09	0.57
tblVehicleEF	LDT2	0.17	0.50
tblVehicleEF	LHD1	6.6430e-003	6.2220e-003
tblVehicleEF	LHD1	0.02	8.7440e-003
tblVehicleEF	LHD1	0.03	0.02
tblVehicleEF	LHD1	0.16	0.20
tblVehicleEF	LHD1	1.26	1.08
tblVehicleEF	LHD1	3.47	1.33
tblVehicleEF	LHD1	8.96	9.15
tblVehicleEF	LHD1	636.87	710.85
tblVehicleEF	LHD1	36.78	13.69

tblVehicleEF	LHD1	0.07	0.06
tblVehicleEF	LHD1	1.64	1.26
tblVehicleEF	LHD1	1.18	0.40
tblVehicleEF	LHD1	7.9000e-004	6.7800e-004
tblVehicleEF	LHD1	9.7770e-003	9.4640e-003
tblVehicleEF	LHD1	0.01	8.7950e-003
tblVehicleEF	LHD1	1.3130e-003	3.7700e-004
tblVehicleEF	LHD1	7.5600e-004	6.4800e-004
tblVehicleEF	LHD1	2.4440e-003	2.3660e-003
tblVehicleEF	LHD1	0.01	8.3810e-003
tblVehicleEF	LHD1	1.2110e-003	3.4800e-004
tblVehicleEF	LHD1	3.6880e-003	3.3600e-003
tblVehicleEF	LHD1	0.11	0.10
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	2.0480e-003	1.8630e-003
tblVehicleEF	LHD1	0.09	0.07
tblVehicleEF	LHD1	0.32	0.67
tblVehicleEF	LHD1	0.35	0.11
tblVehicleEF	LHD1	9.1000e-005	8.9000e-005
tblVehicleEF	LHD1	6.2770e-003	6.9540e-003
tblVehicleEF	LHD1	4.3300e-004	1.3600e-004
tblVehicleEF	LHD1	3.6880e-003	3.3600e-003
tblVehicleEF	LHD1	0.11	0.10
tblVehicleEF	LHD1	0.03	0.04
tblVehicleEF	LHD1	2.0480e-003	1.8630e-003
tblVehicleEF	LHD1	0.11	0.09
tblVehicleEF	LHD1	0.32	0.67
tblVehicleEF	LHD1	0.38	0.12
tblVehicleEF	LHD1	6.6430e-003	6.2358e-003
tblVehicleEF	LHD1	0.02	8.8834e-003

tblVehicleEF	LHD1	0.03	0.02
tblVehicleEF	LHD1	0.16	0.20
tblVehicleEF	LHD1	1.27	1.10
tblVehicleEF	LHD1	3.31	1.27
tblVehicleEF	LHD1	8.96	9.15
tblVehicleEF	LHD1	636.87	710.87
tblVehicleEF	LHD1	36.78	13.58
tblVehicleEF	LHD1	0.07	0.06
tblVehicleEF	LHD1	1.53	1.18
tblVehicleEF	LHD1	1.13	0.38
tblVehicleEF	LHD1	7.9000e-004	6.7751e-004
tblVehicleEF	LHD1	0.08	0.08
tblVehicleEF	LHD1	9.7770e-003	9.4635e-003
tblVehicleEF	LHD1	0.01	8.7947e-003
tblVehicleEF	LHD1	1.3130e-003	3.7701e-004
tblVehicleEF	LHD1	7.5600e-004	6.4820e-004
tblVehicleEF	LHD1	0.03	0.03
tblVehicleEF	LHD1	2.4440e-003	2.3659e-003
tblVehicleEF	LHD1	0.01	8.3811e-003
tblVehicleEF	LHD1	1.2110e-003	3.4821e-004
tblVehicleEF	LHD1	5.7820e-003	5.2411e-003
tblVehicleEF	LHD1	0.12	0.11
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	3.1500e-003	2.8536e-003
tblVehicleEF	LHD1	0.09	0.07
tblVehicleEF	LHD1	0.32	0.66
tblVehicleEF	LHD1	0.34	0.11
tblVehicleEF	LHD1	9.1000e-005	8.9092e-005
tblVehicleEF	LHD1	6.2770e-003	6.9542e-003
tblVehicleEF	LHD1	4.3000e-004	1.3443e-004

tblVehicleEF	LHD1	5.7820e-003	5.2411e-003
tblVehicleEF	LHD1	0.12	0.11
tblVehicleEF	LHD1	0.03	0.04
tblVehicleEF	LHD1	3.1500e-003	2.8536e-003
tblVehicleEF	LHD1	0.11	0.09
tblVehicleEF	LHD1	0.32	0.66
tblVehicleEF	LHD1	0.37	0.12
tblVehicleEF	LHD1	6.6430e-003	6.2201e-003
tblVehicleEF	LHD1	0.02	8.7109e-003
tblVehicleEF	LHD1	0.03	0.02
tblVehicleEF	LHD1	0.16	0.20
tblVehicleEF	LHD1	1.25	1.08
tblVehicleEF	LHD1	3.48	1.34
tblVehicleEF	LHD1	8.96	9.15
tblVehicleEF	LHD1	636.87	710.84
tblVehicleEF	LHD1	36.78	13.71
tblVehicleEF	LHD1	0.07	0.06
tblVehicleEF	LHD1	1.61	1.24
tblVehicleEF	LHD1	1.19	0.40
tblVehicleEF	LHD1	7.9000e-004	6.7751e-004
tblVehicleEF	LHD1	0.08	0.08
tblVehicleEF	LHD1	9.7770e-003	9.4635e-003
tblVehicleEF	LHD1	0.01	8.7947e-003
tblVehicleEF	LHD1	1.3130e-003	3.7701e-004
tblVehicleEF	LHD1	7.5600e-004	6.4820e-004
tblVehicleEF	LHD1	0.03	0.03
tblVehicleEF	LHD1	2.4440e-003	2.3659e-003
tblVehicleEF	LHD1	0.01	8.3811e-003
tblVehicleEF	LHD1	1.2110e-003	3.4821e-004
tblVehicleEF	LHD1	3.8480e-003	3.5257e-003

tblVehicleEF	LHD1	0.13	0.12
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	2.0290e-003	1.8505e-003
tblVehicleEF	LHD1	0.09	0.07
tblVehicleEF	LHD1	0.35	0.73
tblVehicleEF	LHD1	0.35	0.11
tblVehicleEF	LHD1	9.1000e-005	8.9092e-005
tblVehicleEF	LHD1	6.2770e-003	6.9539e-003
tblVehicleEF	LHD1	4.3300e-004	1.3566e-004
tblVehicleEF	LHD1	3.8480e-003	3.5257e-003
tblVehicleEF	LHD1	0.13	0.12
tblVehicleEF	LHD1	0.03	0.04
tblVehicleEF	LHD1	2.0290e-003	1.8505e-003
tblVehicleEF	LHD1	0.11	0.09
tblVehicleEF	LHD1	0.35	0.73
tblVehicleEF	LHD1	0.39	0.12
tblVehicleEF	LHD2	4.9920e-003	4.5360e-003
tblVehicleEF	LHD2	7.6680e-003	6.0320e-003
tblVehicleEF	LHD2	0.01	0.02
tblVehicleEF	LHD2	0.14	0.16
tblVehicleEF	LHD2	0.62	0.73
tblVehicleEF	LHD2	1.92	0.93
tblVehicleEF	LHD2	13.67	13.75
tblVehicleEF	LHD2	650.31	718.07
tblVehicleEF	LHD2	31.10	10.84
tblVehicleEF	LHD2	0.11	0.10
tblVehicleEF	LHD2	1.43	1.61
tblVehicleEF	LHD2	0.75	0.28
tblVehicleEF	LHD2	1.1850e-003	1.1560e-003
tblVehicleEF	LHD2	0.01	0.01

tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	6.3900e-004	2.0000e-004
tblVehicleEF	LHD2	1.1340e-003	1.1060e-003
tblVehicleEF	LHD2	2.6120e-003	2.5850e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	5.8800e-004	1.8400e-004
tblVehicleEF	LHD2	1.7560e-003	2.0980e-003
tblVehicleEF	LHD2	0.06	0.07
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	1.0020e-003	1.1640e-003
tblVehicleEF	LHD2	0.06	0.07
tblVehicleEF	LHD2	0.13	0.45
tblVehicleEF	LHD2	0.19	0.07
tblVehicleEF	LHD2	1.3400e-004	1.3200e-004
tblVehicleEF	LHD2	6.3510e-003	6.9640e-003
tblVehicleEF	LHD2	3.4700e-004	1.0700e-004
tblVehicleEF	LHD2	1.7560e-003	2.0980e-003
tblVehicleEF	LHD2	0.06	0.07
tblVehicleEF	LHD2	0.02	0.03
tblVehicleEF	LHD2	1.0020e-003	1.1640e-003
tblVehicleEF	LHD2	0.08	0.08
tblVehicleEF	LHD2	0.13	0.45
tblVehicleEF	LHD2	0.21	0.08
tblVehicleEF	LHD2	4.9920e-003	4.5461e-003
tblVehicleEF	LHD2	7.7880e-003	6.1111e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	0.14	0.16
tblVehicleEF	LHD2	0.63	0.73
tblVehicleEF	LHD2	1.83	0.89
tblVehicleEF	LHD2	13.67	13.75

tblVehicleEF	LHD2	650.31	718.08
tblVehicleEF	LHD2	31.10	10.76
tblVehicleEF	LHD2	0.11	0.10
tblVehicleEF	LHD2	1.35	1.52
tblVehicleEF	LHD2	0.72	0.27
tblVehicleEF	LHD2	1.1850e-003	1.1558e-003
tblVehicleEF	LHD2	0.09	0.09
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	6.3900e-004	1.9968e-004
tblVehicleEF	LHD2	1.1340e-003	1.1058e-003
tblVehicleEF	LHD2	0.04	0.04
tblVehicleEF	LHD2	2.6120e-003	2.5846e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	5.8800e-004	1.8363e-004
tblVehicleEF	LHD2	2.7400e-003	3.2581e-003
tblVehicleEF	LHD2	0.06	0.07
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	1.5260e-003	1.7692e-003
tblVehicleEF	LHD2	0.06	0.07
tblVehicleEF	LHD2	0.13	0.44
tblVehicleEF	LHD2	0.18	0.07
tblVehicleEF	LHD2	1.3400e-004	1.3209e-004
tblVehicleEF	LHD2	6.3510e-003	6.9644e-003
tblVehicleEF	LHD2	3.4500e-004	1.0651e-004
tblVehicleEF	LHD2	2.7400e-003	3.2581e-003
tblVehicleEF	LHD2	0.06	0.07
tblVehicleEF	LHD2	0.02	0.03
tblVehicleEF	LHD2	1.5260e-003	1.7692e-003
tblVehicleEF	LHD2	0.08	0.08

tblVehicleEF	LHD2	0.13	0.44
tblVehicleEF	LHD2	0.20	0.08
tblVehicleEF	LHD2	4.9920e-003	4.5345e-003
tblVehicleEF	LHD2	7.6380e-003	6.0133e-003
tblVehicleEF	LHD2	0.01	0.02
tblVehicleEF	LHD2	0.14	0.16
tblVehicleEF	LHD2	0.62	0.72
tblVehicleEF	LHD2	1.93	0.94
tblVehicleEF	LHD2	13.67	13.75
tblVehicleEF	LHD2	650.31	718.06
tblVehicleEF	LHD2	31.10	10.85
tblVehicleEF	LHD2	0.11	0.10
tblVehicleEF	LHD2	1.41	1.58
tblVehicleEF	LHD2	0.75	0.28
tblVehicleEF	LHD2	1.1850e-003	1.1558e-003
tblVehicleEF	LHD2	0.09	0.09
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	6.3900e-004	1.9968e-004
tblVehicleEF	LHD2	1.1340e-003	1.1058e-003
tblVehicleEF	LHD2	0.04	0.04
tblVehicleEF	LHD2	2.6120e-003	2.5846e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	5.8800e-004	1.8363e-004
tblVehicleEF	LHD2	1.7930e-003	2.1604e-003
tblVehicleEF	LHD2	0.06	0.08
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	9.7600e-004	1.1325e-003
tblVehicleEF	LHD2	0.06	0.07
tblVehicleEF	LHD2	0.14	0.49

tblVehicleEF	LHD2	0.19	0.08
tblVehicleEF	LHD2	1.3400e-004	1.3209e-004
tblVehicleEF	LHD2	6.3510e-003	6.9642e-003
tblVehicleEF	LHD2	3.4700e-004	1.0738e-004
tblVehicleEF	LHD2	1.7930e-003	2.1604e-003
tblVehicleEF	LHD2	0.06	0.08
tblVehicleEF	LHD2	0.02	0.03
tblVehicleEF	LHD2	9.7600e-004	1.1325e-003
tblVehicleEF	LHD2	0.08	0.08
tblVehicleEF	LHD2	0.14	0.49
tblVehicleEF	LHD2	0.21	0.08
tblVehicleEF	MCY	0.49	0.37
tblVehicleEF	MCY	0.15	0.24
tblVehicleEF	MCY	20.28	20.67
tblVehicleEF	MCY	9.57	8.42
tblVehicleEF	MCY	180.13	218.71
tblVehicleEF	MCY	46.67	61.44
tblVehicleEF	MCY	1.13	1.14
tblVehicleEF	MCY	0.31	0.26
tblVehicleEF	MCY	2.0030e-003	1.9860e-003
tblVehicleEF	MCY	4.1990e-003	3.5510e-003
tblVehicleEF	MCY	1.8780e-003	1.8640e-003
tblVehicleEF	MCY	3.9730e-003	3.3600e-003
tblVehicleEF	MCY	1.20	1.22
tblVehicleEF	MCY	0.73	0.76
tblVehicleEF	MCY	0.72	0.74
tblVehicleEF	MCY	2.56	2.58
tblVehicleEF	MCY	0.69	2.35
tblVehicleEF	MCY	2.11	1.87
tblVehicleEF	MCY	2.2080e-003	2.1640e-003

tblVehicleEF	MCY	6.8500e-004	6.0800e-004
tblVehicleEF	MCY	1.20	1.22
tblVehicleEF	MCY	0.73	0.76
tblVehicleEF	MCY	0.72	0.74
tblVehicleEF	MCY	3.13	3.15
tblVehicleEF	MCY	0.69	2.35
tblVehicleEF	MCY	2.30	2.03
tblVehicleEF	MCY	0.47	0.36
tblVehicleEF	MCY	0.14	0.22
tblVehicleEF	MCY	19.72	20.07
tblVehicleEF	MCY	8.85	7.75
tblVehicleEF	MCY	180.13	217.51
tblVehicleEF	MCY	46.67	59.66
tblVehicleEF	MCY	0.99	0.99
tblVehicleEF	MCY	0.29	0.25
tblVehicleEF	MCY	0.01	0.01
tblVehicleEF	MCY	4.0000e-003	4.0000e-003
tblVehicleEF	MCY	2.0030e-003	1.9864e-003
tblVehicleEF	MCY	4.1990e-003	3.5506e-003
tblVehicleEF	MCY	5.0400e-003	5.0400e-003
tblVehicleEF	MCY	1.0000e-003	1.0000e-003
tblVehicleEF	MCY	1.8780e-003	1.8638e-003
tblVehicleEF	MCY	3.9730e-003	3.3596e-003
tblVehicleEF	MCY	2.01	2.04
tblVehicleEF	MCY	0.84	0.88
tblVehicleEF	MCY	1.29	1.31
tblVehicleEF	MCY	2.49	2.51
tblVehicleEF	MCY	0.65	2.23
tblVehicleEF	MCY	1.88	1.65
tblVehicleEF	MCY	2.1970e-003	2.1525e-003

tblVehicleEF	MCY	6.6600e-004	5.9038e-004
tblVehicleEF	MCY	2.01	2.04
tblVehicleEF	MCY	0.84	0.88
tblVehicleEF	MCY	1.29	1.31
tblVehicleEF	MCY	3.06	3.06
tblVehicleEF	MCY	0.65	2.23
tblVehicleEF	MCY	2.04	1.79
tblVehicleEF	MCY	0.49	0.37
tblVehicleEF	MCY	0.16	0.25
tblVehicleEF	MCY	20.29	20.69
tblVehicleEF	MCY	9.65	8.49
tblVehicleEF	MCY	180.13	218.77
tblVehicleEF	MCY	46.67	61.66
tblVehicleEF	MCY	1.11	1.11
tblVehicleEF	MCY	0.31	0.26
tblVehicleEF	MCY	0.01	0.01
tblVehicleEF	MCY	4.0000e-003	4.0000e-003
tblVehicleEF	MCY	2.0030e-003	1.9864e-003
tblVehicleEF	MCY	4.1990e-003	3.5506e-003
tblVehicleEF	MCY	5.0400e-003	5.0400e-003
tblVehicleEF	MCY	1.0000e-003	1.0000e-003
tblVehicleEF	MCY	1.8780e-003	1.8638e-003
tblVehicleEF	MCY	3.9730e-003	3.3596e-003
tblVehicleEF	MCY	1.28	1.31
tblVehicleEF	MCY	0.95	0.98
tblVehicleEF	MCY	0.69	0.71
tblVehicleEF	MCY	2.57	2.59
tblVehicleEF	MCY	0.78	2.67
tblVehicleEF	MCY	2.14	1.90
tblVehicleEF	MCY	2.2090e-003	2.1649e-003

tblVehicleEF	MCY	6.8800e-004	6.1022e-004
tblVehicleEF	MCY	1.28	1.31
tblVehicleEF	MCY	0.95	0.98
tblVehicleEF	MCY	0.69	0.71
tblVehicleEF	MCY	3.15	3.16
tblVehicleEF	MCY	0.78	2.67
tblVehicleEF	MCY	2.33	2.07
tblVehicleEF	MDV	0.02	0.01
tblVehicleEF	MDV	0.02	0.11
tblVehicleEF	MDV	1.97	1.81
tblVehicleEF	MDV	3.78	3.78
tblVehicleEF	MDV	555.92	469.68
tblVehicleEF	MDV	115.27	95.76
tblVehicleEF	MDV	0.23	0.19
tblVehicleEF	MDV	0.37	0.50
tblVehicleEF	MDV	2.2560e-003	2.2140e-003
tblVehicleEF	MDV	2.6380e-003	2.3670e-003
tblVehicleEF	MDV	2.0840e-003	2.0440e-003
tblVehicleEF	MDV	2.4310e-003	2.1800e-003
tblVehicleEF	MDV	0.08	0.11
tblVehicleEF	MDV	0.19	0.17
tblVehicleEF	MDV	0.08	0.10
tblVehicleEF	MDV	0.06	0.05
tblVehicleEF	MDV	0.10	0.51
tblVehicleEF	MDV	0.31	0.58
tblVehicleEF	MDV	5.5790e-003	4.6450e-003
tblVehicleEF	MDV	1.2200e-003	9.4800e-004
tblVehicleEF	MDV	0.08	0.11
tblVehicleEF	MDV	0.19	0.17
tblVehicleEF	MDV	0.08	0.10

tblVehicleEF	MDV	0.08	0.07
tblVehicleEF	MDV	0.10	0.51
tblVehicleEF	MDV	0.34	0.64
tblVehicleEF	MDV	0.02	0.01
tblVehicleEF	MDV	0.02	0.10
tblVehicleEF	MDV	2.16	1.99
tblVehicleEF	MDV	3.26	3.24
tblVehicleEF	MDV	584.46	487.25
tblVehicleEF	MDV	115.27	94.68
tblVehicleEF	MDV	0.20	0.17
tblVehicleEF	MDV	0.34	0.47
tblVehicleEF	MDV	0.04	0.04
tblVehicleEF	MDV	8.0000e-003	8.0000e-003
tblVehicleEF	MDV	2.2560e-003	2.2139e-003
tblVehicleEF	MDV	2.6380e-003	2.3668e-003
tblVehicleEF	MDV	0.02	0.02
tblVehicleEF	MDV	2.0000e-003	2.0000e-003
tblVehicleEF	MDV	2.0840e-003	2.0439e-003
tblVehicleEF	MDV	2.4310e-003	2.1801e-003
tblVehicleEF	MDV	0.14	0.17
tblVehicleEF	MDV	0.20	0.18
tblVehicleEF	MDV	0.12	0.15
tblVehicleEF	MDV	0.06	0.05
tblVehicleEF	MDV	0.10	0.48
tblVehicleEF	MDV	0.27	0.51
tblVehicleEF	MDV	5.8670e-003	4.8188e-003
tblVehicleEF	MDV	1.2110e-003	9.3691e-004
tblVehicleEF	MDV	0.14	0.17
tblVehicleEF	MDV	0.20	0.18
tblVehicleEF	MDV	0.12	0.15

tblVehicleEF	MDV	0.08	0.07
tblVehicleEF	MDV	0.10	0.48
tblVehicleEF	MDV	0.30	0.56
tblVehicleEF	MDV	0.02	0.01
tblVehicleEF	MDV	0.02	0.11
tblVehicleEF	MDV	1.90	1.75
tblVehicleEF	MDV	3.88	3.89
tblVehicleEF	MDV	546.61	463.94
tblVehicleEF	MDV	115.27	95.98
tblVehicleEF	MDV	0.22	0.19
tblVehicleEF	MDV	0.37	0.51
tblVehicleEF	MDV	0.04	0.04
tblVehicleEF	MDV	8.0000e-003	8.0000e-003
tblVehicleEF	MDV	2.2560e-003	2.2139e-003
tblVehicleEF	MDV	2.6380e-003	2.3668e-003
tblVehicleEF	MDV	0.02	0.02
tblVehicleEF	MDV	2.0000e-003	2.0000e-003
tblVehicleEF	MDV	2.0840e-003	2.0439e-003
tblVehicleEF	MDV	2.4310e-003	2.1801e-003
tblVehicleEF	MDV	0.08	0.10
tblVehicleEF	MDV	0.20	0.19
tblVehicleEF	MDV	0.07	0.10
tblVehicleEF	MDV	0.06	0.05
tblVehicleEF	MDV	0.12	0.59
tblVehicleEF	MDV	0.32	0.59
tblVehicleEF	MDV	5.4850e-003	4.5881e-003
tblVehicleEF	MDV	1.2220e-003	9.4978e-004
tblVehicleEF	MDV	0.08	0.10
tblVehicleEF	MDV	0.20	0.19
tblVehicleEF	MDV	0.07	0.10

tblVehicleEF	MDV	0.08	0.07
tblVehicleEF	MDV	0.12	0.59
tblVehicleEF	MDV	0.35	0.65
tblVehicleEF	MH	0.05	0.02
tblVehicleEF	MH	0.04	0.03
tblVehicleEF	MH	4.65	2.63
tblVehicleEF	MH	7.97	2.52
tblVehicleEF	MH	1,121.37	1,556.29
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tblVehicleEF	MH	0.96	0.24
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tblVehicleEF	MH	0.03	0.03
tblVehicleEF	MH	2.0350e-003	4.0100e-004
tblVehicleEF	MH	3.2110e-003	3.2460e-003
tblVehicleEF	MH	0.03	0.03
tblVehicleEF	MH	1.8970e-003	3.7100e-004
tblVehicleEF	MH	1.46	1.31
tblVehicleEF	MH	0.09	0.08
tblVehicleEF	MH	0.56	0.50
tblVehicleEF	MH	0.17	0.10
tblVehicleEF	MH	0.02	1.96
tblVehicleEF	MH	0.51	0.13
tblVehicleEF	MH	0.01	0.02
tblVehicleEF	MH	8.0000e-004	2.1000e-004
tblVehicleEF	MH	1.46	1.31
tblVehicleEF	MH	0.09	0.08
tblVehicleEF	MH	0.56	0.50
tblVehicleEF	MH	0.22	0.14
tblVehicleEF	MH	0.02	1.96

tblVehicleEF	MH	0.56	0.14
tblVehicleEF	MH	0.05	0.02
tblVehicleEF	MH	0.04	0.03
tblVehicleEF	MH	4.70	2.68
tblVehicleEF	MH	7.54	2.37
tblVehicleEF	MH	1,121.37	1,556.37
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tblVehicleEF	MH	1.48	1.45
tblVehicleEF	MH	0.92	0.23
tblVehicleEF	MH	0.13	0.13
tblVehicleEF	MH	0.01	0.01
tblVehicleEF	MH	0.03	0.03
tblVehicleEF	MH	2.0350e-003	4.0079e-004
tblVehicleEF	MH	0.06	0.06
tblVehicleEF	MH	3.2110e-003	3.2457e-003
tblVehicleEF	MH	0.03	0.03
tblVehicleEF	MH	1.8970e-003	3.7086e-004
tblVehicleEF	MH	2.26	2.02
tblVehicleEF	MH	0.10	0.09
tblVehicleEF	MH	0.89	0.78
tblVehicleEF	MH	0.17	0.11
tblVehicleEF	MH	0.02	1.93
tblVehicleEF	MH	0.49	0.12
tblVehicleEF	MH	0.01	0.02
tblVehicleEF	MH	7.9200e-004	2.0744e-004
tblVehicleEF	MH	2.26	2.02
tblVehicleEF	MH	0.10	0.09
tblVehicleEF	MH	0.89	0.78
tblVehicleEF	MH	0.23	0.14
tblVehicleEF	MH	0.02	1.93

tblVehicleEF	MH	0.54	0.13
tblVehicleEF	MH	0.05	0.02
tblVehicleEF	MH	0.04	0.03
tblVehicleEF	MH	4.64	2.62
tblVehicleEF	MH	8.02	2.54
tblVehicleEF	MH	1,121.37	1,556.27
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tblVehicleEF	MH	1.58	1.54
tblVehicleEF	MH	0.97	0.24
tblVehicleEF	MH	0.13	0.13
tblVehicleEF	MH	0.01	0.01
tblVehicleEF	MH	0.03	0.03
tblVehicleEF	MH	2.0350e-003	4.0079e-004
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tblVehicleEF	MH	3.2110e-003	3.2457e-003
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tblVehicleEF	MH	1.8970e-003	3.7086e-004
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tblVehicleEF	MH	0.12	0.10
tblVehicleEF	MH	0.59	0.51
tblVehicleEF	MH	0.17	0.10
tblVehicleEF	MH	0.03	2.07
tblVehicleEF	MH	0.52	0.13
tblVehicleEF	MH	0.01	0.02
tblVehicleEF	MH	8.0100e-004	2.1030e-004
tblVehicleEF	MH	1.63	1.47
tblVehicleEF	MH	0.12	0.10
tblVehicleEF	MH	0.59	0.51
tblVehicleEF	MH	0.22	0.14
tblVehicleEF	MH	0.03	2.07

tblVehicleEF	MH	0.56	0.14
tblVehicleEF	MHD	0.02	4.4610e-003
tblVehicleEF	MHD	0.01	0.01
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tblVehicleEF	MHD	139.75	69.33
tblVehicleEF	MHD	1,152.78	1,143.60
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tblVehicleEF	MHD	10.32	0.83
tblVehicleEF	MHD	4.9360e-003	3.3290e-003
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tblVehicleEF	MHD	1.1300e-003	1.8300e-004
tblVehicleEF	MHD	4.7220e-003	3.1850e-003
tblVehicleEF	MHD	0.08	0.10
tblVehicleEF	MHD	1.0440e-003	1.7000e-004
tblVehicleEF	MHD	1.6400e-003	8.7400e-004
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tblVehicleEF	MHD	0.04	0.03
tblVehicleEF	MHD	9.4100e-004	5.0400e-004
tblVehicleEF	MHD	0.16	0.20
tblVehicleEF	MHD	0.03	0.16
tblVehicleEF	MHD	0.53	0.08
tblVehicleEF	MHD	1.3460e-003	6.5900e-004
tblVehicleEF	MHD	0.01	0.01
tblVehicleEF	MHD	8.0300e-004	1.2700e-004
tblVehicleEF	MHD	1.6400e-003	8.7400e-004

tblVehicleEF	MHD	0.06	0.03
tblVehicleEF	MHD	0.05	0.04
tblVehicleEF	MHD	9.4100e-004	5.0400e-004
tblVehicleEF	MHD	0.18	0.23
tblVehicleEF	MHD	0.03	0.16
tblVehicleEF	MHD	0.58	0.09
tblVehicleEF	MHD	0.02	4.2172e-003
tblVehicleEF	MHD	0.01	0.01
tblVehicleEF	MHD	0.07	0.01
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tblVehicleEF	MHD	148.02	71.44
tblVehicleEF	MHD	1,152.78	1,143.62
tblVehicleEF	MHD	65.27	12.71
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tblVehicleEF	MHD	10.27	0.82
tblVehicleEF	MHD	4.1610e-003	2.8083e-003
tblVehicleEF	MHD	0.13	0.13
tblVehicleEF	MHD	0.01	0.01
tblVehicleEF	MHD	0.08	0.11
tblVehicleEF	MHD	1.1300e-003	1.8347e-004
tblVehicleEF	MHD	3.9810e-003	2.6868e-003
tblVehicleEF	MHD	0.06	0.06
tblVehicleEF	MHD	3.0000e-003	3.0000e-003
tblVehicleEF	MHD	0.08	0.10
tblVehicleEF	MHD	1.0440e-003	1.6979e-004
tblVehicleEF	MHD	2.5780e-003	1.3667e-003
tblVehicleEF	MHD	0.06	0.03

tblVehicleEF	MHD	0.04	0.03
tblVehicleEF	MHD	1.4590e-003	7.7842e-004
tblVehicleEF	MHD	0.16	0.20
tblVehicleEF	MHD	0.03	0.16
tblVehicleEF	MHD	0.51	0.08
tblVehicleEF	MHD	1.4240e-003	6.7896e-004
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tblVehicleEF	MHD	7.9600e-004	1.2578e-004
tblVehicleEF	MHD	2.5780e-003	1.3667e-003
tblVehicleEF	MHD	0.06	0.03
tblVehicleEF	MHD	0.05	0.03
tblVehicleEF	MHD	1.4590e-003	7.7842e-004
tblVehicleEF	MHD	0.18	0.23
tblVehicleEF	MHD	0.03	0.16
tblVehicleEF	MHD	0.56	0.08
tblVehicleEF	MHD	0.02	4.8100e-003
tblVehicleEF	MHD	0.01	0.01
tblVehicleEF	MHD	0.07	0.01
tblVehicleEF	MHD	0.70	0.51
tblVehicleEF	MHD	0.87	1.12
tblVehicleEF	MHD	8.61	1.63
tblVehicleEF	MHD	128.32	66.40
tblVehicleEF	MHD	1,152.78	1,143.59
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tblVehicleEF	MHD	2.86	3.36
tblVehicleEF	MHD	10.33	0.83
tblVehicleEF	MHD	6.0060e-003	4.0477e-003
tblVehicleEF	MHD	0.13	0.13
tblVehicleEF	MHD	0.01	0.01

tblVehicleEF	MHD	0.08	0.11
tblVehicleEF	MHD	1.1300e-003	1.8347e-004
tblVehicleEF	MHD	5.7460e-003	3.8726e-003
tblVehicleEF	MHD	0.06	0.06
tblVehicleEF	MHD	3.0000e-003	3.0000e-003
tblVehicleEF	MHD	0.08	0.10
tblVehicleEF	MHD	1.0440e-003	1.6979e-004
tblVehicleEF	MHD	1.6980e-003	9.1298e-004
tblVehicleEF	MHD	0.07	0.04
tblVehicleEF	MHD	0.04	0.03
tblVehicleEF	MHD	9.2800e-004	4.9829e-004
tblVehicleEF	MHD	0.16	0.20
tblVehicleEF	MHD	0.03	0.18
tblVehicleEF	MHD	0.53	0.08
tblVehicleEF	MHD	1.2390e-003	6.3094e-004
tblVehicleEF	MHD	0.01	0.01
tblVehicleEF	MHD	8.0400e-004	1.2738e-004
tblVehicleEF	MHD	1.6980e-003	9.1298e-004
tblVehicleEF	MHD	0.07	0.04
tblVehicleEF	MHD	0.06	0.04
tblVehicleEF	MHD	9.2800e-004	4.9829e-004
tblVehicleEF	MHD	0.18	0.23
tblVehicleEF	MHD	0.03	0.18
tblVehicleEF	MHD	0.58	0.09
tblVehicleEF	OBUS	0.01	9.4250e-003
tblVehicleEF	OBUS	0.01	0.02
tblVehicleEF	OBUS	0.04	0.03
tblVehicleEF	OBUS	0.29	0.58
tblVehicleEF	OBUS	0.91	1.69
tblVehicleEF	OBUS	7.01	2.71

tblVehicleEF	OBUS	98.58	92.33
tblVehicleEF	OBUS	1,267.32	1,504.75
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tblVehicleEF	OBUS	0.64	0.75
tblVehicleEF	OBUS	2.32	3.04
tblVehicleEF	OBUS	2.56	0.53
tblVehicleEF	OBUS	3.7800e-004	4.8630e-003
tblVehicleEF	OBUS	0.01	0.08
tblVehicleEF	OBUS	8.4700e-004	2.3300e-004
tblVehicleEF	OBUS	3.6100e-004	4.6530e-003
tblVehicleEF	OBUS	0.01	0.07
tblVehicleEF	OBUS	7.8200e-004	2.1500e-004
tblVehicleEF	OBUS	1.7210e-003	2.0350e-003
tblVehicleEF	OBUS	0.02	0.02
tblVehicleEF	OBUS	0.04	0.07
tblVehicleEF	OBUS	8.4200e-004	9.6700e-004
tblVehicleEF	OBUS	0.08	0.20
tblVehicleEF	OBUS	0.04	0.25
tblVehicleEF	OBUS	0.44	0.14
tblVehicleEF	OBUS	9.5300e-004	8.7900e-004
tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	8.3300e-004	2.0800e-004
tblVehicleEF	OBUS	1.7210e-003	2.0350e-003
tblVehicleEF	OBUS	0.02	0.02
tblVehicleEF	OBUS	0.06	0.09
tblVehicleEF	OBUS	8.4200e-004	9.6700e-004
tblVehicleEF	OBUS	0.10	0.24
tblVehicleEF	OBUS	0.04	0.25
tblVehicleEF	OBUS	0.49	0.15
tblVehicleEF	OBUS	0.01	9.3861e-003

tblVehicleEF	OBUS	0.01	0.02
tblVehicleEF	OBUS	0.03	0.02
tblVehicleEF	OBUS	0.28	0.53
tblVehicleEF	OBUS	0.92	1.71
tblVehicleEF	OBUS	6.62	2.56
tblVehicleEF	OBUS	103.42	94.06
tblVehicleEF	OBUS	1,267.32	1,504.79
tblVehicleEF	OBUS	70.96	20.81
tblVehicleEF	OBUS	0.66	0.76
tblVehicleEF	OBUS	2.18	2.85
tblVehicleEF	OBUS	2.51	0.51
tblVehicleEF	OBUS	3.1900e-004	4.1038e-003
tblVehicleEF	OBUS	0.13	0.13
tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	0.01	0.08
tblVehicleEF	OBUS	8.4700e-004	2.3256e-004
tblVehicleEF	OBUS	3.0500e-004	3.9263e-003
tblVehicleEF	OBUS	0.06	0.06
tblVehicleEF	OBUS	3.0000e-003	3.0000e-003
tblVehicleEF	OBUS	0.01	0.07
tblVehicleEF	OBUS	7.8200e-004	2.1532e-004
tblVehicleEF	OBUS	2.6270e-003	3.0685e-003
tblVehicleEF	OBUS	0.02	0.02
tblVehicleEF	OBUS	0.04	0.07
tblVehicleEF	OBUS	1.2860e-003	1.4624e-003
tblVehicleEF	OBUS	0.08	0.20
tblVehicleEF	OBUS	0.04	0.25
tblVehicleEF	OBUS	0.43	0.13
tblVehicleEF	OBUS	9.9900e-004	8.9518e-004
tblVehicleEF	OBUS	0.01	0.01

tblVehicleEF	OBUS	8.2600e-004	2.0593e-004
tblVehicleEF	OBUS	2.6270e-003	3.0685e-003
tblVehicleEF	OBUS	0.02	0.02
tblVehicleEF	OBUS	0.06	0.09
tblVehicleEF	OBUS	1.2860e-003	1.4624e-003
tblVehicleEF	OBUS	0.10	0.24
tblVehicleEF	OBUS	0.04	0.25
tblVehicleEF	OBUS	0.47	0.14
tblVehicleEF	OBUS	0.01	9.4980e-003
tblVehicleEF	OBUS	0.01	0.02
tblVehicleEF	OBUS	0.04	0.03
tblVehicleEF	OBUS	0.32	0.65
tblVehicleEF	OBUS	0.90	1.69
tblVehicleEF	OBUS	7.07	2.73
tblVehicleEF	OBUS	91.91	89.95
tblVehicleEF	OBUS	1,267.32	1,504.74
tblVehicleEF	OBUS	70.96	21.12
tblVehicleEF	OBUS	0.61	0.73
tblVehicleEF	OBUS	2.28	2.99
tblVehicleEF	OBUS	2.57	0.53
tblVehicleEF	OBUS	4.6000e-004	5.9121e-003
tblVehicleEF	OBUS	0.13	0.13
tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	0.01	0.08
tblVehicleEF	OBUS	8.4700e-004	2.3256e-004
tblVehicleEF	OBUS	4.4000e-004	5.6564e-003
tblVehicleEF	OBUS	0.06	0.06
tblVehicleEF	OBUS	3.0000e-003	3.0000e-003
tblVehicleEF	OBUS	0.01	0.07
tblVehicleEF	OBUS	7.8200e-004	2.1532e-004

tblVehicleEF	OBUS	1.7890e-003	2.1596e-003
tblVehicleEF	OBUS	0.02	0.03
tblVehicleEF	OBUS	0.04	0.07
tblVehicleEF	OBUS	8.3300e-004	9.6792e-004
tblVehicleEF	OBUS	0.08	0.20
tblVehicleEF	OBUS	0.05	0.27
tblVehicleEF	OBUS	0.45	0.14
tblVehicleEF	OBUS	8.8900e-004	8.5631e-004
tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	8.3400e-004	2.0896e-004
tblVehicleEF	OBUS	1.7890e-003	2.1596e-003
tblVehicleEF	OBUS	0.02	0.03
tblVehicleEF	OBUS	0.06	0.09
tblVehicleEF	OBUS	8.3300e-004	9.6792e-004
tblVehicleEF	OBUS	0.10	0.24
tblVehicleEF	OBUS	0.05	0.27
tblVehicleEF	OBUS	0.49	0.15
tblVehicleEF	SBUS	0.88	0.06
tblVehicleEF	SBUS	0.02	0.01
tblVehicleEF	SBUS	0.08	5.9540e-003
tblVehicleEF	SBUS	7.42	2.43
tblVehicleEF	SBUS	1.03	0.98
tblVehicleEF	SBUS	8.08	0.85
tblVehicleEF	SBUS	1,189.21	353.51
tblVehicleEF	SBUS	1,126.06	1,158.58
tblVehicleEF	SBUS	48.51	4.94
tblVehicleEF	SBUS	12.14	3.74
tblVehicleEF	SBUS	5.83	6.15
tblVehicleEF	SBUS	13.45	0.59
tblVehicleEF	SBUS	0.02	6.4200e-003

tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.03	0.04
tblVehicleEF	SBUS	6.8600e-004	4.3000e-005
tblVehicleEF	SBUS	0.02	6.1430e-003
tblVehicleEF	SBUS	2.7190e-003	2.6990e-003
tblVehicleEF	SBUS	0.03	0.04
tblVehicleEF	SBUS	6.3000e-004	4.0000e-005
tblVehicleEF	SBUS	4.1630e-003	1.1120e-003
tblVehicleEF	SBUS	0.03	8.8780e-003
tblVehicleEF	SBUS	0.90	0.29
tblVehicleEF	SBUS	1.8230e-003	5.0200e-004
tblVehicleEF	SBUS	0.13	0.13
tblVehicleEF	SBUS	0.02	0.08
tblVehicleEF	SBUS	0.43	0.03
tblVehicleEF	SBUS	0.01	3.3690e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	6.2500e-004	4.9000e-005
tblVehicleEF	SBUS	4.1630e-003	1.1120e-003
tblVehicleEF	SBUS	0.03	8.8780e-003
tblVehicleEF	SBUS	1.29	0.41
tblVehicleEF	SBUS	1.8230e-003	5.0200e-004
tblVehicleEF	SBUS	0.16	0.16
tblVehicleEF	SBUS	0.02	0.08
tblVehicleEF	SBUS	0.47	0.04
tblVehicleEF	SBUS	0.88	0.06
tblVehicleEF	SBUS	0.02	0.01
tblVehicleEF	SBUS	0.07	5.2215e-003
tblVehicleEF	SBUS	7.27	2.38
tblVehicleEF	SBUS	1.05	0.99
tblVehicleEF	SBUS	6.43	0.68

tblVehicleEF	SBUS	1,245.65	364.58
tblVehicleEF	SBUS	1,126.06	1,158.61
tblVehicleEF	SBUS	48.51	4.64
tblVehicleEF	SBUS	12.53	3.84
tblVehicleEF	SBUS	5.49	5.80
tblVehicleEF	SBUS	13.41	0.59
tblVehicleEF	SBUS	0.01	5.4183e-003
tblVehicleEF	SBUS	0.74	0.74
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.03	0.04
tblVehicleEF	SBUS	6.8600e-004	4.3378e-005
tblVehicleEF	SBUS	0.01	5.1839e-003
tblVehicleEF	SBUS	0.32	0.32
tblVehicleEF	SBUS	2.7190e-003	2.6986e-003
tblVehicleEF	SBUS	0.03	0.04
tblVehicleEF	SBUS	6.3000e-004	3.9884e-005
tblVehicleEF	SBUS	6.3910e-003	1.6978e-003
tblVehicleEF	SBUS	0.03	9.0877e-003
tblVehicleEF	SBUS	0.90	0.29
tblVehicleEF	SBUS	2.8630e-003	7.7801e-004
tblVehicleEF	SBUS	0.14	0.13
tblVehicleEF	SBUS	0.02	0.07
tblVehicleEF	SBUS	0.38	0.03
tblVehicleEF	SBUS	0.01	3.4739e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	5.9800e-004	4.5957e-005
tblVehicleEF	SBUS	6.3910e-003	1.6978e-003
tblVehicleEF	SBUS	0.03	9.0877e-003
tblVehicleEF	SBUS	1.29	0.41
tblVehicleEF	SBUS	2.8630e-003	7.7801e-004

tblVehicleEF	SBUS	0.16	0.16
tblVehicleEF	SBUS	0.02	0.07
tblVehicleEF	SBUS	0.41	0.03
tblVehicleEF	SBUS	0.88	0.06
tblVehicleEF	SBUS	0.02	0.01
tblVehicleEF	SBUS	0.08	6.1021e-003
tblVehicleEF	SBUS	7.64	2.50
tblVehicleEF	SBUS	1.03	0.97
tblVehicleEF	SBUS	8.36	0.88
tblVehicleEF	SBUS	1,111.28	338.23
tblVehicleEF	SBUS	1,126.06	1,158.57
tblVehicleEF	SBUS	48.51	4.99
tblVehicleEF	SBUS	11.61	3.60
tblVehicleEF	SBUS	5.74	6.05
tblVehicleEF	SBUS	13.46	0.59
tblVehicleEF	SBUS	0.02	7.8043e-003
tblVehicleEF	SBUS	0.74	0.74
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.03	0.04
tblVehicleEF	SBUS	6.8600e-004	4.3378e-005
tblVehicleEF	SBUS	0.02	7.4667e-003
tblVehicleEF	SBUS	0.32	0.32
tblVehicleEF	SBUS	2.7190e-003	2.6986e-003
tblVehicleEF	SBUS	0.03	0.04
tblVehicleEF	SBUS	6.3000e-004	3.9884e-005
tblVehicleEF	SBUS	4.4520e-003	1.1827e-003
tblVehicleEF	SBUS	0.04	0.01
tblVehicleEF	SBUS	0.90	0.29
tblVehicleEF	SBUS	1.8210e-003	5.0817e-004
tblVehicleEF	SBUS	0.13	0.13

tblVehicleEF	SBUS	0.02	0.09
tblVehicleEF	SBUS	0.44	0.04
tblVehicleEF	SBUS	0.01	3.2250e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	6.3000e-004	4.9380e-005
tblVehicleEF	SBUS	4.4520e-003	1.1827e-003
tblVehicleEF	SBUS	0.04	0.01
tblVehicleEF	SBUS	1.30	0.41
tblVehicleEF	SBUS	1.8210e-003	5.0817e-004
tblVehicleEF	SBUS	0.16	0.16
tblVehicleEF	SBUS	0.02	0.09
tblVehicleEF	SBUS	0.48	0.04
tblVehicleEF	UBUS	2.98	6.60
tblVehicleEF	UBUS	0.06	0.02
tblVehicleEF	UBUS	13.28	33.66
tblVehicleEF	UBUS	10.93	0.94
tblVehicleEF	UBUS	2,011.88	1,933.49
tblVehicleEF	UBUS	95.00	11.92
tblVehicleEF	UBUS	11.80	2.78
tblVehicleEF	UBUS	15.88	0.12
tblVehicleEF	UBUS	0.62	0.07
tblVehicleEF	UBUS	0.01	0.03
tblVehicleEF	UBUS	0.15	4.6650e-003
tblVehicleEF	UBUS	1.0690e-003	2.4000e-005
tblVehicleEF	UBUS	0.27	0.03
tblVehicleEF	UBUS	3.0000e-003	7.5900e-003
tblVehicleEF	UBUS	0.14	4.4610e-003
tblVehicleEF	UBUS	9.8800e-004	2.2000e-005
tblVehicleEF	UBUS	5.6060e-003	8.6600e-004
tblVehicleEF	UBUS	0.09	0.01

tblVehicleEF	UBUS	2.9810e-003	6.5800e-004
tblVehicleEF	UBUS	1.01	0.34
tblVehicleEF	UBUS	0.02	0.06
tblVehicleEF	UBUS	0.81	0.07
tblVehicleEF	UBUS	0.01	2.4510e-003
tblVehicleEF	UBUS	1.1470e-003	1.1800e-004
tblVehicleEF	UBUS	5.6060e-003	8.6600e-004
tblVehicleEF	UBUS	0.09	0.01
tblVehicleEF	UBUS	2.9810e-003	6.5800e-004
tblVehicleEF	UBUS	4.11	7.01
tblVehicleEF	UBUS	0.02	0.06
tblVehicleEF	UBUS	0.89	0.07
tblVehicleEF	UBUS	2.98	6.60
tblVehicleEF	UBUS	0.05	0.01
tblVehicleEF	UBUS	13.34	33.66
tblVehicleEF	UBUS	9.50	0.83
tblVehicleEF	UBUS	2,011.88	1,933.49
tblVehicleEF	UBUS	95.00	11.72
tblVehicleEF	UBUS	11.12	2.78
tblVehicleEF	UBUS	15.82	0.12
tblVehicleEF	UBUS	0.62	0.07
tblVehicleEF	UBUS	0.01	0.03
tblVehicleEF	UBUS	0.15	4.6647e-003
tblVehicleEF	UBUS	1.0690e-003	2.3655e-005
tblVehicleEF	UBUS	0.27	0.03
tblVehicleEF	UBUS	3.0000e-003	7.5896e-003
tblVehicleEF	UBUS	0.14	4.4609e-003
tblVehicleEF	UBUS	9.8800e-004	2.1750e-005
tblVehicleEF	UBUS	8.4440e-003	1.3092e-003
tblVehicleEF	UBUS	0.10	0.01

tblVehicleEF	UBUS	4.5610e-003	9.7544e-004
tblVehicleEF	UBUS	1.02	0.34
tblVehicleEF	UBUS	0.02	0.06
tblVehicleEF	UBUS	0.74	0.06
tblVehicleEF	UBUS	0.01	2.4506e-003
tblVehicleEF	UBUS	1.1220e-003	1.1599e-004
tblVehicleEF	UBUS	8.4440e-003	1.3092e-003
tblVehicleEF	UBUS	0.10	0.01
tblVehicleEF	UBUS	4.5610e-003	9.7544e-004
tblVehicleEF	UBUS	4.12	7.01
tblVehicleEF	UBUS	0.02	0.06
tblVehicleEF	UBUS	0.81	0.07
tblVehicleEF	UBUS	2.98	6.60
tblVehicleEF	UBUS	0.06	0.02
tblVehicleEF	UBUS	13.27	33.66
tblVehicleEF	UBUS	11.14	0.96
tblVehicleEF	UBUS	2,011.88	1,933.49
tblVehicleEF	UBUS	95.00	11.95
tblVehicleEF	UBUS	11.59	2.78
tblVehicleEF	UBUS	15.89	0.12
tblVehicleEF	UBUS	0.62	0.07
tblVehicleEF	UBUS	0.01	0.03
tblVehicleEF	UBUS	0.15	4.6647e-003
tblVehicleEF	UBUS	1.0690e-003	2.3655e-005
tblVehicleEF	UBUS	0.27	0.03
tblVehicleEF	UBUS	3.0000e-003	7.5896e-003
tblVehicleEF	UBUS	0.14	4.4609e-003
tblVehicleEF	UBUS	9.8800e-004	2.1750e-005
tblVehicleEF	UBUS	6.2210e-003	8.4446e-004
tblVehicleEF	UBUS	0.11	0.01

tblVehicleEF	UBUS	3.1200e-003	6.3647e-004
tblVehicleEF	UBUS	1.01	0.34
tblVehicleEF	UBUS	0.03	0.08
tblVehicleEF	UBUS	0.82	0.07
tblVehicleEF	UBUS	0.01	2.4506e-003
tblVehicleEF	UBUS	1.1500e-003	1.1827e-004
tblVehicleEF	UBUS	6.2210e-003	8.4446e-004
tblVehicleEF	UBUS	0.11	0.01
tblVehicleEF	UBUS	3.1200e-003	6.3647e-004
tblVehicleEF	UBUS	4.10	7.01
tblVehicleEF	UBUS	0.03	0.08
tblVehicleEF	UBUS	0.90	0.07
tblVehicleTrips	DV_TP	40.00	35.00
tblVehicleTrips	PB_TP	15.00	25.00
tblVehicleTrips	PR_TP	45.00	40.00
tblVehicleTrips	ST_TR	42.04	28.31
tblVehicleTrips	SU_TR	20.43	28.31
tblVehicleTrips	WD_TR	44.32	28.31

## 2.0 Emissions Summary

### 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	0.0559	0.0000	4.4000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	8.4000e-004	8.4000e-004	0.0000	0.0000	9.0000e-004
Energy	1.2000e-004	1.0700e-003	9.0000e-004	1.0000e-005		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005	0.0000	50.2027	50.2027	2.4800e-003	5.3000e-004	50.4225
Mobile	0.2514	0.2522	1.6518	2.7300e-003	0.2397	3.6000e-003	0.2433	0.0640	3.3900e-003	0.0674	0.0000	252.5009	252.5009	0.0236	0.0000	253.0897
Waste						0.0000	0.0000		0.0000	0.0000	2.8358	0.0000	2.8358	0.1676	0.0000	7.0255
Water						0.0000	0.0000		0.0000	0.0000	0.3126	5.1302	5.4427	0.0324	8.1000e-004	6.4934
<b>Total</b>	<b>0.3074</b>	<b>0.2533</b>	<b>1.6531</b>	<b>2.7400e-003</b>	<b>0.2397</b>	<b>3.6800e-003</b>	<b>0.2434</b>	<b>0.0640</b>	<b>3.4700e-003</b>	<b>0.0674</b>	<b>3.1483</b>	<b>307.8346</b>	<b>310.9830</b>	<b>0.2260</b>	<b>1.3400e-003</b>	<b>317.0321</b>

#### 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	0.0559	0.0000	4.4000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	8.4000e-004	8.4000e-004	0.0000	0.0000	9.0000e-004
Energy	1.2000e-004	1.0700e-003	9.0000e-004	1.0000e-005		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005	0.0000	50.2027	50.2027	2.4800e-003	5.3000e-004	50.4225
Mobile	0.2514	0.2522	1.6518	2.7300e-003	0.2397	3.6000e-003	0.2433	0.0640	3.3900e-003	0.0674	0.0000	252.5009	252.5009	0.0236	0.0000	253.0897
Waste						0.0000	0.0000		0.0000	0.0000	1.4179	0.0000	1.4179	0.0838	0.0000	3.5128
Water						0.0000	0.0000		0.0000	0.0000	0.3126	5.1302	5.4427	0.0324	8.1000e-004	6.4934
<b>Total</b>	<b>0.3074</b>	<b>0.2533</b>	<b>1.6531</b>	<b>2.7400e-003</b>	<b>0.2397</b>	<b>3.6800e-003</b>	<b>0.2434</b>	<b>0.0640</b>	<b>3.4700e-003</b>	<b>0.0674</b>	<b>1.7304</b>	<b>307.8346</b>	<b>309.5651</b>	<b>0.1422</b>	<b>1.3400e-003</b>	<b>313.5193</b>

	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
<b>Percent Reduction</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>45.04</b>	<b>0.00</b>	<b>0.46</b>	<b>37.08</b>	<b>0.00</b>	<b>1.11</b>

## 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	0.2514	0.2522	1.6518	2.7300e-003	0.2397	3.6000e-003	0.2433	0.0640	3.3900e-003	0.0674	0.0000	252.5009	252.5009	0.0236	0.0000	253.0897
Unmitigated	0.2514	0.2522	1.6518	2.7300e-003	0.2397	3.6000e-003	0.2433	0.0640	3.3900e-003	0.0674	0.0000	252.5009	252.5009	0.0236	0.0000	253.0897

### 4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Parking Lot	0.00	0.00	0.00		
Strip Mall	376.52	376.52	376.52	636,569	636,569
Total	376.52	376.52	376.52	636,569	636,569

### 4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Strip Mall	16.60	8.40	6.90	16.60	64.40	19.00	40	35	25

### 4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Parking Lot	0.544640	0.056709	0.184037	0.135255	0.023974	0.005744	0.012157	0.008882	0.000874	0.000542	0.022226	0.000740	0.004220
Strip Mall	0.544640	0.056709	0.184037	0.135255	0.023974	0.005744	0.012157	0.008882	0.000874	0.000542	0.022226	0.000740	0.004220

## 5.0 Energy Detail

Historical Energy Use: Y

### 5.1 Mitigation Measures Energy

	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	49.0387	49.0387	2.4600e-003	5.1000e-004	49.2515
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	49.0387	49.0387	2.4600e-003	5.1000e-004	49.2515
NaturalGas Mitigated	1.2000e-004	1.0700e-003	9.0000e-004	1.0000e-005		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005	0.0000	1.1641	1.1641	2.0000e-005	2.0000e-005	1.1710
NaturalGas Unmitigated	1.2000e-004	1.0700e-003	9.0000e-004	1.0000e-005		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005	0.0000	1.1641	1.1641	2.0000e-005	2.0000e-005	1.1710

### 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					
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
Strip Mall	21813.6	1.2000e-004	1.0700e-003	9.0000e-004	1.0000e-005		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005	0.0000	1.1641	1.1641	2.0000e-005	2.0000e-005	1.1710
<b>Total</b>		<b>1.2000e-004</b>	<b>1.0700e-003</b>	<b>9.0000e-004</b>	<b>1.0000e-005</b>		<b>8.0000e-005</b>	<b>8.0000e-005</b>		<b>8.0000e-005</b>	<b>8.0000e-005</b>	<b>0.0000</b>	<b>1.1641</b>	<b>1.1641</b>	<b>2.0000e-005</b>	<b>2.0000e-005</b>	<b>1.1710</b>

#### 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					
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
Strip Mall	21813.6	1.2000e-004	1.0700e-003	9.0000e-004	1.0000e-005		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005	0.0000	1.1641	1.1641	2.0000e-005	2.0000e-005	1.1710
<b>Total</b>		<b>1.2000e-004</b>	<b>1.0700e-003</b>	<b>9.0000e-004</b>	<b>1.0000e-005</b>		<b>8.0000e-005</b>	<b>8.0000e-005</b>		<b>8.0000e-005</b>	<b>8.0000e-005</b>	<b>0.0000</b>	<b>1.1641</b>	<b>1.1641</b>	<b>2.0000e-005</b>	<b>2.0000e-005</b>	<b>1.1710</b>

### 5.3 Energy by Land Use - Electricity

#### Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Parking Lot	7180.6	1.8856	9.0000e-005	2.0000e-005	1.8938
Strip Mall	179564	47.1531	2.3600e-003	4.9000e-004	47.3577
<b>Total</b>		<b>49.0387</b>	<b>2.4500e-003</b>	<b>5.1000e-004</b>	<b>49.2515</b>

#### Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Parking Lot	7180.6	1.8856	9.0000e-005	2.0000e-005	1.8938
Strip Mall	179564	47.1531	2.3600e-003	4.9000e-004	47.3577
<b>Total</b>		<b>49.0387</b>	<b>2.4500e-003</b>	<b>5.1000e-004</b>	<b>49.2515</b>

### 6.0 Area Detail

#### 6.1 Mitigation Measures Area

	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	0.0559	0.0000	4.4000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	8.4000e-004	8.4000e-004	0.0000	0.0000	9.0000e-004
Unmitigated	0.0559	0.0000	4.4000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	8.4000e-004	8.4000e-004	0.0000	0.0000	9.0000e-004

## 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	6.4500e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0494					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	4.0000e-005	0.0000	4.4000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	8.4000e-004	8.4000e-004	0.0000	0.0000	9.0000e-004
<b>Total</b>	<b>0.0559</b>	<b>0.0000</b>	<b>4.4000e-004</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>8.4000e-004</b>	<b>8.4000e-004</b>	<b>0.0000</b>	<b>0.0000</b>	<b>9.0000e-004</b>

### 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	6.4500e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0494					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	4.0000e-005	0.0000	4.4000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	8.4000e-004	8.4000e-004	0.0000	0.0000	9.0000e-004
<b>Total</b>	<b>0.0559</b>	<b>0.0000</b>	<b>4.4000e-004</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>8.4000e-004</b>	<b>8.4000e-004</b>	<b>0.0000</b>	<b>0.0000</b>	<b>9.0000e-004</b>

## 7.0 Water Detail

### 7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	5.4427	0.0324	8.1000e-004	6.4934
Unmitigated	5.4427	0.0324	8.1000e-004	6.4934

## 7.2 Water by Land Use

### Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Strip Mall	0.985165 / 0.603811	5.4427	0.0324	8.1000e-004	6.4934
<b>Total</b>		<b>5.4427</b>	<b>0.0324</b>	<b>8.1000e-004</b>	<b>6.4934</b>

### Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Strip Mall	0.985165 / 0.603811	5.4427	0.0324	8.1000e-004	6.4934
<b>Total</b>		<b>5.4427</b>	<b>0.0324</b>	<b>8.1000e-004</b>	<b>6.4934</b>

## 8.0 Waste Detail

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### 8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

#### Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	1.4179	0.0838	0.0000	3.5128
Unmitigated	2.8358	0.1676	0.0000	7.0255

## 8.2 Waste by Land Use

### Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Strip Mall	13.97	2.8358	0.1676	0.0000	7.0255
<b>Total</b>		<b>2.8358</b>	<b>0.1676</b>	<b>0.0000</b>	<b>7.0255</b>

### Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Strip Mall	6.985	1.4179	0.0838	0.0000	3.5128
<b>Total</b>		<b>1.4179</b>	<b>0.0838</b>	<b>0.0000</b>	<b>3.5128</b>

## 9.0 Operational Offroad

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

### Fire Pumps and Emergency Generators

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

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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### User Defined Equipment

Equipment Type	Number
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## 11.0 Vegetation

## **A-3 Project Operational Emissions**

11469 Jefferson Hotel

Project - Greenhouse Gas Summary

Project Operations Summary (Full Buildout Year 2022)	
Category	MTCO <sub>2</sub> e/yr
Mobile	1,223
Area	0.01
Electricity	256
Natural Gas	157
Waste	12
Water	21
Construction	35
<b>Project Subtotal</b>	<b>1,703</b>
Existing	314
<b>Project Net Total GHG Emissions</b>	<b>1,390</b>

MTCO<sub>2</sub>e=Metric Tons Carbon Dioxide equivalents

Existing Emissions Summary	
Category	MTCO <sub>2</sub> e/yr
On Road Mobile Sources	253.0897
Area	9.00E-04
Energy (Electricity and Natural Gas)	50.4225
Water Conveyance and Wastewater Treatment	3.5128
Solid Waste	6.4934
<b>Total Existing Emissions</b>	<b>314</b>

11469 Jefferson Hotel

Project - Greenhouse Gas Summary

No GHG Reduction Features

Project Operations Summary (Full Buildout Year 2022)	
Category	MTCO <sub>2</sub> e/yr
Mobile	1,223
Area	0
Electricity	359
Natural Gas	157
Waste	48
Water	26
Construction	35
<b>Project Subtotal</b>	<b>1,848</b>
Existing	314
<b>Project Net Total GHG Emissions</b>	<b>1,535</b>

MTCO<sub>2</sub>e=Metric Tons Carbon Dioxide equivalents

Existing Emissions Summary	
Category	MTCO <sub>2</sub> e/yr
On Road Mobile Sources	253.0897
Area	9.00E-04
Energy (Electricity and Natural Gas)	50.4225
Water Conveyance and Wastewater Treatment	3.5128
Solid Waste	6.4934
<b>Total Existing Emissions</b>	<b>314</b>

11469 Jefferson - Operations - South Coast AQMD Air District, Annual

**11469 Jefferson - Operations**  
**South Coast AQMD Air District, Annual**

**1.0 Project Characteristics**

**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Enclosed Parking with Elevator	208.00	Space	0.28	33,817.00	0
Hotel	175.00	Room	0.50	122,000.00	0

**1.2 Other Project Characteristics**

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>	2.2	<b>Precipitation Freq (Days)</b>	31
<b>Climate Zone</b>	11	<b>Operational Year</b>		2022	
<b>Utility Company</b>	Southern California Edison				
<b>CO2 Intensity (lb/MW hr)</b>	509.22	<b>CH4 Intensity (lb/MW hr)</b>	0.029	<b>N2O Intensity (lb/MW hr)</b>	0.006

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

Project Characteristics - CO2e intensity factor was linearly projected for year 2022 anticipated RPS based on SB 100 target of 44% RPS by 12/31/2024 projected and from SCE contract with the CPUC to have 41.4% RPS by 2020.

Land Use - see operational assumptions

Vehicle Trips - trip rate from project traffic study

Vehicle Emission Factors - Updated to EMFAC2017 EFs

Energy Use -

Energy Mitigation - see operational assumptions for solar pv system assumptions.

Waste Mitigation -

Table Name	Column Name	Default Value	New Value
tblFleetMix	HHD	0.03	9.1619e-003
tblFleetMix	HHD	0.03	9.1619e-003
tblFleetMix	LDA	0.55	0.54
tblFleetMix	LDA	0.55	0.54
tblFleetMix	LDT1	0.04	0.06
tblFleetMix	LDT1	0.04	0.06
tblFleetMix	LDT2	0.20	0.18
tblFleetMix	LDT2	0.20	0.18
tblFleetMix	LHD1	0.02	0.02
tblFleetMix	LHD1	0.02	0.02
tblFleetMix	LHD2	5.8460e-003	6.2455e-003
tblFleetMix	LHD2	5.8460e-003	6.2455e-003
tblFleetMix	MCY	4.8550e-003	0.02
tblFleetMix	MCY	4.8550e-003	0.02
tblFleetMix	MDV	0.12	0.13
tblFleetMix	MDV	0.12	0.13
tblFleetMix	MH	8.9600e-004	3.8643e-003
tblFleetMix	MH	8.9600e-004	3.8643e-003
tblFleetMix	MHD	0.02	0.01
tblFleetMix	MHD	0.02	0.01
tblFleetMix	OBUS	2.0990e-003	8.2637e-004
tblFleetMix	OBUS	2.0990e-003	8.2637e-004
tblFleetMix	SBUS	7.0900e-004	7.4790e-004
tblFleetMix	SBUS	7.0900e-004	7.4790e-004
tblFleetMix	UBUS	1.8280e-003	5.1497e-004
tblFleetMix	UBUS	1.8280e-003	5.1497e-004
tblLandUse	LandUseSquareFeet	83,200.00	33,817.00
tblLandUse	LandUseSquareFeet	254,100.00	122,000.00
tblLandUse	LotAcreage	1.87	0.28

tblLandUse	LotAcreage	5.83	0.50
tblProjectCharacteristics	CO2IntensityFactor	702.44	509.22
tblVehicleEF	HHD	0.72	0.03
tblVehicleEF	HHD	0.09	0.08
tblVehicleEF	HHD	0.08	0.00
tblVehicleEF	HHD	2.55	6.51
tblVehicleEF	HHD	0.96	0.52
tblVehicleEF	HHD	2.84	7.1770e-003
tblVehicleEF	HHD	4,906.64	1,210.94
tblVehicleEF	HHD	1,590.87	1,438.06
tblVehicleEF	HHD	9.09	0.06
tblVehicleEF	HHD	20.90	6.45
tblVehicleEF	HHD	3.41	3.28
tblVehicleEF	HHD	19.73	2.11
tblVehicleEF	HHD	0.01	3.7420e-003
tblVehicleEF	HHD	0.06	0.06
tblVehicleEF	HHD	0.04	0.04
tblVehicleEF	HHD	0.01	0.03
tblVehicleEF	HHD	7.7000e-005	1.0000e-006
tblVehicleEF	HHD	0.01	3.5800e-003
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	8.8170e-003	8.8730e-003
tblVehicleEF	HHD	0.01	0.03
tblVehicleEF	HHD	7.0000e-005	1.0000e-006
tblVehicleEF	HHD	9.9000e-005	5.0000e-006
tblVehicleEF	HHD	4.0680e-003	1.9900e-004
tblVehicleEF	HHD	0.64	0.47
tblVehicleEF	HHD	7.1000e-005	4.0000e-006
tblVehicleEF	HHD	0.12	0.07
tblVehicleEF	HHD	3.3200e-004	1.0440e-003

tblVehicleEF	HHD	0.07	2.0000e-06
tblVehicleEF	HHD	0.05	0.01
tblVehicleEF	HHD	0.01	0.01
tblVehicleEF	HHD	1.3800e-004	1.0000e-006
tblVehicleEF	HHD	9.9000e-005	5.0000e-006
tblVehicleEF	HHD	4.0680e-003	1.9900e-004
tblVehicleEF	HHD	0.74	0.54
tblVehicleEF	HHD	7.1000e-005	4.0000e-006
tblVehicleEF	HHD	0.22	0.16
tblVehicleEF	HHD	3.3200e-004	1.0440e-003
tblVehicleEF	HHD	0.08	2.0000e-006
tblVehicleEF	HHD	0.67	0.03
tblVehicleEF	HHD	0.09	0.08
tblVehicleEF	HHD	0.08	4.0556e-007
tblVehicleEF	HHD	1.86	6.37
tblVehicleEF	HHD	0.97	0.52
tblVehicleEF	HHD	2.70	6.8153e-003
tblVehicleEF	HHD	5,197.96	1,206.27
tblVehicleEF	HHD	1,590.87	1,438.06
tblVehicleEF	HHD	9.09	0.06
tblVehicleEF	HHD	21.57	6.25
tblVehicleEF	HHD	3.22	3.10
tblVehicleEF	HHD	19.72	2.11
tblVehicleEF	HHD	0.01	3.2843e-003
tblVehicleEF	HHD	0.06	0.06
tblVehicleEF	HHD	0.04	0.04
tblVehicleEF	HHD	0.01	0.03
tblVehicleEF	HHD	7.7000e-005	1.1608e-006
tblVehicleEF	HHD	0.01	3.1423e-003
tblVehicleEF	HHD	0.03	0.03

tblVehicleEF	HHD	8.8170e-003	8.8727e-003
tblVehicleEF	HHD	0.01	0.03
tblVehicleEF	HHD	7.0000e-005	1.0673e-006
tblVehicleEF	HHD	1.6000e-004	8.6932e-006
tblVehicleEF	HHD	4.2570e-003	2.0741e-004
tblVehicleEF	HHD	0.60	0.49
tblVehicleEF	HHD	1.1000e-004	5.9150e-006
tblVehicleEF	HHD	0.12	0.07
tblVehicleEF	HHD	3.2600e-004	1.0356e-003
tblVehicleEF	HHD	0.07	2.1344e-006
tblVehicleEF	HHD	0.05	0.01
tblVehicleEF	HHD	0.01	0.01
tblVehicleEF	HHD	1.3500e-004	6.3630e-007
tblVehicleEF	HHD	1.6000e-004	8.6932e-006
tblVehicleEF	HHD	4.2570e-003	2.0741e-004
tblVehicleEF	HHD	0.70	0.57
tblVehicleEF	HHD	1.1000e-004	5.9150e-006
tblVehicleEF	HHD	0.22	0.16
tblVehicleEF	HHD	3.2600e-004	1.0356e-003
tblVehicleEF	HHD	0.07	2.3369e-006
tblVehicleEF	HHD	0.77	0.03
tblVehicleEF	HHD	0.09	0.08
tblVehicleEF	HHD	0.08	4.2674e-007
tblVehicleEF	HHD	3.51	6.70
tblVehicleEF	HHD	0.96	0.52
tblVehicleEF	HHD	2.86	7.2281e-003
tblVehicleEF	HHD	4,504.34	1,217.38
tblVehicleEF	HHD	1,590.87	1,438.06
tblVehicleEF	HHD	9.09	0.06
tblVehicleEF	HHD	19.97	6.73

tblVehicleEF	HHD	3.36	3.24
tblVehicleEF	HHD	19.73	2.11
tblVehicleEF	HHD	0.02	4.3740e-003
tblVehicleEF	HHD	0.06	0.06
tblVehicleEF	HHD	0.04	0.04
tblVehicleEF	HHD	0.01	0.03
tblVehicleEF	HHD	7.7000e-005	1.1608e-006
tblVehicleEF	HHD	0.02	4.1847e-003
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	8.8170e-003	8.8727e-003
tblVehicleEF	HHD	0.01	0.03
tblVehicleEF	HHD	7.0000e-005	1.0673e-006
tblVehicleEF	HHD	9.3000e-005	5.5102e-006
tblVehicleEF	HHD	4.3390e-003	2.2656e-004
tblVehicleEF	HHD	0.69	0.44
tblVehicleEF	HHD	6.8000e-005	3.6531e-006
tblVehicleEF	HHD	0.12	0.07
tblVehicleEF	HHD	3.5900e-004	1.1075e-003
tblVehicleEF	HHD	0.07	2.2379e-006
tblVehicleEF	HHD	0.04	0.01
tblVehicleEF	HHD	0.01	0.01
tblVehicleEF	HHD	1.3800e-004	6.4278e-007
tblVehicleEF	HHD	9.3000e-005	5.5102e-006
tblVehicleEF	HHD	4.3390e-003	2.2656e-004
tblVehicleEF	HHD	0.80	0.51
tblVehicleEF	HHD	6.8000e-005	3.6531e-006
tblVehicleEF	HHD	0.22	0.16
tblVehicleEF	HHD	3.5900e-004	1.1075e-003
tblVehicleEF	HHD	0.08	2.4502e-006
tblVehicleEF	LDA	4.7080e-003	2.7390e-003

tblVehicleEF	LDA	5.1030e-003	0.05
tblVehicleEF	LDA	0.61	0.68
tblVehicleEF	LDA	1.10	2.09
tblVehicleEF	LDA	264.19	265.95
tblVehicleEF	LDA	56.82	53.17
tblVehicleEF	LDA	0.05	0.04
tblVehicleEF	LDA	0.07	0.18
tblVehicleEF	LDA	1.9930e-003	1.6790e-003
tblVehicleEF	LDA	2.2640e-003	1.8370e-003
tblVehicleEF	LDA	1.8370e-003	1.5470e-003
tblVehicleEF	LDA	2.0810e-003	1.6890e-003
tblVehicleEF	LDA	0.04	0.05
tblVehicleEF	LDA	0.10	0.10
tblVehicleEF	LDA	0.04	0.05
tblVehicleEF	LDA	0.01	0.01
tblVehicleEF	LDA	0.04	0.21
tblVehicleEF	LDA	0.07	0.22
tblVehicleEF	LDA	2.6460e-003	2.6310e-003
tblVehicleEF	LDA	5.8700e-004	5.2600e-004
tblVehicleEF	LDA	0.04	0.05
tblVehicleEF	LDA	0.10	0.10
tblVehicleEF	LDA	0.04	0.05
tblVehicleEF	LDA	0.02	0.02
tblVehicleEF	LDA	0.04	0.21
tblVehicleEF	LDA	0.08	0.24
tblVehicleEF	LDA	5.0460e-003	2.9541e-003
tblVehicleEF	LDA	4.5230e-003	0.04
tblVehicleEF	LDA	0.69	0.76
tblVehicleEF	LDA	0.94	1.79
tblVehicleEF	LDA	278.35	279.67

tblVehicleEF	LDA	56.82	52.61
tblVehicleEF	LDA	0.04	0.03
tblVehicleEF	LDA	0.06	0.17
tblVehicleEF	LDA	0.04	0.04
tblVehicleEF	LDA	8.0000e-003	8.0000e-003
tblVehicleEF	LDA	1.9930e-003	1.6792e-003
tblVehicleEF	LDA	2.2640e-003	1.8374e-003
tblVehicleEF	LDA	0.02	0.02
tblVehicleEF	LDA	2.0000e-003	2.0000e-003
tblVehicleEF	LDA	1.8370e-003	1.5468e-003
tblVehicleEF	LDA	2.0810e-003	1.6895e-003
tblVehicleEF	LDA	0.06	0.09
tblVehicleEF	LDA	0.10	0.10
tblVehicleEF	LDA	0.05	0.07
tblVehicleEF	LDA	0.01	0.01
tblVehicleEF	LDA	0.04	0.20
tblVehicleEF	LDA	0.06	0.19
tblVehicleEF	LDA	2.7880e-003	2.7668e-003
tblVehicleEF	LDA	5.8400e-004	5.2065e-004
tblVehicleEF	LDA	0.06	0.09
tblVehicleEF	LDA	0.10	0.10
tblVehicleEF	LDA	0.05	0.07
tblVehicleEF	LDA	0.02	0.02
tblVehicleEF	LDA	0.04	0.20
tblVehicleEF	LDA	0.07	0.21
tblVehicleEF	LDA	4.6070e-003	2.6779e-003
tblVehicleEF	LDA	5.2210e-003	0.05
tblVehicleEF	LDA	0.59	0.66
tblVehicleEF	LDA	1.13	2.15
tblVehicleEF	LDA	259.61	261.48

tblVehicleEF	LDA	56.82	53.28
tblVehicleEF	LDA	0.05	0.04
tblVehicleEF	LDA	0.07	0.18
tblVehicleEF	LDA	0.04	0.04
tblVehicleEF	LDA	8.0000e-003	8.0000e-003
tblVehicleEF	LDA	1.9930e-003	1.6792e-003
tblVehicleEF	LDA	2.2640e-003	1.8374e-003
tblVehicleEF	LDA	0.02	0.02
tblVehicleEF	LDA	2.0000e-003	2.0000e-003
tblVehicleEF	LDA	1.8370e-003	1.5468e-003
tblVehicleEF	LDA	2.0810e-003	1.6895e-003
tblVehicleEF	LDA	0.04	0.05
tblVehicleEF	LDA	0.11	0.11
tblVehicleEF	LDA	0.03	0.05
tblVehicleEF	LDA	0.01	0.01
tblVehicleEF	LDA	0.04	0.24
tblVehicleEF	LDA	0.07	0.22
tblVehicleEF	LDA	2.6000e-003	2.5867e-003
tblVehicleEF	LDA	5.8700e-004	5.2725e-004
tblVehicleEF	LDA	0.04	0.05
tblVehicleEF	LDA	0.11	0.11
tblVehicleEF	LDA	0.03	0.05
tblVehicleEF	LDA	0.02	0.02
tblVehicleEF	LDA	0.04	0.24
tblVehicleEF	LDA	0.08	0.24
tblVehicleEF	LDT1	0.01	7.1830e-003
tblVehicleEF	LDT1	0.01	0.07
tblVehicleEF	LDT1	1.50	1.39
tblVehicleEF	LDT1	2.77	2.28
tblVehicleEF	LDT1	329.66	314.22

tblVehicleEF	LDT1	69.74	63.58
tblVehicleEF	LDT1	0.14	0.11
tblVehicleEF	LDT1	0.16	0.26
tblVehicleEF	LDT1	3.1320e-003	2.5040e-003
tblVehicleEF	LDT1	3.4000e-003	2.6190e-003
tblVehicleEF	LDT1	2.8840e-003	2.3040e-003
tblVehicleEF	LDT1	3.1270e-003	2.4080e-003
tblVehicleEF	LDT1	0.14	0.14
tblVehicleEF	LDT1	0.27	0.21
tblVehicleEF	LDT1	0.11	0.11
tblVehicleEF	LDT1	0.03	0.03
tblVehicleEF	LDT1	0.17	0.70
tblVehicleEF	LDT1	0.19	0.36
tblVehicleEF	LDT1	3.3150e-003	3.1090e-003
tblVehicleEF	LDT1	7.4600e-004	6.2900e-004
tblVehicleEF	LDT1	0.14	0.14
tblVehicleEF	LDT1	0.27	0.21
tblVehicleEF	LDT1	0.11	0.11
tblVehicleEF	LDT1	0.05	0.05
tblVehicleEF	LDT1	0.17	0.70
tblVehicleEF	LDT1	0.21	0.39
tblVehicleEF	LDT1	0.01	7.6860e-003
tblVehicleEF	LDT1	0.01	0.06
tblVehicleEF	LDT1	1.65	1.54
tblVehicleEF	LDT1	2.37	1.95
tblVehicleEF	LDT1	346.09	328.12
tblVehicleEF	LDT1	69.74	62.92
tblVehicleEF	LDT1	0.12	0.10
tblVehicleEF	LDT1	0.15	0.24
tblVehicleEF	LDT1	0.04	0.04

tblVehicleEF	LDT1	8.0000e-003	8.0000e-003
tblVehicleEF	LDT1	3.1320e-003	2.5040e-003
tblVehicleEF	LDT1	3.4000e-003	2.6192e-003
tblVehicleEF	LDT1	0.02	0.02
tblVehicleEF	LDT1	2.0000e-003	2.0000e-003
tblVehicleEF	LDT1	2.8840e-003	2.3043e-003
tblVehicleEF	LDT1	3.1270e-003	2.4084e-003
tblVehicleEF	LDT1	0.22	0.22
tblVehicleEF	LDT1	0.29	0.22
tblVehicleEF	LDT1	0.16	0.17
tblVehicleEF	LDT1	0.04	0.03
tblVehicleEF	LDT1	0.16	0.66
tblVehicleEF	LDT1	0.17	0.32
tblVehicleEF	LDT1	3.4820e-003	3.2470e-003
tblVehicleEF	LDT1	7.3900e-004	6.2263e-004
tblVehicleEF	LDT1	0.22	0.22
tblVehicleEF	LDT1	0.29	0.22
tblVehicleEF	LDT1	0.16	0.17
tblVehicleEF	LDT1	0.05	0.05
tblVehicleEF	LDT1	0.16	0.66
tblVehicleEF	LDT1	0.18	0.35
tblVehicleEF	LDT1	0.01	7.0340e-003
tblVehicleEF	LDT1	0.01	0.07
tblVehicleEF	LDT1	1.45	1.34
tblVehicleEF	LDT1	2.85	2.35
tblVehicleEF	LDT1	324.17	309.56
tblVehicleEF	LDT1	69.74	63.72
tblVehicleEF	LDT1	0.14	0.11
tblVehicleEF	LDT1	0.16	0.26
tblVehicleEF	LDT1	0.04	0.04

tblVehicleEF	LDT1	8.0000e-003	8.0000e-003
tblVehicleEF	LDT1	3.1320e-003	2.5040e-003
tblVehicleEF	LDT1	3.4000e-003	2.6192e-003
tblVehicleEF	LDT1	0.02	0.02
tblVehicleEF	LDT1	2.0000e-003	2.0000e-003
tblVehicleEF	LDT1	2.8840e-003	2.3043e-003
tblVehicleEF	LDT1	3.1270e-003	2.4084e-003
tblVehicleEF	LDT1	0.13	0.13
tblVehicleEF	LDT1	0.31	0.23
tblVehicleEF	LDT1	0.10	0.11
tblVehicleEF	LDT1	0.03	0.03
tblVehicleEF	LDT1	0.20	0.83
tblVehicleEF	LDT1	0.20	0.37
tblVehicleEF	LDT1	3.2600e-003	3.0632e-003
tblVehicleEF	LDT1	7.4700e-004	6.3053e-004
tblVehicleEF	LDT1	0.13	0.13
tblVehicleEF	LDT1	0.31	0.23
tblVehicleEF	LDT1	0.10	0.11
tblVehicleEF	LDT1	0.05	0.05
tblVehicleEF	LDT1	0.20	0.83
tblVehicleEF	LDT1	0.21	0.40
tblVehicleEF	LDT2	6.4770e-003	4.5310e-003
tblVehicleEF	LDT2	6.3660e-003	0.07
tblVehicleEF	LDT2	0.79	0.97
tblVehicleEF	LDT2	1.35	2.64
tblVehicleEF	LDT2	369.39	336.54
tblVehicleEF	LDT2	78.41	68.58
tblVehicleEF	LDT2	0.08	0.08
tblVehicleEF	LDT2	0.11	0.28
tblVehicleEF	LDT2	1.9860e-003	1.7610e-003

tblVehicleEF	LDT2	2.3340e-003	1.8600e-003
tblVehicleEF	LDT2	1.8270e-003	1.6210e-003
tblVehicleEF	LDT2	2.1460e-003	1.7100e-003
tblVehicleEF	LDT2	0.05	0.08
tblVehicleEF	LDT2	0.10	0.12
tblVehicleEF	LDT2	0.05	0.08
tblVehicleEF	LDT2	0.02	0.02
tblVehicleEF	LDT2	0.06	0.41
tblVehicleEF	LDT2	0.09	0.31
tblVehicleEF	LDT2	3.7000e-003	3.3290e-003
tblVehicleEF	LDT2	8.0700e-004	6.7900e-004
tblVehicleEF	LDT2	0.05	0.08
tblVehicleEF	LDT2	0.10	0.12
tblVehicleEF	LDT2	0.05	0.08
tblVehicleEF	LDT2	0.02	0.03
tblVehicleEF	LDT2	0.06	0.41
tblVehicleEF	LDT2	0.09	0.34
tblVehicleEF	LDT2	6.9310e-003	4.8690e-003
tblVehicleEF	LDT2	5.6450e-003	0.06
tblVehicleEF	LDT2	0.88	1.08
tblVehicleEF	LDT2	1.16	2.26
tblVehicleEF	LDT2	388.48	350.13
tblVehicleEF	LDT2	78.41	67.87
tblVehicleEF	LDT2	0.07	0.07
tblVehicleEF	LDT2	0.10	0.26
tblVehicleEF	LDT2	0.04	0.04
tblVehicleEF	LDT2	8.0000e-003	8.0000e-003
tblVehicleEF	LDT2	1.9860e-003	1.7615e-003
tblVehicleEF	LDT2	2.3340e-003	1.8602e-003
tblVehicleEF	LDT2	0.02	0.02

tblVehicleEF	LDT2	2.0000e-003	2.0000e-003
tblVehicleEF	LDT2	1.8270e-003	1.6212e-003
tblVehicleEF	LDT2	2.1460e-003	1.7104e-003
tblVehicleEF	LDT2	0.08	0.13
tblVehicleEF	LDT2	0.11	0.13
tblVehicleEF	LDT2	0.07	0.11
tblVehicleEF	LDT2	0.02	0.02
tblVehicleEF	LDT2	0.06	0.38
tblVehicleEF	LDT2	0.08	0.28
tblVehicleEF	LDT2	3.8920e-003	3.4639e-003
tblVehicleEF	LDT2	8.0300e-004	6.7161e-004
tblVehicleEF	LDT2	0.08	0.13
tblVehicleEF	LDT2	0.11	0.13
tblVehicleEF	LDT2	0.07	0.11
tblVehicleEF	LDT2	0.03	0.03
tblVehicleEF	LDT2	0.06	0.38
tblVehicleEF	LDT2	0.08	0.30
tblVehicleEF	LDT2	6.3380e-003	4.4315e-003
tblVehicleEF	LDT2	6.5150e-003	0.07
tblVehicleEF	LDT2	0.76	0.93
tblVehicleEF	LDT2	1.39	2.72
tblVehicleEF	LDT2	363.05	331.99
tblVehicleEF	LDT2	78.41	68.74
tblVehicleEF	LDT2	0.07	0.08
tblVehicleEF	LDT2	0.11	0.28
tblVehicleEF	LDT2	0.04	0.04
tblVehicleEF	LDT2	8.0000e-003	8.0000e-003
tblVehicleEF	LDT2	1.9860e-003	1.7615e-003
tblVehicleEF	LDT2	2.3340e-003	1.8602e-003
tblVehicleEF	LDT2	0.02	0.02

tblVehicleEF	LDT2	2.0000e-003	2.0000e-003
tblVehicleEF	LDT2	1.8270e-003	1.6212e-003
tblVehicleEF	LDT2	2.1460e-003	1.7104e-003
tblVehicleEF	LDT2	0.04	0.07
tblVehicleEF	LDT2	0.11	0.13
tblVehicleEF	LDT2	0.04	0.07
tblVehicleEF	LDT2	0.02	0.02
tblVehicleEF	LDT2	0.07	0.47
tblVehicleEF	LDT2	0.09	0.32
tblVehicleEF	LDT2	3.6360e-003	3.2844e-003
tblVehicleEF	LDT2	8.0700e-004	6.8020e-004
tblVehicleEF	LDT2	0.04	0.07
tblVehicleEF	LDT2	0.11	0.13
tblVehicleEF	LDT2	0.04	0.07
tblVehicleEF	LDT2	0.02	0.03
tblVehicleEF	LDT2	0.07	0.47
tblVehicleEF	LDT2	0.10	0.35
tblVehicleEF	LHD1	5.4910e-003	5.4520e-003
tblVehicleEF	LHD1	0.01	5.3620e-003
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	0.15	0.19
tblVehicleEF	LHD1	0.82	0.63
tblVehicleEF	LHD1	2.60	1.08
tblVehicleEF	LHD1	9.01	9.00
tblVehicleEF	LHD1	602.65	659.27
tblVehicleEF	LHD1	32.51	12.01
tblVehicleEF	LHD1	0.08	0.06
tblVehicleEF	LHD1	1.20	0.80
tblVehicleEF	LHD1	1.00	0.33
tblVehicleEF	LHD1	8.6000e-004	7.9900e-004

tblVehicleEF	LHD1	0.01	9.7330e-003
tblVehicleEF	LHD1	0.01	7.1920e-003
tblVehicleEF	LHD1	9.4900e-004	2.6600e-004
tblVehicleEF	LHD1	8.2200e-004	7.6400e-004
tblVehicleEF	LHD1	2.5220e-003	2.4330e-003
tblVehicleEF	LHD1	9.6970e-003	6.8540e-003
tblVehicleEF	LHD1	8.7300e-004	2.4500e-004
tblVehicleEF	LHD1	3.1810e-003	2.5560e-003
tblVehicleEF	LHD1	0.10	0.08
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	1.8680e-003	1.5090e-003
tblVehicleEF	LHD1	0.06	0.05
tblVehicleEF	LHD1	0.30	0.52
tblVehicleEF	LHD1	0.26	0.08
tblVehicleEF	LHD1	9.0000e-005	8.7000e-005
tblVehicleEF	LHD1	5.9160e-003	6.4340e-003
tblVehicleEF	LHD1	3.7400e-004	1.1900e-004
tblVehicleEF	LHD1	3.1810e-003	2.5560e-003
tblVehicleEF	LHD1	0.10	0.08
tblVehicleEF	LHD1	0.02	0.03
tblVehicleEF	LHD1	1.8680e-003	1.5090e-003
tblVehicleEF	LHD1	0.08	0.06
tblVehicleEF	LHD1	0.30	0.52
tblVehicleEF	LHD1	0.28	0.08
tblVehicleEF	LHD1	5.4910e-003	5.4637e-003
tblVehicleEF	LHD1	0.01	5.4654e-003
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	0.15	0.19
tblVehicleEF	LHD1	0.83	0.64
tblVehicleEF	LHD1	2.48	1.03

tblVehicleEF	LHD1	9.01	9.00
tblVehicleEF	LHD1	602.65	659.29
tblVehicleEF	LHD1	32.51	11.92
tblVehicleEF	LHD1	0.08	0.06
tblVehicleEF	LHD1	1.12	0.75
tblVehicleEF	LHD1	0.96	0.31
tblVehicleEF	LHD1	8.6000e-004	7.9884e-004
tblVehicleEF	LHD1	0.08	0.08
tblVehicleEF	LHD1	0.01	9.7335e-003
tblVehicleEF	LHD1	0.01	7.1920e-003
tblVehicleEF	LHD1	9.4900e-004	2.6596e-004
tblVehicleEF	LHD1	8.2200e-004	7.6429e-004
tblVehicleEF	LHD1	0.03	0.03
tblVehicleEF	LHD1	2.5220e-003	2.4334e-003
tblVehicleEF	LHD1	9.6970e-003	6.8537e-003
tblVehicleEF	LHD1	8.7300e-004	2.4454e-004
tblVehicleEF	LHD1	4.9650e-003	3.9659e-003
tblVehicleEF	LHD1	0.11	0.08
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	2.8120e-003	2.2585e-003
tblVehicleEF	LHD1	0.07	0.05
tblVehicleEF	LHD1	0.30	0.50
tblVehicleEF	LHD1	0.25	0.07
tblVehicleEF	LHD1	9.0000e-005	8.7363e-005
tblVehicleEF	LHD1	5.9160e-003	6.4344e-003
tblVehicleEF	LHD1	3.7200e-004	1.1799e-004
tblVehicleEF	LHD1	4.9650e-003	3.9659e-003
tblVehicleEF	LHD1	0.11	0.08
tblVehicleEF	LHD1	0.02	0.03
tblVehicleEF	LHD1	2.8120e-003	2.2585e-003

tblVehicleEF	LHD1	0.08	0.06
tblVehicleEF	LHD1	0.30	0.50
tblVehicleEF	LHD1	0.27	0.08
tblVehicleEF	LHD1	5.4910e-003	5.4499e-003
tblVehicleEF	LHD1	0.01	5.3380e-003
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	0.15	0.19
tblVehicleEF	LHD1	0.81	0.62
tblVehicleEF	LHD1	2.61	1.09
tblVehicleEF	LHD1	9.01	9.00
tblVehicleEF	LHD1	602.65	659.27
tblVehicleEF	LHD1	32.51	12.02
tblVehicleEF	LHD1	0.08	0.06
tblVehicleEF	LHD1	1.18	0.78
tblVehicleEF	LHD1	1.00	0.33
tblVehicleEF	LHD1	8.6000e-004	7.9884e-004
tblVehicleEF	LHD1	0.08	0.08
tblVehicleEF	LHD1	0.01	9.7335e-003
tblVehicleEF	LHD1	0.01	7.1920e-003
tblVehicleEF	LHD1	9.4900e-004	2.6596e-004
tblVehicleEF	LHD1	8.2200e-004	7.6429e-004
tblVehicleEF	LHD1	0.03	0.03
tblVehicleEF	LHD1	2.5220e-003	2.4334e-003
tblVehicleEF	LHD1	9.6970e-003	6.8537e-003
tblVehicleEF	LHD1	8.7300e-004	2.4454e-004
tblVehicleEF	LHD1	3.2290e-003	2.6127e-003
tblVehicleEF	LHD1	0.12	0.09
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	1.8330e-003	1.4847e-003
tblVehicleEF	LHD1	0.06	0.05

tblVehicleEF	LHD1	0.33	0.56
tblVehicleEF	LHD1	0.26	0.08
tblVehicleEF	LHD1	9.0000e-005	8.7363e-005
tblVehicleEF	LHD1	5.9160e-003	6.4341e-003
tblVehicleEF	LHD1	3.7400e-004	1.1895e-004
tblVehicleEF	LHD1	3.2290e-003	2.6127e-003
tblVehicleEF	LHD1	0.12	0.09
tblVehicleEF	LHD1	0.02	0.03
tblVehicleEF	LHD1	1.8330e-003	1.4847e-003
tblVehicleEF	LHD1	0.08	0.06
tblVehicleEF	LHD1	0.33	0.56
tblVehicleEF	LHD1	0.28	0.08
tblVehicleEF	LHD2	3.9270e-003	3.8310e-003
tblVehicleEF	LHD2	4.1730e-003	3.7830e-003
tblVehicleEF	LHD2	8.3570e-003	0.01
tblVehicleEF	LHD2	0.13	0.15
tblVehicleEF	LHD2	0.36	0.43
tblVehicleEF	LHD2	1.31	0.72
tblVehicleEF	LHD2	13.72	13.69
tblVehicleEF	LHD2	614.66	663.04
tblVehicleEF	LHD2	27.22	9.23
tblVehicleEF	LHD2	0.10	0.09
tblVehicleEF	LHD2	0.80	0.96
tblVehicleEF	LHD2	0.55	0.23
tblVehicleEF	LHD2	1.1850e-003	1.2740e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	9.5110e-003	0.01
tblVehicleEF	LHD2	4.4600e-004	1.4900e-004
tblVehicleEF	LHD2	1.1340e-003	1.2190e-003
tblVehicleEF	LHD2	2.6590e-003	2.6410e-003

tblVehicleEF	LHD2	9.0860e-003	0.01
tblVehicleEF	LHD2	4.1000e-004	1.3700e-004
tblVehicleEF	LHD2	1.1830e-003	1.5470e-003
tblVehicleEF	LHD2	0.04	0.05
tblVehicleEF	LHD2	0.01	0.02
tblVehicleEF	LHD2	7.4900e-004	9.3300e-004
tblVehicleEF	LHD2	0.05	0.05
tblVehicleEF	LHD2	0.08	0.32
tblVehicleEF	LHD2	0.11	0.05
tblVehicleEF	LHD2	1.3400e-004	1.3100e-004
tblVehicleEF	LHD2	5.9880e-003	6.4150e-003
tblVehicleEF	LHD2	2.9600e-004	9.1000e-005
tblVehicleEF	LHD2	1.1830e-003	1.5470e-003
tblVehicleEF	LHD2	0.04	0.05
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	7.4900e-004	9.3300e-004
tblVehicleEF	LHD2	0.05	0.06
tblVehicleEF	LHD2	0.08	0.32
tblVehicleEF	LHD2	0.12	0.06
tblVehicleEF	LHD2	3.9270e-003	3.8391e-003
tblVehicleEF	LHD2	4.2260e-003	3.8228e-003
tblVehicleEF	LHD2	8.0730e-003	0.01
tblVehicleEF	LHD2	0.13	0.15
tblVehicleEF	LHD2	0.36	0.44
tblVehicleEF	LHD2	1.25	0.69
tblVehicleEF	LHD2	13.72	13.69
tblVehicleEF	LHD2	614.66	663.05
tblVehicleEF	LHD2	27.22	9.17
tblVehicleEF	LHD2	0.10	0.09
tblVehicleEF	LHD2	0.76	0.91

tblVehicleEF	LHD2	0.53	0.22
tblVehicleEF	LHD2	1.1850e-003	1.2739e-003
tblVehicleEF	LHD2	0.09	0.09
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	9.5110e-003	0.01
tblVehicleEF	LHD2	4.4600e-004	1.4893e-004
tblVehicleEF	LHD2	1.1340e-003	1.2188e-003
tblVehicleEF	LHD2	0.04	0.04
tblVehicleEF	LHD2	2.6590e-003	2.6414e-003
tblVehicleEF	LHD2	9.0860e-003	0.01
tblVehicleEF	LHD2	4.1000e-004	1.3694e-004
tblVehicleEF	LHD2	1.8430e-003	2.3965e-003
tblVehicleEF	LHD2	0.04	0.05
tblVehicleEF	LHD2	0.01	0.02
tblVehicleEF	LHD2	1.1140e-003	1.3896e-003
tblVehicleEF	LHD2	0.05	0.05
tblVehicleEF	LHD2	0.08	0.31
tblVehicleEF	LHD2	0.11	0.05
tblVehicleEF	LHD2	1.3400e-004	1.3119e-004
tblVehicleEF	LHD2	5.9880e-003	6.4148e-003
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tblVehicleEF	LHD2	1.8430e-003	2.3965e-003
tblVehicleEF	LHD2	0.04	0.05
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	1.1140e-003	1.3896e-003
tblVehicleEF	LHD2	0.05	0.06
tblVehicleEF	LHD2	0.08	0.31
tblVehicleEF	LHD2	0.12	0.06
tblVehicleEF	LHD2	3.9270e-003	3.8293e-003
tblVehicleEF	LHD2	4.1600e-003	3.7732e-003

tblVehicleEF	LHD2	8.4070e-003	0.01
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tblVehicleEF	LHD2	0.36	0.43
tblVehicleEF	LHD2	1.32	0.72
tblVehicleEF	LHD2	13.72	13.69
tblVehicleEF	LHD2	614.66	663.04
tblVehicleEF	LHD2	27.22	9.24
tblVehicleEF	LHD2	0.10	0.09
tblVehicleEF	LHD2	0.79	0.95
tblVehicleEF	LHD2	0.55	0.23
tblVehicleEF	LHD2	1.1850e-003	1.2739e-003
tblVehicleEF	LHD2	0.09	0.09
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	9.5110e-003	0.01
tblVehicleEF	LHD2	4.4600e-004	1.4893e-004
tblVehicleEF	LHD2	1.1340e-003	1.2188e-003
tblVehicleEF	LHD2	0.04	0.04
tblVehicleEF	LHD2	2.6590e-003	2.6414e-003
tblVehicleEF	LHD2	9.0860e-003	0.01
tblVehicleEF	LHD2	4.1000e-004	1.3694e-004
tblVehicleEF	LHD2	1.1570e-003	1.5365e-003
tblVehicleEF	LHD2	0.04	0.06
tblVehicleEF	LHD2	0.01	0.02
tblVehicleEF	LHD2	7.2000e-004	8.9742e-004
tblVehicleEF	LHD2	0.05	0.05
tblVehicleEF	LHD2	0.09	0.35
tblVehicleEF	LHD2	0.11	0.05
tblVehicleEF	LHD2	1.3400e-004	1.3119e-004
tblVehicleEF	LHD2	5.9880e-003	6.4147e-003
tblVehicleEF	LHD2	2.9600e-004	9.1439e-005

tblVehicleEF	LHD2	1.1570e-003	1.5365e-003
tblVehicleEF	LHD2	0.04	0.06
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	7.2000e-004	8.9742e-004
tblVehicleEF	LHD2	0.05	0.06
tblVehicleEF	LHD2	0.09	0.35
tblVehicleEF	LHD2	0.12	0.06
tblVehicleEF	MCY	0.51	0.36
tblVehicleEF	MCY	0.15	0.24
tblVehicleEF	MCY	18.81	19.03
tblVehicleEF	MCY	9.64	8.52
tblVehicleEF	MCY	182.85	218.99
tblVehicleEF	MCY	44.84	59.80
tblVehicleEF	MCY	1.13	1.13
tblVehicleEF	MCY	0.31	0.26
tblVehicleEF	MCY	2.2780e-003	2.2710e-003
tblVehicleEF	MCY	3.7580e-003	3.1960e-003
tblVehicleEF	MCY	2.1290e-003	2.1230e-003
tblVehicleEF	MCY	3.5380e-003	3.0080e-003
tblVehicleEF	MCY	1.18	1.19
tblVehicleEF	MCY	0.68	0.70
tblVehicleEF	MCY	0.70	0.71
tblVehicleEF	MCY	2.47	2.48
tblVehicleEF	MCY	0.61	1.96
tblVehicleEF	MCY	2.05	1.82
tblVehicleEF	MCY	2.2100e-003	2.1670e-003
tblVehicleEF	MCY	6.6600e-004	5.9200e-004
tblVehicleEF	MCY	1.18	1.19
tblVehicleEF	MCY	0.68	0.70
tblVehicleEF	MCY	0.70	0.71

tblVehicleEF	MCY	3.07	3.08
tblVehicleEF	MCY	0.61	1.96
tblVehicleEF	MCY	2.23	1.98
tblVehicleEF	MCY	0.50	0.36
tblVehicleEF	MCY	0.13	0.21
tblVehicleEF	MCY	18.33	18.52
tblVehicleEF	MCY	8.86	7.79
tblVehicleEF	MCY	182.85	217.99
tblVehicleEF	MCY	44.84	57.98
tblVehicleEF	MCY	0.98	0.99
tblVehicleEF	MCY	0.29	0.25
tblVehicleEF	MCY	0.01	0.01
tblVehicleEF	MCY	4.0000e-003	4.0000e-003
tblVehicleEF	MCY	2.2780e-003	2.2712e-003
tblVehicleEF	MCY	3.7580e-003	3.1959e-003
tblVehicleEF	MCY	5.0400e-003	5.0400e-003
tblVehicleEF	MCY	1.0000e-003	1.0000e-003
tblVehicleEF	MCY	2.1290e-003	2.1228e-003
tblVehicleEF	MCY	3.5380e-003	3.0082e-003
tblVehicleEF	MCY	1.98	1.99
tblVehicleEF	MCY	0.79	0.81
tblVehicleEF	MCY	1.24	1.25
tblVehicleEF	MCY	2.42	2.43
tblVehicleEF	MCY	0.58	1.86
tblVehicleEF	MCY	1.83	1.61
tblVehicleEF	MCY	2.2010e-003	2.1572e-003
tblVehicleEF	MCY	6.4700e-004	5.7375e-004
tblVehicleEF	MCY	1.98	1.99
tblVehicleEF	MCY	0.79	0.81
tblVehicleEF	MCY	1.24	1.25

tblVehicleEF	MCY	3.01	3.02
tblVehicleEF	MCY	0.58	1.86
tblVehicleEF	MCY	1.99	1.75
tblVehicleEF	MCY	0.51	0.36
tblVehicleEF	MCY	0.15	0.24
tblVehicleEF	MCY	18.82	19.04
tblVehicleEF	MCY	9.74	8.61
tblVehicleEF	MCY	182.85	219.05
tblVehicleEF	MCY	44.84	60.06
tblVehicleEF	MCY	1.10	1.10
tblVehicleEF	MCY	0.31	0.27
tblVehicleEF	MCY	0.01	0.01
tblVehicleEF	MCY	4.0000e-003	4.0000e-003
tblVehicleEF	MCY	2.2780e-003	2.2712e-003
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tblVehicleEF	MCY	5.0400e-003	5.0400e-003
tblVehicleEF	MCY	1.0000e-003	1.0000e-003
tblVehicleEF	MCY	2.1290e-003	2.1228e-003
tblVehicleEF	MCY	3.5380e-003	3.0082e-003
tblVehicleEF	MCY	1.26	1.27
tblVehicleEF	MCY	0.87	0.89
tblVehicleEF	MCY	0.67	0.68
tblVehicleEF	MCY	2.48	2.49
tblVehicleEF	MCY	0.70	2.25
tblVehicleEF	MCY	2.08	1.85
tblVehicleEF	MCY	2.2110e-003	2.1677e-003
tblVehicleEF	MCY	6.6900e-004	5.9430e-004
tblVehicleEF	MCY	1.26	1.27
tblVehicleEF	MCY	0.87	0.89
tblVehicleEF	MCY	0.67	0.68

tblVehicleEF	MCY	3.08	3.09
tblVehicleEF	MCY	0.70	2.25
tblVehicleEF	MCY	2.27	2.01
tblVehicleEF	MDV	0.01	5.8710e-003
tblVehicleEF	MDV	0.01	0.08
tblVehicleEF	MDV	1.28	1.14
tblVehicleEF	MDV	2.55	3.08
tblVehicleEF	MDV	499.57	414.41
tblVehicleEF	MDV	104.47	83.86
tblVehicleEF	MDV	0.14	0.11
tblVehicleEF	MDV	0.23	0.34
tblVehicleEF	MDV	2.1350e-003	1.8900e-003
tblVehicleEF	MDV	2.4500e-003	2.0050e-003
tblVehicleEF	MDV	1.9680e-003	1.7430e-003
tblVehicleEF	MDV	2.2530e-003	1.8440e-003
tblVehicleEF	MDV	0.07	0.09
tblVehicleEF	MDV	0.16	0.14
tblVehicleEF	MDV	0.07	0.09
tblVehicleEF	MDV	0.03	0.03
tblVehicleEF	MDV	0.09	0.44
tblVehicleEF	MDV	0.19	0.40
tblVehicleEF	MDV	5.0040e-003	4.0970e-003
tblVehicleEF	MDV	1.0890e-003	8.3000e-004
tblVehicleEF	MDV	0.07	0.09
tblVehicleEF	MDV	0.16	0.14
tblVehicleEF	MDV	0.07	0.09
tblVehicleEF	MDV	0.05	0.04
tblVehicleEF	MDV	0.09	0.44
tblVehicleEF	MDV	0.21	0.44
tblVehicleEF	MDV	0.01	6.3076e-003

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tblVehicleEF	MDV	1.43	1.27
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tblVehicleEF	MDV	0.13	0.09
tblVehicleEF	MDV	0.22	0.32
tblVehicleEF	MDV	0.04	0.04
tblVehicleEF	MDV	8.0000e-003	8.0000e-003
tblVehicleEF	MDV	2.1350e-003	1.8904e-003
tblVehicleEF	MDV	2.4500e-003	2.0047e-003
tblVehicleEF	MDV	0.02	0.02
tblVehicleEF	MDV	2.0000e-003	2.0000e-003
tblVehicleEF	MDV	1.9680e-003	1.7429e-003
tblVehicleEF	MDV	2.2530e-003	1.8436e-003
tblVehicleEF	MDV	0.12	0.15
tblVehicleEF	MDV	0.17	0.15
tblVehicleEF	MDV	0.11	0.14
tblVehicleEF	MDV	0.03	0.03
tblVehicleEF	MDV	0.09	0.41
tblVehicleEF	MDV	0.17	0.35
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tblVehicleEF	MDV	1.0830e-003	8.2131e-004
tblVehicleEF	MDV	0.12	0.15
tblVehicleEF	MDV	0.17	0.15
tblVehicleEF	MDV	0.11	0.14
tblVehicleEF	MDV	0.05	0.04
tblVehicleEF	MDV	0.09	0.41
tblVehicleEF	MDV	0.19	0.39
tblVehicleEF	MDV	0.01	5.7419e-003

tblVehicleEF	MDV	0.01	0.08
tblVehicleEF	MDV	1.23	1.10
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tblVehicleEF	MDV	491.18	409.59
tblVehicleEF	MDV	104.47	84.04
tblVehicleEF	MDV	0.14	0.10
tblVehicleEF	MDV	0.23	0.35
tblVehicleEF	MDV	0.04	0.04
tblVehicleEF	MDV	8.0000e-003	8.0000e-003
tblVehicleEF	MDV	2.1350e-003	1.8904e-003
tblVehicleEF	MDV	2.4500e-003	2.0047e-003
tblVehicleEF	MDV	0.02	0.02
tblVehicleEF	MDV	2.0000e-003	2.0000e-003
tblVehicleEF	MDV	1.9680e-003	1.7429e-003
tblVehicleEF	MDV	2.2530e-003	1.8436e-003
tblVehicleEF	MDV	0.07	0.08
tblVehicleEF	MDV	0.17	0.15
tblVehicleEF	MDV	0.07	0.09
tblVehicleEF	MDV	0.03	0.02
tblVehicleEF	MDV	0.11	0.51
tblVehicleEF	MDV	0.20	0.41
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tblVehicleEF	MDV	0.07	0.08
tblVehicleEF	MDV	0.17	0.15
tblVehicleEF	MDV	0.07	0.09
tblVehicleEF	MDV	0.04	0.04
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tblVehicleEF	MH	0.03	9.6750e-003

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tblVehicleEF	MH	0.79	0.24
tblVehicleEF	MH	0.01	0.01
tblVehicleEF	MH	0.02	0.03
tblVehicleEF	MH	1.0760e-003	2.6200e-004
tblVehicleEF	MH	3.2190e-003	3.2690e-003
tblVehicleEF	MH	0.02	0.02
tblVehicleEF	MH	9.9000e-004	2.4100e-004
tblVehicleEF	MH	1.05	0.90
tblVehicleEF	MH	0.07	0.06
tblVehicleEF	MH	0.43	0.36
tblVehicleEF	MH	0.08	0.06
tblVehicleEF	MH	0.02	1.37
tblVehicleEF	MH	0.32	0.09
tblVehicleEF	MH	0.01	0.01
tblVehicleEF	MH	6.8800e-004	1.8600e-004
tblVehicleEF	MH	1.05	0.90
tblVehicleEF	MH	0.07	0.06
tblVehicleEF	MH	0.43	0.36
tblVehicleEF	MH	0.12	0.08
tblVehicleEF	MH	0.02	1.37
tblVehicleEF	MH	0.35	0.10
tblVehicleEF	MH	0.03	9.8973e-003
tblVehicleEF	MH	0.02	0.02
tblVehicleEF	MH	2.22	1.19

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tblVehicleEF	MH	1,102.49	1,478.73
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tblVehicleEF	MH	1.13	1.17
tblVehicleEF	MH	0.76	0.23
tblVehicleEF	MH	0.13	0.13
tblVehicleEF	MH	0.01	0.01
tblVehicleEF	MH	0.02	0.03
tblVehicleEF	MH	1.0760e-003	2.6221e-004
tblVehicleEF	MH	0.06	0.06
tblVehicleEF	MH	3.2190e-003	3.2685e-003
tblVehicleEF	MH	0.02	0.02
tblVehicleEF	MH	9.9000e-004	2.4109e-004
tblVehicleEF	MH	1.62	1.38
tblVehicleEF	MH	0.07	0.06
tblVehicleEF	MH	0.66	0.56
tblVehicleEF	MH	0.09	0.06
tblVehicleEF	MH	0.02	1.35
tblVehicleEF	MH	0.31	0.09
tblVehicleEF	MH	0.01	0.01
tblVehicleEF	MH	6.8200e-004	1.8387e-004
tblVehicleEF	MH	1.62	1.38
tblVehicleEF	MH	0.07	0.06
tblVehicleEF	MH	0.66	0.56
tblVehicleEF	MH	0.12	0.08
tblVehicleEF	MH	0.02	1.35
tblVehicleEF	MH	0.34	0.10
tblVehicleEF	MH	0.03	9.6224e-003
tblVehicleEF	MH	0.02	0.02
tblVehicleEF	MH	2.14	1.15

tblVehicleEF	MH	5.64	2.08
tblVehicleEF	MH	1,102.49	1,478.67
tblVehicleEF	MH	59.08	18.81
tblVehicleEF	MH	1.20	1.23
tblVehicleEF	MH	0.79	0.24
tblVehicleEF	MH	0.13	0.13
tblVehicleEF	MH	0.01	0.01
tblVehicleEF	MH	0.02	0.03
tblVehicleEF	MH	1.0760e-003	2.6221e-004
tblVehicleEF	MH	0.06	0.06
tblVehicleEF	MH	3.2190e-003	3.2685e-003
tblVehicleEF	MH	0.02	0.02
tblVehicleEF	MH	9.9000e-004	2.4109e-004
tblVehicleEF	MH	1.15	0.97
tblVehicleEF	MH	0.08	0.07
tblVehicleEF	MH	0.43	0.37
tblVehicleEF	MH	0.08	0.06
tblVehicleEF	MH	0.02	1.45
tblVehicleEF	MH	0.32	0.09
tblVehicleEF	MH	0.01	0.01
tblVehicleEF	MH	6.8900e-004	1.8619e-004
tblVehicleEF	MH	1.15	0.97
tblVehicleEF	MH	0.08	0.07
tblVehicleEF	MH	0.43	0.37
tblVehicleEF	MH	0.11	0.08
tblVehicleEF	MH	0.02	1.45
tblVehicleEF	MH	0.35	0.10
tblVehicleEF	MHD	0.02	4.1960e-003
tblVehicleEF	MHD	4.1830e-003	4.0320e-003
tblVehicleEF	MHD	0.05	0.01

tblVehicleEF	MHD	0.36	0.38
tblVehicleEF	MHD	0.33	0.41
tblVehicleEF	MHD	5.78	1.27
tblVehicleEF	MHD	140.95	64.96
tblVehicleEF	MHD	1,135.28	1,044.05
tblVehicleEF	MHD	59.98	11.27
tblVehicleEF	MHD	0.52	0.46
tblVehicleEF	MHD	1.09	1.57
tblVehicleEF	MHD	10.59	1.31
tblVehicleEF	MHD	3.2100e-004	1.0750e-003
tblVehicleEF	MHD	5.1490e-003	0.03
tblVehicleEF	MHD	7.9400e-004	1.2100e-004
tblVehicleEF	MHD	3.0700e-004	1.0280e-003
tblVehicleEF	MHD	4.9220e-003	0.03
tblVehicleEF	MHD	7.3000e-004	1.1200e-004
tblVehicleEF	MHD	1.1590e-003	5.9600e-004
tblVehicleEF	MHD	0.04	0.02
tblVehicleEF	MHD	0.03	0.02
tblVehicleEF	MHD	7.2500e-004	3.7500e-004
tblVehicleEF	MHD	0.04	0.06
tblVehicleEF	MHD	0.02	0.12
tblVehicleEF	MHD	0.35	0.06
tblVehicleEF	MHD	1.3570e-003	6.1700e-004
tblVehicleEF	MHD	0.01	9.9730e-003
tblVehicleEF	MHD	7.0100e-004	1.1200e-004
tblVehicleEF	MHD	1.1590e-003	5.9600e-004
tblVehicleEF	MHD	0.04	0.02
tblVehicleEF	MHD	0.04	0.03
tblVehicleEF	MHD	7.2500e-004	3.7500e-004
tblVehicleEF	MHD	0.05	0.07

tblVehicleEF	MHD	0.02	0.12
tblVehicleEF	MHD	0.39	0.06
tblVehicleEF	MHD	0.02	3.9786e-003
tblVehicleEF	MHD	4.2400e-003	4.0723e-003
tblVehicleEF	MHD	0.05	0.01
tblVehicleEF	MHD	0.26	0.31
tblVehicleEF	MHD	0.33	0.42
tblVehicleEF	MHD	5.50	1.21
tblVehicleEF	MHD	149.29	65.72
tblVehicleEF	MHD	1,135.28	1,044.05
tblVehicleEF	MHD	59.98	11.16
tblVehicleEF	MHD	0.54	0.46
tblVehicleEF	MHD	1.03	1.48
tblVehicleEF	MHD	10.55	1.31
tblVehicleEF	MHD	2.7000e-004	9.0840e-004
tblVehicleEF	MHD	0.13	0.13
tblVehicleEF	MHD	0.01	0.01
tblVehicleEF	MHD	5.1490e-003	0.03
tblVehicleEF	MHD	7.9400e-004	1.2136e-004
tblVehicleEF	MHD	2.5900e-004	8.6911e-004
tblVehicleEF	MHD	0.06	0.06
tblVehicleEF	MHD	3.0000e-003	3.0000e-003
tblVehicleEF	MHD	4.9220e-003	0.03
tblVehicleEF	MHD	7.3000e-004	1.1159e-004
tblVehicleEF	MHD	1.8110e-003	9.2226e-004
tblVehicleEF	MHD	0.05	0.02
tblVehicleEF	MHD	0.02	0.02
tblVehicleEF	MHD	1.0870e-003	5.5868e-004
tblVehicleEF	MHD	0.04	0.06
tblVehicleEF	MHD	0.02	0.12

tblVehicleEF	MHD	0.34	0.06
tblVehicleEF	MHD	1.4350e-003	6.2465e-004
tblVehicleEF	MHD	0.01	9.9736e-003
tblVehicleEF	MHD	6.9600e-004	1.1048e-004
tblVehicleEF	MHD	1.8110e-003	9.2226e-004
tblVehicleEF	MHD	0.05	0.02
tblVehicleEF	MHD	0.03	0.03
tblVehicleEF	MHD	1.0870e-003	5.5868e-004
tblVehicleEF	MHD	0.05	0.07
tblVehicleEF	MHD	0.02	0.12
tblVehicleEF	MHD	0.37	0.06
tblVehicleEF	MHD	0.02	4.5103e-003
tblVehicleEF	MHD	4.1660e-003	4.0186e-003
tblVehicleEF	MHD	0.05	0.01
tblVehicleEF	MHD	0.49	0.47
tblVehicleEF	MHD	0.33	0.41
tblVehicleEF	MHD	5.84	1.28
tblVehicleEF	MHD	129.42	63.91
tblVehicleEF	MHD	1,135.28	1,044.04
tblVehicleEF	MHD	59.98	11.29
tblVehicleEF	MHD	0.50	0.46
tblVehicleEF	MHD	1.07	1.54
tblVehicleEF	MHD	10.59	1.31
tblVehicleEF	MHD	3.9000e-004	1.3042e-003
tblVehicleEF	MHD	0.13	0.13
tblVehicleEF	MHD	0.01	0.01
tblVehicleEF	MHD	5.1490e-003	0.03
tblVehicleEF	MHD	7.9400e-004	1.2136e-004
tblVehicleEF	MHD	3.7300e-004	1.2478e-003
tblVehicleEF	MHD	0.06	0.06

tblVehicleEF	MHD	3.0000e-003	3.0000e-003
tblVehicleEF	MHD	4.9220e-003	0.03
tblVehicleEF	MHD	7.3000e-004	1.1159e-004
tblVehicleEF	MHD	1.1430e-003	5.9436e-004
tblVehicleEF	MHD	0.05	0.03
tblVehicleEF	MHD	0.03	0.02
tblVehicleEF	MHD	6.9800e-004	3.6353e-004
tblVehicleEF	MHD	0.04	0.06
tblVehicleEF	MHD	0.02	0.13
tblVehicleEF	MHD	0.36	0.06
tblVehicleEF	MHD	1.2480e-003	6.0712e-004
tblVehicleEF	MHD	0.01	9.9735e-003
tblVehicleEF	MHD	7.0200e-004	1.1173e-004
tblVehicleEF	MHD	1.1430e-003	5.9436e-004
tblVehicleEF	MHD	0.05	0.03
tblVehicleEF	MHD	0.04	0.03
tblVehicleEF	MHD	6.9800e-004	3.6353e-004
tblVehicleEF	MHD	0.05	0.07
tblVehicleEF	MHD	0.02	0.13
tblVehicleEF	MHD	0.39	0.07
tblVehicleEF	OBUS	0.01	8.5600e-003
tblVehicleEF	OBUS	7.6080e-003	6.8620e-003
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tblVehicleEF	OBUS	0.28	0.57
tblVehicleEF	OBUS	0.52	0.78
tblVehicleEF	OBUS	5.46	2.41
tblVehicleEF	OBUS	101.26	88.88
tblVehicleEF	OBUS	1,235.74	1,389.18
tblVehicleEF	OBUS	68.49	19.57
tblVehicleEF	OBUS	0.45	0.43

tblVehicleEF	OBUS	1.44	1.49
tblVehicleEF	OBUS	2.43	0.73
tblVehicleEF	OBUS	1.0100e-004	7.3900e-004
tblVehicleEF	OBUS	6.9700e-003	0.02
tblVehicleEF	OBUS	8.2900e-004	1.9900e-004
tblVehicleEF	OBUS	9.7000e-005	7.0700e-004
tblVehicleEF	OBUS	6.6520e-003	0.02
tblVehicleEF	OBUS	7.6200e-004	1.8300e-004
tblVehicleEF	OBUS	1.5340e-003	1.9530e-003
tblVehicleEF	OBUS	0.02	0.02
tblVehicleEF	OBUS	0.04	0.05
tblVehicleEF	OBUS	7.9200e-004	9.7400e-004
tblVehicleEF	OBUS	0.06	0.06
tblVehicleEF	OBUS	0.04	0.26
tblVehicleEF	OBUS	0.34	0.12
tblVehicleEF	OBUS	9.7800e-004	8.4600e-004
tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	7.8100e-004	1.9400e-004
tblVehicleEF	OBUS	1.5340e-003	1.9530e-003
tblVehicleEF	OBUS	0.02	0.02
tblVehicleEF	OBUS	0.05	0.07
tblVehicleEF	OBUS	7.9200e-004	9.7400e-004
tblVehicleEF	OBUS	0.07	0.08
tblVehicleEF	OBUS	0.04	0.26
tblVehicleEF	OBUS	0.37	0.13
tblVehicleEF	OBUS	0.01	8.6168e-003
tblVehicleEF	OBUS	7.7360e-003	6.9838e-003
tblVehicleEF	OBUS	0.03	0.02
tblVehicleEF	OBUS	0.26	0.56
tblVehicleEF	OBUS	0.53	0.79

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tblVehicleEF	OBUS	106.28	88.75
tblVehicleEF	OBUS	1,235.74	1,389.21
tblVehicleEF	OBUS	68.49	19.34
tblVehicleEF	OBUS	0.47	0.42
tblVehicleEF	OBUS	1.35	1.40
tblVehicleEF	OBUS	2.39	0.72
tblVehicleEF	OBUS	8.5000e-005	6.2834e-004
tblVehicleEF	OBUS	0.13	0.13
tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	6.9700e-003	0.02
tblVehicleEF	OBUS	8.2900e-004	1.9895e-004
tblVehicleEF	OBUS	8.1000e-005	6.0116e-004
tblVehicleEF	OBUS	0.06	0.06
tblVehicleEF	OBUS	3.0000e-003	3.0000e-003
tblVehicleEF	OBUS	6.6520e-003	0.02
tblVehicleEF	OBUS	7.6200e-004	1.8293e-004
tblVehicleEF	OBUS	2.3330e-003	2.9398e-003
tblVehicleEF	OBUS	0.02	0.02
tblVehicleEF	OBUS	0.04	0.06
tblVehicleEF	OBUS	1.1860e-003	1.4442e-003
tblVehicleEF	OBUS	0.06	0.06
tblVehicleEF	OBUS	0.04	0.25
tblVehicleEF	OBUS	0.33	0.11
tblVehicleEF	OBUS	1.0260e-003	8.4477e-004
tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	7.7500e-004	1.9139e-004
tblVehicleEF	OBUS	2.3330e-003	2.9398e-003
tblVehicleEF	OBUS	0.02	0.02
tblVehicleEF	OBUS	0.05	0.07

tblVehicleEF	OBUS	1.1860e-003	1.4442e-003
tblVehicleEF	OBUS	0.07	0.08
tblVehicleEF	OBUS	0.04	0.25
tblVehicleEF	OBUS	0.36	0.12
tblVehicleEF	OBUS	0.01	8.5020e-003
tblVehicleEF	OBUS	7.5760e-003	6.8295e-003
tblVehicleEF	OBUS	0.03	0.02
tblVehicleEF	OBUS	0.30	0.59
tblVehicleEF	OBUS	0.52	0.77
tblVehicleEF	OBUS	5.52	2.43
tblVehicleEF	OBUS	94.33	89.05
tblVehicleEF	OBUS	1,235.74	1,389.17
tblVehicleEF	OBUS	68.49	19.61
tblVehicleEF	OBUS	0.43	0.44
tblVehicleEF	OBUS	1.42	1.46
tblVehicleEF	OBUS	2.43	0.73
tblVehicleEF	OBUS	1.2300e-004	8.9290e-004
tblVehicleEF	OBUS	0.13	0.13
tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	6.9700e-003	0.02
tblVehicleEF	OBUS	8.2900e-004	1.9895e-004
tblVehicleEF	OBUS	1.1800e-004	8.5428e-004
tblVehicleEF	OBUS	0.06	0.06
tblVehicleEF	OBUS	3.0000e-003	3.0000e-003
tblVehicleEF	OBUS	6.6520e-003	0.02
tblVehicleEF	OBUS	7.6200e-004	1.8293e-004
tblVehicleEF	OBUS	1.5400e-003	2.0059e-003
tblVehicleEF	OBUS	0.02	0.02
tblVehicleEF	OBUS	0.04	0.05
tblVehicleEF	OBUS	7.7300e-004	9.6051e-004

tblVehicleEF	OBUS	0.06	0.06
tblVehicleEF	OBUS	0.04	0.28
tblVehicleEF	OBUS	0.34	0.12
tblVehicleEF	OBUS	9.1200e-004	8.4763e-004
tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	7.8200e-004	1.9407e-004
tblVehicleEF	OBUS	1.5400e-003	2.0059e-003
tblVehicleEF	OBUS	0.02	0.02
tblVehicleEF	OBUS	0.05	0.07
tblVehicleEF	OBUS	7.7300e-004	9.6051e-004
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tblVehicleEF	OBUS	0.04	0.28
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tblVehicleEF	SBUS	0.07	6.9140e-003
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tblVehicleEF	SBUS	7.34	0.95
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tblVehicleEF	SBUS	1,090.38	1,104.99
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tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.02	0.03
tblVehicleEF	SBUS	7.5100e-004	5.4000e-005
tblVehicleEF	SBUS	9.1010e-003	4.1140e-003

tblVehicleEF	SBUS	2.6840e-003	2.6610e-003
tblVehicleEF	SBUS	0.02	0.03
tblVehicleEF	SBUS	6.9100e-004	4.9000e-005
tblVehicleEF	SBUS	3.6290e-003	1.1130e-003
tblVehicleEF	SBUS	0.03	9.1650e-003
tblVehicleEF	SBUS	0.95	0.34
tblVehicleEF	SBUS	1.8660e-003	5.7300e-004
tblVehicleEF	SBUS	0.11	0.10
tblVehicleEF	SBUS	0.01	0.06
tblVehicleEF	SBUS	0.39	0.04
tblVehicleEF	SBUS	0.01	3.4000e-003
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tblVehicleEF	SBUS	3.6290e-003	1.1130e-003
tblVehicleEF	SBUS	0.03	9.1650e-003
tblVehicleEF	SBUS	1.36	0.49
tblVehicleEF	SBUS	1.8660e-003	5.7300e-004
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tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.02	0.03
tblVehicleEF	SBUS	7.5100e-004	5.3615e-005
tblVehicleEF	SBUS	7.6720e-003	3.4750e-003
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tblVehicleEF	SBUS	2.6840e-003	2.6612e-003
tblVehicleEF	SBUS	0.02	0.03
tblVehicleEF	SBUS	6.9100e-004	4.9297e-005
tblVehicleEF	SBUS	5.6260e-003	1.7224e-003
tblVehicleEF	SBUS	0.03	9.3972e-003
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tblVehicleEF	SBUS	2.8700e-003	8.7954e-004
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tblVehicleEF	SBUS	5.6260e-003	1.7224e-003
tblVehicleEF	SBUS	0.03	9.3972e-003
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tblVehicleEF	SBUS	2.8700e-003	8.7954e-004
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tblVehicleEF	SBUS	0.37	0.04
tblVehicleEF	SBUS	0.84	0.07

tblVehicleEF	SBUS	0.01	7.7871e-003
tblVehicleEF	SBUS	0.07	7.0886e-003
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tblVehicleEF	SBUS	12.37	0.82
tblVehicleEF	SBUS	0.01	5.2229e-003
tblVehicleEF	SBUS	0.74	0.74
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.02	0.03
tblVehicleEF	SBUS	7.5100e-004	5.3615e-005
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tblVehicleEF	SBUS	2.6840e-003	2.6612e-003
tblVehicleEF	SBUS	0.02	0.03
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tblVehicleEF	SBUS	3.5410e-003	1.0863e-003
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tblVehicleEF	SBUS	1.8040e-003	5.5621e-004
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tblVehicleEF	SBUS	0.40	0.04
tblVehicleEF	SBUS	0.01	3.2870e-003
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tblVehicleEF	SBUS	6.7000e-004	5.7598e-005
tblVehicleEF	SBUS	3.5410e-003	1.0863e-003
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tblVehicleEF	SBUS	1.8040e-003	5.5621e-004
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tblVehicleEF	UBUS	1,922.34	1,952.53
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tblVehicleEF	UBUS	0.58	0.07
tblVehicleEF	UBUS	0.01	0.03
tblVehicleEF	UBUS	0.11	3.0740e-003
tblVehicleEF	UBUS	1.1660e-003	6.0000e-005
tblVehicleEF	UBUS	0.25	0.03
tblVehicleEF	UBUS	3.0000e-003	7.5900e-003
tblVehicleEF	UBUS	0.10	2.9360e-003
tblVehicleEF	UBUS	1.0720e-003	5.5000e-005
tblVehicleEF	UBUS	5.1000e-003	9.7700e-004
tblVehicleEF	UBUS	0.08	0.01
tblVehicleEF	UBUS	2.8840e-003	7.6500e-004
tblVehicleEF	UBUS	0.74	0.08
tblVehicleEF	UBUS	0.02	0.08
tblVehicleEF	UBUS	0.79	0.07

tblVehicleEF	UBUS	9.5950e-003	2.3120e-003
tblVehicleEF	UBUS	1.2860e-003	1.1500e-004
tblVehicleEF	UBUS	5.1000e-003	9.7700e-004
tblVehicleEF	UBUS	0.08	0.01
tblVehicleEF	UBUS	2.8840e-003	7.6500e-004
tblVehicleEF	UBUS	3.18	5.55
tblVehicleEF	UBUS	0.02	0.08
tblVehicleEF	UBUS	0.86	0.07
tblVehicleEF	UBUS	2.36	5.43
tblVehicleEF	UBUS	0.05	0.01
tblVehicleEF	UBUS	10.48	42.26
tblVehicleEF	UBUS	8.90	0.83
tblVehicleEF	UBUS	1,922.34	1,952.53
tblVehicleEF	UBUS	110.12	11.40
tblVehicleEF	UBUS	7.90	0.45
tblVehicleEF	UBUS	14.60	0.11
tblVehicleEF	UBUS	0.58	0.07
tblVehicleEF	UBUS	0.01	0.03
tblVehicleEF	UBUS	0.11	3.0743e-003
tblVehicleEF	UBUS	1.1660e-003	5.9592e-005
tblVehicleEF	UBUS	0.25	0.03
tblVehicleEF	UBUS	3.0000e-003	7.5896e-003
tblVehicleEF	UBUS	0.10	2.9364e-003
tblVehicleEF	UBUS	1.0720e-003	5.4793e-005
tblVehicleEF	UBUS	7.6030e-003	1.4423e-003
tblVehicleEF	UBUS	0.08	0.01
tblVehicleEF	UBUS	4.3100e-003	1.1013e-003
tblVehicleEF	UBUS	0.75	0.08
tblVehicleEF	UBUS	0.02	0.07
tblVehicleEF	UBUS	0.72	0.06

tblVehicleEF	UBUS	9.5960e-003	2.3120e-003
tblVehicleEF	UBUS	1.2630e-003	1.1277e-004
tblVehicleEF	UBUS	7.6030e-003	1.4423e-003
tblVehicleEF	UBUS	0.08	0.01
tblVehicleEF	UBUS	4.3100e-003	1.1013e-003
tblVehicleEF	UBUS	3.19	5.55
tblVehicleEF	UBUS	0.02	0.07
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tblVehicleEF	UBUS	2.35	5.43
tblVehicleEF	UBUS	0.06	0.02
tblVehicleEF	UBUS	10.41	42.26
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tblVehicleEF	UBUS	1,922.34	1,952.53
tblVehicleEF	UBUS	110.12	11.63
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tblVehicleEF	UBUS	0.58	0.07
tblVehicleEF	UBUS	0.01	0.03
tblVehicleEF	UBUS	0.11	3.0743e-003
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tblVehicleEF	UBUS	3.0000e-003	7.5896e-003
tblVehicleEF	UBUS	0.10	2.9364e-003
tblVehicleEF	UBUS	1.0720e-003	5.4793e-005
tblVehicleEF	UBUS	5.5780e-003	9.5046e-004
tblVehicleEF	UBUS	0.10	0.01
tblVehicleEF	UBUS	2.9770e-003	7.3313e-004
tblVehicleEF	UBUS	0.74	0.08
tblVehicleEF	UBUS	0.03	0.10
tblVehicleEF	UBUS	0.80	0.07

tblVehicleEF	UBUS	9.5950e-003	2.3120e-003
tblVehicleEF	UBUS	1.2900e-003	1.1506e-004
tblVehicleEF	UBUS	5.5780e-003	9.5046e-004
tblVehicleEF	UBUS	0.10	0.01
tblVehicleEF	UBUS	2.9770e-003	7.3313e-004
tblVehicleEF	UBUS	3.18	5.55
tblVehicleEF	UBUS	0.03	0.10
tblVehicleEF	UBUS	0.88	0.07
tblVehicleTrips	ST_TR	8.19	8.36
tblVehicleTrips	SU_TR	5.95	8.36
tblVehicleTrips	WD_TR	8.17	8.36

## 2.0 Emissions Summary

### 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	0.5005	4.0000e-005	4.9000e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	9.5100e-003	9.5100e-003	3.0000e-005	0.0000	0.0101
Energy	0.0158	0.1434	0.1205	8.6000e-004		0.0109	0.0109		0.0109	0.0109	0.0000	415.4909	415.4909	0.0178	5.9200e-003	417.6987
Mobile	0.8583	0.8376	6.4297	0.0132	1.3143	0.0116	1.3259	0.3508	0.0109	0.3616	0.0000	1,220.6533	1,220.6533	0.0881	0.0000	1,222.8548
Waste						0.0000	0.0000		0.0000	0.0000	19.4486	0.0000	19.4486	1.1494	0.0000	48.1830
Water						0.0000	0.0000		0.0000	0.0000	1.4084	14.6169	16.0253	0.1455	3.5900e-003	20.7315
<b>Total</b>	<b>1.3745</b>	<b>0.9810</b>	<b>6.5551</b>	<b>0.0141</b>	<b>1.3143</b>	<b>0.0226</b>	<b>1.3369</b>	<b>0.3508</b>	<b>0.0218</b>	<b>0.3725</b>	<b>20.8569</b>	<b>1,650.7707</b>	<b>1,671.6276</b>	<b>1.4007</b>	<b>9.5100e-003</b>	<b>1,709.4781</b>

### 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	0.5005	4.0000e-005	4.9000e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	9.5100e-003	9.5100e-003	3.0000e-005	0.0000	0.0101
Energy	0.0158	0.1434	0.1205	8.6000e-004		0.0109	0.0109		0.0109	0.0109	0.0000	410.4623	410.4623	0.0175	5.8600e-003	412.6452
Mobile	0.8583	0.8376	6.4297	0.0132	1.3143	0.0116	1.3259	0.3508	0.0109	0.3616	0.0000	1,220.6533	1,220.6533	0.0881	0.0000	1,222.8548
Waste						0.0000	0.0000		0.0000	0.0000	4.8621	0.0000	4.8621	0.2873	0.0000	12.0458
Water						0.0000	0.0000		0.0000	0.0000	1.4084	14.6169	16.0253	0.1455	3.5900e-003	20.7315
<b>Total</b>	<b>1.3745</b>	<b>0.9810</b>	<b>6.5551</b>	<b>0.0141</b>	<b>1.3143</b>	<b>0.0226</b>	<b>1.3369</b>	<b>0.3508</b>	<b>0.0218</b>	<b>0.3725</b>	<b>6.2705</b>	<b>1,645.7421</b>	<b>1,652.0126</b>	<b>0.5384</b>	<b>9.4500e-003</b>	<b>1,668.2874</b>

	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
<b>Percent Reduction</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>69.94</b>	<b>0.30</b>	<b>1.17</b>	<b>61.56</b>	<b>0.63</b>	<b>2.41</b>

### 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	0.8583	0.8376	6.4297	0.0132	1.3143	0.0116	1.3259	0.3508	0.0109	0.3616	0.0000	1,220.6533	1,220.6533	0.0881	0.0000	1,222.8548
Unmitigated	0.8583	0.8376	6.4297	0.0132	1.3143	0.0116	1.3259	0.3508	0.0109	0.3616	0.0000	1,220.6533	1,220.6533	0.0881	0.0000	1,222.8548

#### 4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated Annual VMT	Mitigated Annual VMT
	Weekday	Saturday	Sunday		
Enclosed Parking with Elevator	0.00	0.00	0.00		
Hotel	1,463.00	1,463.00	1,463.00	3,490,968	3,490,968
<b>Total</b>	<b>1,463.00</b>	<b>1,463.00</b>	<b>1,463.00</b>	<b>3,490,968</b>	<b>3,490,968</b>

### 4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	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
Enclosed Parking with Elevator	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Hotel	16.60	8.40	6.90	19.40	61.60	19.00	58	38	4

### 4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Enclosed Parking with Elevator	0.543376	0.059966	0.184357	0.131187	0.023843	0.006245	0.012012	0.009162	0.000826	0.000515	0.023898	0.000748	0.003864
Hotel	0.543376	0.059966	0.184357	0.131187	0.023843	0.006245	0.012012	0.009162	0.000826	0.000515	0.023898	0.000748	0.003864

### 5.0 Energy Detail

Historical Energy Use: N

### 5.1 Mitigation Measures Energy

Kilowatt Hours of Renewable Electricity Generated

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	254.3433	254.3433	0.0145	3.0000e-003	255.5985
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	259.3719	259.3719	0.0148	3.0600e-003	260.6519
NaturalGas Mitigated	0.0158	0.1434	0.1205	8.6000e-004		0.0109	0.0109		0.0109	0.0109	0.0000	156.1190	156.1190	2.9900e-003	2.8600e-003	157.0468
NaturalGas Unmitigated	0.0158	0.1434	0.1205	8.6000e-004		0.0109	0.0109		0.0109	0.0109	0.0000	156.1190	156.1190	2.9900e-003	2.8600e-003	157.0468

## 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					
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hotel	2.92556e+006	0.0158	0.1434	0.1205	8.6000e-004		0.0109	0.0109		0.0109	0.0109	0.0000	156.1190	156.1190	2.9900e-003	2.8600e-003	157.0468
<b>Total</b>		<b>0.0158</b>	<b>0.1434</b>	<b>0.1205</b>	<b>8.6000e-004</b>		<b>0.0109</b>	<b>0.0109</b>		<b>0.0109</b>	<b>0.0109</b>	<b>0.0000</b>	<b>156.1190</b>	<b>156.1190</b>	<b>2.9900e-003</b>	<b>2.8600e-003</b>	<b>157.0468</b>

### 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					
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hotel	2.92556e+006	0.0158	0.1434	0.1205	8.6000e-004		0.0109	0.0109		0.0109	0.0109	0.0000	156.1190	156.1190	2.9900e-003	2.8600e-003	157.0468
<b>Total</b>		<b>0.0158</b>	<b>0.1434</b>	<b>0.1205</b>	<b>8.6000e-004</b>		<b>0.0109</b>	<b>0.0109</b>		<b>0.0109</b>	<b>0.0109</b>	<b>0.0000</b>	<b>156.1190</b>	<b>156.1190</b>	<b>2.9900e-003</b>	<b>2.8600e-003</b>	<b>157.0468</b>

## 5.3 Energy by Land Use - Electricity

### Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Enclosed Parking with Elevator	198168	45.7724	2.6100e-003	5.4000e-004	45.9983
Hotel	924760	213.5995	0.0122	2.5200e-003	214.6536
<b>Total</b>		<b>259.3719</b>	<b>0.0148</b>	<b>3.0600e-003</b>	<b>260.6519</b>

## Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Enclosed Parking with Elevator	187282	43.2581	2.4600e-003	5.1000e-004	43.4716
Hotel	913875	211.0852	0.0120	2.4900e-003	212.1269
<b>Total</b>		<b>254.3433</b>	<b>0.0145</b>	<b>3.0000e-003</b>	<b>255.5985</b>

## 6.0 Area Detail

### 6.1 Mitigation Measures Area

	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	0.5005	4.0000e-005	4.9000e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	9.5100e-003	9.5100e-003	3.0000e-005	0.0000	0.0101
Unmitigated	0.5005	4.0000e-005	4.9000e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	9.5100e-003	9.5100e-003	3.0000e-005	0.0000	0.0101

### 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	0.0570					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.4430					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	4.6000e-004	4.0000e-005	4.9000e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	9.5100e-003	9.5100e-003	3.0000e-005	0.0000	0.0101
<b>Total</b>	<b>0.5005</b>	<b>4.0000e-005</b>	<b>4.9000e-003</b>	<b>0.0000</b>		<b>2.0000e-005</b>	<b>2.0000e-005</b>		<b>2.0000e-005</b>	<b>2.0000e-005</b>	<b>0.0000</b>	<b>9.5100e-003</b>	<b>9.5100e-003</b>	<b>3.0000e-005</b>	<b>0.0000</b>	<b>0.0101</b>

## 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	0.0570						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.4430						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	4.6000e-004	4.0000e-005	4.9000e-003	0.0000			2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	9.5100e-003	9.5100e-003	3.0000e-005	0.0000	0.0101
<b>Total</b>	<b>0.5005</b>	<b>4.0000e-005</b>	<b>4.9000e-003</b>	<b>0.0000</b>			<b>2.0000e-005</b>	<b>2.0000e-005</b>		<b>2.0000e-005</b>	<b>2.0000e-005</b>	<b>0.0000</b>	<b>9.5100e-003</b>	<b>9.5100e-003</b>	<b>3.0000e-005</b>	<b>0.0000</b>	<b>0.0101</b>

## 7.0 Water Detail

### 7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	16.0253	0.1455	3.5900e-003	20.7315
Unmitigated	16.0253	0.1455	3.5900e-003	20.7315

### 7.2 Water by Land Use

#### Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Enclosed Parking with Elevator	0 / 0	0.0000	0.0000	0.0000	0.0000
Hotel	4.43918 / 0.493243	16.0253	0.1455	3.5900e-003	20.7315
<b>Total</b>		<b>16.0253</b>	<b>0.1455</b>	<b>3.5900e-003</b>	<b>20.7315</b>

## Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Enclosed Parking with Elevator	0 / 0	0.0000	0.0000	0.0000	0.0000
Hotel	4.43918 / 0.493243	16.0253	0.1455	3.5900e-003	20.7315
<b>Total</b>		<b>16.0253</b>	<b>0.1455</b>	<b>3.5900e-003</b>	<b>20.7315</b>

## 8.0 Waste Detail

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### 8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

#### Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	4.8621	0.2873	0.0000	12.0458
Unmitigated	19.4486	1.1494	0.0000	48.1830

### 8.2 Waste by Land Use

#### Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
Hotel	95.81	19.4486	1.1494	0.0000	48.1830
<b>Total</b>		<b>19.4486</b>	<b>1.1494</b>	<b>0.0000</b>	<b>48.1830</b>

## Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
Hotel	23.9525	4.8621	0.2873	0.0000	12.0458
<b>Total</b>		<b>4.8621</b>	<b>0.2873</b>	<b>0.0000</b>	<b>12.0458</b>

## 9.0 Operational Offroad

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

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### Fire Pumps and Emergency Generators

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

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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### User Defined Equipment

Equipment Type	Number
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## 11.0 Vegetation

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11469 Jefferson - Operations - South Coast AQMD Air District, Annual

**11469 Jefferson - Operations**  
**South Coast AQMD Air District, Annual**

**1.0 Project Characteristics**

**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Enclosed Parking with Elevator	208.00	Space	0.28	33,817.00	0
Hotel	175.00	Room	0.50	122,000.00	0

**1.2 Other Project Characteristics**

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>	2.2	<b>Precipitation Freq (Days)</b>	31
<b>Climate Zone</b>	11	<b>Operational Year</b>		2022	
<b>Utility Company</b>	Southern California Edison				
<b>CO2 Intensity (lb/MW hr)</b>	702.44	<b>CH4 Intensity (lb/MW hr)</b>	0.029	<b>N2O Intensity (lb/MW hr)</b>	0.006

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

Project Characteristics - BAU Scenario - CO2e intensity factor left at default.

Land Use - see operational assumptions

Vehicle Trips - trip rate from project traffic study

Vehicle Emission Factors - Updated to EMFAC2017 EFs

Energy Use -

Energy Mitigation -

Waste Mitigation -

Table Name	Column Name	Default Value	New Value
tblFleetMix	HHD	0.03	9.1619e-003
tblFleetMix	HHD	0.03	9.1619e-003
tblFleetMix	LDA	0.55	0.54
tblFleetMix	LDA	0.55	0.54
tblFleetMix	LDT1	0.04	0.06
tblFleetMix	LDT1	0.04	0.06
tblFleetMix	LDT2	0.20	0.18
tblFleetMix	LDT2	0.20	0.18
tblFleetMix	LHD1	0.02	0.02
tblFleetMix	LHD1	0.02	0.02
tblFleetMix	LHD2	5.8460e-003	6.2455e-003
tblFleetMix	LHD2	5.8460e-003	6.2455e-003
tblFleetMix	MCY	4.8550e-003	0.02
tblFleetMix	MCY	4.8550e-003	0.02
tblFleetMix	MDV	0.12	0.13
tblFleetMix	MDV	0.12	0.13
tblFleetMix	MH	8.9600e-004	3.8643e-003
tblFleetMix	MH	8.9600e-004	3.8643e-003
tblFleetMix	MHD	0.02	0.01
tblFleetMix	MHD	0.02	0.01
tblFleetMix	OBUS	2.0990e-003	8.2637e-004
tblFleetMix	OBUS	2.0990e-003	8.2637e-004
tblFleetMix	SBUS	7.0900e-004	7.4790e-004
tblFleetMix	SBUS	7.0900e-004	7.4790e-004
tblFleetMix	UBUS	1.8280e-003	5.1497e-004
tblFleetMix	UBUS	1.8280e-003	5.1497e-004
tblLandUse	LandUseSquareFeet	83,200.00	33,817.00
tblLandUse	LandUseSquareFeet	254,100.00	122,000.00
tblLandUse	LotAcreage	1.87	0.28

tblLandUse	LotAcreage	5.83	0.50
tblVehicleEF	HHD	0.72	0.03
tblVehicleEF	HHD	0.09	0.08
tblVehicleEF	HHD	0.08	4.2321e-007
tblVehicleEF	HHD	2.55	6.51
tblVehicleEF	HHD	0.96	0.52
tblVehicleEF	HHD	2.84	7.1774e-003
tblVehicleEF	HHD	4,906.64	1,210.94
tblVehicleEF	HHD	1,590.87	1,438.06
tblVehicleEF	HHD	9.09	0.06
tblVehicleEF	HHD	20.90	6.45
tblVehicleEF	HHD	3.41	3.28
tblVehicleEF	HHD	19.73	2.11
tblVehicleEF	HHD	0.01	3.7420e-003
tblVehicleEF	HHD	0.06	0.06
tblVehicleEF	HHD	0.04	0.04
tblVehicleEF	HHD	0.01	0.03
tblVehicleEF	HHD	7.7000e-005	1.1608e-006
tblVehicleEF	HHD	0.01	3.5801e-003
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	8.8170e-003	8.8727e-003
tblVehicleEF	HHD	0.01	0.03
tblVehicleEF	HHD	7.0000e-005	1.0673e-006
tblVehicleEF	HHD	9.9000e-005	5.2964e-006
tblVehicleEF	HHD	4.0680e-003	1.9938e-004
tblVehicleEF	HHD	0.64	0.47
tblVehicleEF	HHD	7.1000e-005	3.6081e-006
tblVehicleEF	HHD	0.12	0.07
tblVehicleEF	HHD	3.3200e-004	1.0442e-003
tblVehicleEF	HHD	0.07	2.2210e-006

tblVehicleEF	HHD	0.05	0.01
tblVehicleEF	HHD	0.01	0.01
tblVehicleEF	HHD	1.3800e-004	6.4199e-007
tblVehicleEF	HHD	9.9000e-005	5.2964e-006
tblVehicleEF	HHD	4.0680e-003	1.9938e-004
tblVehicleEF	HHD	0.74	0.54
tblVehicleEF	HHD	7.1000e-005	3.6081e-006
tblVehicleEF	HHD	0.22	0.16
tblVehicleEF	HHD	3.3200e-004	1.0442e-003
tblVehicleEF	HHD	0.08	2.4317e-006
tblVehicleEF	HHD	0.67	0.03
tblVehicleEF	HHD	0.09	0.08
tblVehicleEF	HHD	0.08	4.0556e-007
tblVehicleEF	HHD	1.86	6.37
tblVehicleEF	HHD	0.97	0.52
tblVehicleEF	HHD	2.70	6.8153e-003
tblVehicleEF	HHD	5,197.96	1,206.27
tblVehicleEF	HHD	1,590.87	1,438.06
tblVehicleEF	HHD	9.09	0.06
tblVehicleEF	HHD	21.57	6.25
tblVehicleEF	HHD	3.22	3.10
tblVehicleEF	HHD	19.72	2.11
tblVehicleEF	HHD	0.01	3.2843e-003
tblVehicleEF	HHD	0.06	0.06
tblVehicleEF	HHD	0.04	0.04
tblVehicleEF	HHD	0.01	0.03
tblVehicleEF	HHD	7.7000e-005	1.1608e-006
tblVehicleEF	HHD	0.01	3.1423e-003
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	8.8170e-003	8.8727e-003

tblVehicleEF	HHD	0.01	0.03
tblVehicleEF	HHD	7.0000e-005	1.0673e-006
tblVehicleEF	HHD	1.6000e-004	8.6932e-006
tblVehicleEF	HHD	4.2570e-003	2.0741e-004
tblVehicleEF	HHD	0.60	0.49
tblVehicleEF	HHD	1.1000e-004	5.9150e-006
tblVehicleEF	HHD	0.12	0.07
tblVehicleEF	HHD	3.2600e-004	1.0356e-003
tblVehicleEF	HHD	0.07	2.1344e-006
tblVehicleEF	HHD	0.05	0.01
tblVehicleEF	HHD	0.01	0.01
tblVehicleEF	HHD	1.3500e-004	6.3630e-007
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tblVehicleEF	HHD	4.2570e-003	2.0741e-004
tblVehicleEF	HHD	0.70	0.57
tblVehicleEF	HHD	1.1000e-004	5.9150e-006
tblVehicleEF	HHD	0.22	0.16
tblVehicleEF	HHD	3.2600e-004	1.0356e-003
tblVehicleEF	HHD	0.07	2.3369e-006
tblVehicleEF	HHD	0.77	0.03
tblVehicleEF	HHD	0.09	0.08
tblVehicleEF	HHD	0.08	4.2674e-007
tblVehicleEF	HHD	3.51	6.70
tblVehicleEF	HHD	0.96	0.52
tblVehicleEF	HHD	2.86	7.2281e-003
tblVehicleEF	HHD	4,504.34	1,217.38
tblVehicleEF	HHD	1,590.87	1,438.06
tblVehicleEF	HHD	9.09	0.06
tblVehicleEF	HHD	19.97	6.73
tblVehicleEF	HHD	3.36	3.24

tblVehicleEF	HHD	19.73	2.11
tblVehicleEF	HHD	0.02	4.3740e-003
tblVehicleEF	HHD	0.06	0.06
tblVehicleEF	HHD	0.04	0.04
tblVehicleEF	HHD	0.01	0.03
tblVehicleEF	HHD	7.7000e-005	1.1608e-006
tblVehicleEF	HHD	0.02	4.1847e-003
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	8.8170e-003	8.8727e-003
tblVehicleEF	HHD	0.01	0.03
tblVehicleEF	HHD	7.0000e-005	1.0673e-006
tblVehicleEF	HHD	9.3000e-005	5.5102e-006
tblVehicleEF	HHD	4.3390e-003	2.2656e-004
tblVehicleEF	HHD	0.69	0.44
tblVehicleEF	HHD	6.8000e-005	3.6531e-006
tblVehicleEF	HHD	0.12	0.07
tblVehicleEF	HHD	3.5900e-004	1.1075e-003
tblVehicleEF	HHD	0.07	2.2379e-006
tblVehicleEF	HHD	0.04	0.01
tblVehicleEF	HHD	0.01	0.01
tblVehicleEF	HHD	1.3800e-004	6.4278e-007
tblVehicleEF	HHD	9.3000e-005	5.5102e-006
tblVehicleEF	HHD	4.3390e-003	2.2656e-004
tblVehicleEF	HHD	0.80	0.51
tblVehicleEF	HHD	6.8000e-005	3.6531e-006
tblVehicleEF	HHD	0.22	0.16
tblVehicleEF	HHD	3.5900e-004	1.1075e-003
tblVehicleEF	HHD	0.08	2.4502e-006
tblVehicleEF	LDA	4.7080e-003	2.7389e-003
tblVehicleEF	LDA	5.1030e-003	0.05

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tblVehicleEF	LDA	1.10	2.09
tblVehicleEF	LDA	264.19	265.95
tblVehicleEF	LDA	56.82	53.17
tblVehicleEF	LDA	0.05	0.04
tblVehicleEF	LDA	0.07	0.18
tblVehicleEF	LDA	0.04	0.04
tblVehicleEF	LDA	8.0000e-003	8.0000e-003
tblVehicleEF	LDA	1.9930e-003	1.6792e-003
tblVehicleEF	LDA	2.2640e-003	1.8374e-003
tblVehicleEF	LDA	0.02	0.02
tblVehicleEF	LDA	2.0000e-003	2.0000e-003
tblVehicleEF	LDA	1.8370e-003	1.5468e-003
tblVehicleEF	LDA	2.0810e-003	1.6895e-003
tblVehicleEF	LDA	0.04	0.05
tblVehicleEF	LDA	0.10	0.10
tblVehicleEF	LDA	0.04	0.05
tblVehicleEF	LDA	0.01	0.01
tblVehicleEF	LDA	0.04	0.21
tblVehicleEF	LDA	0.07	0.22
tblVehicleEF	LDA	2.6460e-003	2.6309e-003
tblVehicleEF	LDA	5.8700e-004	5.2613e-004
tblVehicleEF	LDA	0.04	0.05
tblVehicleEF	LDA	0.10	0.10
tblVehicleEF	LDA	0.04	0.05
tblVehicleEF	LDA	0.02	0.02
tblVehicleEF	LDA	0.04	0.21
tblVehicleEF	LDA	0.08	0.24
tblVehicleEF	LDA	5.0460e-003	2.9541e-003
tblVehicleEF	LDA	4.5230e-003	0.04

tblVehicleEF	LDA	0.69	0.76
tblVehicleEF	LDA	0.94	1.79
tblVehicleEF	LDA	278.35	279.67
tblVehicleEF	LDA	56.82	52.61
tblVehicleEF	LDA	0.04	0.03
tblVehicleEF	LDA	0.06	0.17
tblVehicleEF	LDA	0.04	0.04
tblVehicleEF	LDA	8.0000e-003	8.0000e-003
tblVehicleEF	LDA	1.9930e-003	1.6792e-003
tblVehicleEF	LDA	2.2640e-003	1.8374e-003
tblVehicleEF	LDA	0.02	0.02
tblVehicleEF	LDA	2.0000e-003	2.0000e-003
tblVehicleEF	LDA	1.8370e-003	1.5468e-003
tblVehicleEF	LDA	2.0810e-003	1.6895e-003
tblVehicleEF	LDA	0.06	0.09
tblVehicleEF	LDA	0.10	0.10
tblVehicleEF	LDA	0.05	0.07
tblVehicleEF	LDA	0.01	0.01
tblVehicleEF	LDA	0.04	0.20
tblVehicleEF	LDA	0.06	0.19
tblVehicleEF	LDA	2.7880e-003	2.7668e-003
tblVehicleEF	LDA	5.8400e-004	5.2065e-004
tblVehicleEF	LDA	0.06	0.09
tblVehicleEF	LDA	0.10	0.10
tblVehicleEF	LDA	0.05	0.07
tblVehicleEF	LDA	0.02	0.02
tblVehicleEF	LDA	0.04	0.20
tblVehicleEF	LDA	0.07	0.21
tblVehicleEF	LDA	4.6070e-003	2.6779e-003
tblVehicleEF	LDA	5.2210e-003	0.05

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tblVehicleEF	LDA	1.13	2.15
tblVehicleEF	LDA	259.61	261.48
tblVehicleEF	LDA	56.82	53.28
tblVehicleEF	LDA	0.05	0.04
tblVehicleEF	LDA	0.07	0.18
tblVehicleEF	LDA	0.04	0.04
tblVehicleEF	LDA	8.0000e-003	8.0000e-003
tblVehicleEF	LDA	1.9930e-003	1.6792e-003
tblVehicleEF	LDA	2.2640e-003	1.8374e-003
tblVehicleEF	LDA	0.02	0.02
tblVehicleEF	LDA	2.0000e-003	2.0000e-003
tblVehicleEF	LDA	1.8370e-003	1.5468e-003
tblVehicleEF	LDA	2.0810e-003	1.6895e-003
tblVehicleEF	LDA	0.04	0.05
tblVehicleEF	LDA	0.11	0.11
tblVehicleEF	LDA	0.03	0.05
tblVehicleEF	LDA	0.01	0.01
tblVehicleEF	LDA	0.04	0.24
tblVehicleEF	LDA	0.07	0.22
tblVehicleEF	LDA	2.6000e-003	2.5867e-003
tblVehicleEF	LDA	5.8700e-004	5.2725e-004
tblVehicleEF	LDA	0.04	0.05
tblVehicleEF	LDA	0.11	0.11
tblVehicleEF	LDA	0.03	0.05
tblVehicleEF	LDA	0.02	0.02
tblVehicleEF	LDA	0.04	0.24
tblVehicleEF	LDA	0.08	0.24
tblVehicleEF	LDT1	0.01	7.1828e-003
tblVehicleEF	LDT1	0.01	0.07

tblVehicleEF	LDT1	1.50	1.39
tblVehicleEF	LDT1	2.77	2.28
tblVehicleEF	LDT1	329.66	314.22
tblVehicleEF	LDT1	69.74	63.58
tblVehicleEF	LDT1	0.14	0.11
tblVehicleEF	LDT1	0.16	0.26
tblVehicleEF	LDT1	0.04	0.04
tblVehicleEF	LDT1	8.0000e-003	8.0000e-003
tblVehicleEF	LDT1	3.1320e-003	2.5040e-003
tblVehicleEF	LDT1	3.4000e-003	2.6192e-003
tblVehicleEF	LDT1	0.02	0.02
tblVehicleEF	LDT1	2.0000e-003	2.0000e-003
tblVehicleEF	LDT1	2.8840e-003	2.3043e-003
tblVehicleEF	LDT1	3.1270e-003	2.4084e-003
tblVehicleEF	LDT1	0.14	0.14
tblVehicleEF	LDT1	0.27	0.21
tblVehicleEF	LDT1	0.11	0.11
tblVehicleEF	LDT1	0.03	0.03
tblVehicleEF	LDT1	0.17	0.70
tblVehicleEF	LDT1	0.19	0.36
tblVehicleEF	LDT1	3.3150e-003	3.1094e-003
tblVehicleEF	LDT1	7.4600e-004	6.2916e-004
tblVehicleEF	LDT1	0.14	0.14
tblVehicleEF	LDT1	0.27	0.21
tblVehicleEF	LDT1	0.11	0.11
tblVehicleEF	LDT1	0.05	0.05
tblVehicleEF	LDT1	0.17	0.70
tblVehicleEF	LDT1	0.21	0.39
tblVehicleEF	LDT1	0.01	7.6860e-003
tblVehicleEF	LDT1	0.01	0.06

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tblVehicleEF	LDT1	2.37	1.95
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tblVehicleEF	LDT1	69.74	62.92
tblVehicleEF	LDT1	0.12	0.10
tblVehicleEF	LDT1	0.15	0.24
tblVehicleEF	LDT1	0.04	0.04
tblVehicleEF	LDT1	8.0000e-003	8.0000e-003
tblVehicleEF	LDT1	3.1320e-003	2.5040e-003
tblVehicleEF	LDT1	3.4000e-003	2.6192e-003
tblVehicleEF	LDT1	0.02	0.02
tblVehicleEF	LDT1	2.0000e-003	2.0000e-003
tblVehicleEF	LDT1	2.8840e-003	2.3043e-003
tblVehicleEF	LDT1	3.1270e-003	2.4084e-003
tblVehicleEF	LDT1	0.22	0.22
tblVehicleEF	LDT1	0.29	0.22
tblVehicleEF	LDT1	0.16	0.17
tblVehicleEF	LDT1	0.04	0.03
tblVehicleEF	LDT1	0.16	0.66
tblVehicleEF	LDT1	0.17	0.32
tblVehicleEF	LDT1	3.4820e-003	3.2470e-003
tblVehicleEF	LDT1	7.3900e-004	6.2263e-004
tblVehicleEF	LDT1	0.22	0.22
tblVehicleEF	LDT1	0.29	0.22
tblVehicleEF	LDT1	0.16	0.17
tblVehicleEF	LDT1	0.05	0.05
tblVehicleEF	LDT1	0.16	0.66
tblVehicleEF	LDT1	0.18	0.35
tblVehicleEF	LDT1	0.01	7.0340e-003
tblVehicleEF	LDT1	0.01	0.07

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tblVehicleEF	LDT1	2.85	2.35
tblVehicleEF	LDT1	324.17	309.56
tblVehicleEF	LDT1	69.74	63.72
tblVehicleEF	LDT1	0.14	0.11
tblVehicleEF	LDT1	0.16	0.26
tblVehicleEF	LDT1	0.04	0.04
tblVehicleEF	LDT1	8.0000e-003	8.0000e-003
tblVehicleEF	LDT1	3.1320e-003	2.5040e-003
tblVehicleEF	LDT1	3.4000e-003	2.6192e-003
tblVehicleEF	LDT1	0.02	0.02
tblVehicleEF	LDT1	2.0000e-003	2.0000e-003
tblVehicleEF	LDT1	2.8840e-003	2.3043e-003
tblVehicleEF	LDT1	3.1270e-003	2.4084e-003
tblVehicleEF	LDT1	0.13	0.13
tblVehicleEF	LDT1	0.31	0.23
tblVehicleEF	LDT1	0.10	0.11
tblVehicleEF	LDT1	0.03	0.03
tblVehicleEF	LDT1	0.20	0.83
tblVehicleEF	LDT1	0.20	0.37
tblVehicleEF	LDT1	3.2600e-003	3.0632e-003
tblVehicleEF	LDT1	7.4700e-004	6.3053e-004
tblVehicleEF	LDT1	0.13	0.13
tblVehicleEF	LDT1	0.31	0.23
tblVehicleEF	LDT1	0.10	0.11
tblVehicleEF	LDT1	0.05	0.05
tblVehicleEF	LDT1	0.20	0.83
tblVehicleEF	LDT1	0.21	0.40
tblVehicleEF	LDT2	6.4770e-003	4.5308e-003
tblVehicleEF	LDT2	6.3660e-003	0.07

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tblVehicleEF	LDT2	1.35	2.64
tblVehicleEF	LDT2	369.39	336.54
tblVehicleEF	LDT2	78.41	68.58
tblVehicleEF	LDT2	0.08	0.08
tblVehicleEF	LDT2	0.11	0.28
tblVehicleEF	LDT2	0.04	0.04
tblVehicleEF	LDT2	8.0000e-003	8.0000e-003
tblVehicleEF	LDT2	1.9860e-003	1.7615e-003
tblVehicleEF	LDT2	2.3340e-003	1.8602e-003
tblVehicleEF	LDT2	0.02	0.02
tblVehicleEF	LDT2	2.0000e-003	2.0000e-003
tblVehicleEF	LDT2	1.8270e-003	1.6212e-003
tblVehicleEF	LDT2	2.1460e-003	1.7104e-003
tblVehicleEF	LDT2	0.05	0.08
tblVehicleEF	LDT2	0.10	0.12
tblVehicleEF	LDT2	0.05	0.08
tblVehicleEF	LDT2	0.02	0.02
tblVehicleEF	LDT2	0.06	0.41
tblVehicleEF	LDT2	0.09	0.31
tblVehicleEF	LDT2	3.7000e-003	3.3295e-003
tblVehicleEF	LDT2	8.0700e-004	6.7870e-004
tblVehicleEF	LDT2	0.05	0.08
tblVehicleEF	LDT2	0.10	0.12
tblVehicleEF	LDT2	0.05	0.08
tblVehicleEF	LDT2	0.02	0.03
tblVehicleEF	LDT2	0.06	0.41
tblVehicleEF	LDT2	0.09	0.34
tblVehicleEF	LDT2	6.9310e-003	4.8690e-003
tblVehicleEF	LDT2	5.6450e-003	0.06

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tblVehicleEF	LDT2	388.48	350.13
tblVehicleEF	LDT2	78.41	67.87
tblVehicleEF	LDT2	0.07	0.07
tblVehicleEF	LDT2	0.10	0.26
tblVehicleEF	LDT2	0.04	0.04
tblVehicleEF	LDT2	8.0000e-003	8.0000e-003
tblVehicleEF	LDT2	1.9860e-003	1.7615e-003
tblVehicleEF	LDT2	2.3340e-003	1.8602e-003
tblVehicleEF	LDT2	0.02	0.02
tblVehicleEF	LDT2	2.0000e-003	2.0000e-003
tblVehicleEF	LDT2	1.8270e-003	1.6212e-003
tblVehicleEF	LDT2	2.1460e-003	1.7104e-003
tblVehicleEF	LDT2	0.08	0.13
tblVehicleEF	LDT2	0.11	0.13
tblVehicleEF	LDT2	0.07	0.11
tblVehicleEF	LDT2	0.02	0.02
tblVehicleEF	LDT2	0.06	0.38
tblVehicleEF	LDT2	0.08	0.28
tblVehicleEF	LDT2	3.8920e-003	3.4639e-003
tblVehicleEF	LDT2	8.0300e-004	6.7161e-004
tblVehicleEF	LDT2	0.08	0.13
tblVehicleEF	LDT2	0.11	0.13
tblVehicleEF	LDT2	0.07	0.11
tblVehicleEF	LDT2	0.03	0.03
tblVehicleEF	LDT2	0.06	0.38
tblVehicleEF	LDT2	0.08	0.30
tblVehicleEF	LDT2	6.3380e-003	4.4315e-003
tblVehicleEF	LDT2	6.5150e-003	0.07

tblVehicleEF	LDT2	0.76	0.93
tblVehicleEF	LDT2	1.39	2.72
tblVehicleEF	LDT2	363.05	331.99
tblVehicleEF	LDT2	78.41	68.74
tblVehicleEF	LDT2	0.07	0.08
tblVehicleEF	LDT2	0.11	0.28
tblVehicleEF	LDT2	0.04	0.04
tblVehicleEF	LDT2	8.0000e-003	8.0000e-003
tblVehicleEF	LDT2	1.9860e-003	1.7615e-003
tblVehicleEF	LDT2	2.3340e-003	1.8602e-003
tblVehicleEF	LDT2	0.02	0.02
tblVehicleEF	LDT2	2.0000e-003	2.0000e-003
tblVehicleEF	LDT2	1.8270e-003	1.6212e-003
tblVehicleEF	LDT2	2.1460e-003	1.7104e-003
tblVehicleEF	LDT2	0.04	0.07
tblVehicleEF	LDT2	0.11	0.13
tblVehicleEF	LDT2	0.04	0.07
tblVehicleEF	LDT2	0.02	0.02
tblVehicleEF	LDT2	0.07	0.47
tblVehicleEF	LDT2	0.09	0.32
tblVehicleEF	LDT2	3.6360e-003	3.2844e-003
tblVehicleEF	LDT2	8.0700e-004	6.8020e-004
tblVehicleEF	LDT2	0.04	0.07
tblVehicleEF	LDT2	0.11	0.13
tblVehicleEF	LDT2	0.04	0.07
tblVehicleEF	LDT2	0.02	0.03
tblVehicleEF	LDT2	0.07	0.47
tblVehicleEF	LDT2	0.10	0.35
tblVehicleEF	LHD1	5.4910e-003	5.4517e-003
tblVehicleEF	LHD1	0.01	5.3617e-003

tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	0.15	0.19
tblVehicleEF	LHD1	0.82	0.63
tblVehicleEF	LHD1	2.60	1.08
tblVehicleEF	LHD1	9.01	9.00
tblVehicleEF	LHD1	602.65	659.27
tblVehicleEF	LHD1	32.51	12.01
tblVehicleEF	LHD1	0.08	0.06
tblVehicleEF	LHD1	1.20	0.80
tblVehicleEF	LHD1	1.00	0.33
tblVehicleEF	LHD1	8.6000e-004	7.9884e-004
tblVehicleEF	LHD1	0.08	0.08
tblVehicleEF	LHD1	0.01	9.7335e-003
tblVehicleEF	LHD1	0.01	7.1920e-003
tblVehicleEF	LHD1	9.4900e-004	2.6596e-004
tblVehicleEF	LHD1	8.2200e-004	7.6429e-004
tblVehicleEF	LHD1	0.03	0.03
tblVehicleEF	LHD1	2.5220e-003	2.4334e-003
tblVehicleEF	LHD1	9.6970e-003	6.8537e-003
tblVehicleEF	LHD1	8.7300e-004	2.4454e-004
tblVehicleEF	LHD1	3.1810e-003	2.5562e-003
tblVehicleEF	LHD1	0.10	0.08
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	1.8680e-003	1.5089e-003
tblVehicleEF	LHD1	0.06	0.05
tblVehicleEF	LHD1	0.30	0.52
tblVehicleEF	LHD1	0.26	0.08
tblVehicleEF	LHD1	9.0000e-005	8.7363e-005
tblVehicleEF	LHD1	5.9160e-003	6.4342e-003
tblVehicleEF	LHD1	3.7400e-004	1.1884e-004

tblVehicleEF	LHD1	3.1810e-003	2.5562e-003
tblVehicleEF	LHD1	0.10	0.08
tblVehicleEF	LHD1	0.02	0.03
tblVehicleEF	LHD1	1.8680e-003	1.5089e-003
tblVehicleEF	LHD1	0.08	0.06
tblVehicleEF	LHD1	0.30	0.52
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tblVehicleEF	LHD1	5.4910e-003	5.4637e-003
tblVehicleEF	LHD1	0.01	5.4654e-003
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	0.15	0.19
tblVehicleEF	LHD1	0.83	0.64
tblVehicleEF	LHD1	2.48	1.03
tblVehicleEF	LHD1	9.01	9.00
tblVehicleEF	LHD1	602.65	659.29
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tblVehicleEF	LHD1	0.08	0.06
tblVehicleEF	LHD1	1.12	0.75
tblVehicleEF	LHD1	0.96	0.31
tblVehicleEF	LHD1	8.6000e-004	7.9884e-004
tblVehicleEF	LHD1	0.08	0.08
tblVehicleEF	LHD1	0.01	9.7335e-003
tblVehicleEF	LHD1	0.01	7.1920e-003
tblVehicleEF	LHD1	9.4900e-004	2.6596e-004
tblVehicleEF	LHD1	8.2200e-004	7.6429e-004
tblVehicleEF	LHD1	0.03	0.03
tblVehicleEF	LHD1	2.5220e-003	2.4334e-003
tblVehicleEF	LHD1	9.6970e-003	6.8537e-003
tblVehicleEF	LHD1	8.7300e-004	2.4454e-004
tblVehicleEF	LHD1	4.9650e-003	3.9659e-003

tblVehicleEF	LHD1	0.11	0.08
tblVehicleEF	LHD1	0.02	0.02
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tblVehicleEF	LHD1	0.30	0.50
tblVehicleEF	LHD1	0.25	0.07
tblVehicleEF	LHD1	9.0000e-005	8.7363e-005
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tblVehicleEF	LHD1	0.11	0.08
tblVehicleEF	LHD1	0.02	0.03
tblVehicleEF	LHD1	2.8120e-003	2.2585e-003
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tblVehicleEF	LHD1	0.01	5.3380e-003
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tblVehicleEF	LHD1	0.15	0.19
tblVehicleEF	LHD1	0.81	0.62
tblVehicleEF	LHD1	2.61	1.09
tblVehicleEF	LHD1	9.01	9.00
tblVehicleEF	LHD1	602.65	659.27
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tblVehicleEF	LHD1	0.08	0.06
tblVehicleEF	LHD1	1.18	0.78
tblVehicleEF	LHD1	1.00	0.33
tblVehicleEF	LHD1	8.6000e-004	7.9884e-004
tblVehicleEF	LHD1	0.08	0.08

tblVehicleEF	LHD1	0.01	9.7335e-003
tblVehicleEF	LHD1	0.01	7.1920e-003
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tblVehicleEF	LHD1	8.2200e-004	7.6429e-004
tblVehicleEF	LHD1	0.03	0.03
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tblVehicleEF	LHD1	3.2290e-003	2.6127e-003
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tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	1.8330e-003	1.4847e-003
tblVehicleEF	LHD1	0.06	0.05
tblVehicleEF	LHD1	0.33	0.56
tblVehicleEF	LHD1	0.26	0.08
tblVehicleEF	LHD1	9.0000e-005	8.7363e-005
tblVehicleEF	LHD1	5.9160e-003	6.4341e-003
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tblVehicleEF	LHD1	3.2290e-003	2.6127e-003
tblVehicleEF	LHD1	0.12	0.09
tblVehicleEF	LHD1	0.02	0.03
tblVehicleEF	LHD1	1.8330e-003	1.4847e-003
tblVehicleEF	LHD1	0.08	0.06
tblVehicleEF	LHD1	0.33	0.56
tblVehicleEF	LHD1	0.28	0.08
tblVehicleEF	LHD2	3.9270e-003	3.8307e-003
tblVehicleEF	LHD2	4.1730e-003	3.7828e-003
tblVehicleEF	LHD2	8.3570e-003	0.01
tblVehicleEF	LHD2	0.13	0.15
tblVehicleEF	LHD2	0.36	0.43

tblVehicleEF	LHD2	1.31	0.72
tblVehicleEF	LHD2	13.72	13.69
tblVehicleEF	LHD2	614.66	663.04
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tblVehicleEF	LHD2	0.80	0.96
tblVehicleEF	LHD2	0.55	0.23
tblVehicleEF	LHD2	1.1850e-003	1.2739e-003
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tblVehicleEF	LHD2	0.01	0.01
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tblVehicleEF	LHD2	1.1340e-003	1.2188e-003
tblVehicleEF	LHD2	0.04	0.04
tblVehicleEF	LHD2	2.6590e-003	2.6414e-003
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tblVehicleEF	LHD2	1.1830e-003	1.5469e-003
tblVehicleEF	LHD2	0.04	0.05
tblVehicleEF	LHD2	0.01	0.02
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tblVehicleEF	LHD2	0.08	0.32
tblVehicleEF	LHD2	0.11	0.05
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tblVehicleEF	LHD2	5.9880e-003	6.4147e-003
tblVehicleEF	LHD2	2.9600e-004	9.1353e-005
tblVehicleEF	LHD2	1.1830e-003	1.5469e-003
tblVehicleEF	LHD2	0.04	0.05
tblVehicleEF	LHD2	0.02	0.02

tblVehicleEF	LHD2	7.4900e-004	9.3325e-004
tblVehicleEF	LHD2	0.05	0.06
tblVehicleEF	LHD2	0.08	0.32
tblVehicleEF	LHD2	0.12	0.06
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tblVehicleEF	LHD2	8.0730e-003	0.01
tblVehicleEF	LHD2	0.13	0.15
tblVehicleEF	LHD2	0.36	0.44
tblVehicleEF	LHD2	1.25	0.69
tblVehicleEF	LHD2	13.72	13.69
tblVehicleEF	LHD2	614.66	663.05
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tblVehicleEF	LHD2	0.53	0.22
tblVehicleEF	LHD2	1.1850e-003	1.2739e-003
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tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	9.5110e-003	0.01
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tblVehicleEF	LHD2	9.0860e-003	0.01
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tblVehicleEF	LHD2	0.01	0.02
tblVehicleEF	LHD2	1.1140e-003	1.3896e-003

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tblVehicleEF	LHD2	0.08	0.31
tblVehicleEF	LHD2	0.11	0.05
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tblVehicleEF	LHD2	1.8430e-003	2.3965e-003
tblVehicleEF	LHD2	0.04	0.05
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	1.1140e-003	1.3896e-003
tblVehicleEF	LHD2	0.05	0.06
tblVehicleEF	LHD2	0.08	0.31
tblVehicleEF	LHD2	0.12	0.06
tblVehicleEF	LHD2	3.9270e-003	3.8293e-003
tblVehicleEF	LHD2	4.1600e-003	3.7732e-003
tblVehicleEF	LHD2	8.4070e-003	0.01
tblVehicleEF	LHD2	0.13	0.15
tblVehicleEF	LHD2	0.36	0.43
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tblVehicleEF	LHD2	13.72	13.69
tblVehicleEF	LHD2	614.66	663.04
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tblVehicleEF	LHD2	1.1850e-003	1.2739e-003
tblVehicleEF	LHD2	0.09	0.09
tblVehicleEF	LHD2	0.01	0.01
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tblVehicleEF	LHD2	1.1340e-003	1.2188e-003
tblVehicleEF	LHD2	0.04	0.04
tblVehicleEF	LHD2	2.6590e-003	2.6414e-003
tblVehicleEF	LHD2	9.0860e-003	0.01
tblVehicleEF	LHD2	4.1000e-004	1.3694e-004
tblVehicleEF	LHD2	1.1570e-003	1.5365e-003
tblVehicleEF	LHD2	0.04	0.06
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tblVehicleEF	LHD2	0.09	0.35
tblVehicleEF	LHD2	0.11	0.05
tblVehicleEF	LHD2	1.3400e-004	1.3119e-004
tblVehicleEF	LHD2	5.9880e-003	6.4147e-003
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tblVehicleEF	LHD2	1.1570e-003	1.5365e-003
tblVehicleEF	LHD2	0.04	0.06
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	7.2000e-004	8.9742e-004
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tblVehicleEF	LHD2	0.12	0.06
tblVehicleEF	MCY	0.51	0.36
tblVehicleEF	MCY	0.15	0.24
tblVehicleEF	MCY	18.81	19.03
tblVehicleEF	MCY	9.64	8.52
tblVehicleEF	MCY	182.85	218.99
tblVehicleEF	MCY	44.84	59.80
tblVehicleEF	MCY	1.13	1.13
tblVehicleEF	MCY	0.31	0.26

tblVehicleEF	MCY	0.01	0.01
tblVehicleEF	MCY	4.0000e-003	4.0000e-003
tblVehicleEF	MCY	2.2780e-003	2.2712e-003
tblVehicleEF	MCY	3.7580e-003	3.1959e-003
tblVehicleEF	MCY	5.0400e-003	5.0400e-003
tblVehicleEF	MCY	1.0000e-003	1.0000e-003
tblVehicleEF	MCY	2.1290e-003	2.1228e-003
tblVehicleEF	MCY	3.5380e-003	3.0082e-003
tblVehicleEF	MCY	1.18	1.19
tblVehicleEF	MCY	0.68	0.70
tblVehicleEF	MCY	0.70	0.71
tblVehicleEF	MCY	2.47	2.48
tblVehicleEF	MCY	0.61	1.96
tblVehicleEF	MCY	2.05	1.82
tblVehicleEF	MCY	2.2100e-003	2.1671e-003
tblVehicleEF	MCY	6.6600e-004	5.9175e-004
tblVehicleEF	MCY	1.18	1.19
tblVehicleEF	MCY	0.68	0.70
tblVehicleEF	MCY	0.70	0.71
tblVehicleEF	MCY	3.07	3.08
tblVehicleEF	MCY	0.61	1.96
tblVehicleEF	MCY	2.23	1.98
tblVehicleEF	MCY	0.50	0.36
tblVehicleEF	MCY	0.13	0.21
tblVehicleEF	MCY	18.33	18.52
tblVehicleEF	MCY	8.86	7.79
tblVehicleEF	MCY	182.85	217.99
tblVehicleEF	MCY	44.84	57.98
tblVehicleEF	MCY	0.98	0.99
tblVehicleEF	MCY	0.29	0.25

tblVehicleEF	MCY	0.01	0.01
tblVehicleEF	MCY	4.0000e-003	4.0000e-003
tblVehicleEF	MCY	2.2780e-003	2.2712e-003
tblVehicleEF	MCY	3.7580e-003	3.1959e-003
tblVehicleEF	MCY	5.0400e-003	5.0400e-003
tblVehicleEF	MCY	1.0000e-003	1.0000e-003
tblVehicleEF	MCY	2.1290e-003	2.1228e-003
tblVehicleEF	MCY	3.5380e-003	3.0082e-003
tblVehicleEF	MCY	1.98	1.99
tblVehicleEF	MCY	0.79	0.81
tblVehicleEF	MCY	1.24	1.25
tblVehicleEF	MCY	2.42	2.43
tblVehicleEF	MCY	0.58	1.86
tblVehicleEF	MCY	1.83	1.61
tblVehicleEF	MCY	2.2010e-003	2.1572e-003
tblVehicleEF	MCY	6.4700e-004	5.7375e-004
tblVehicleEF	MCY	1.98	1.99
tblVehicleEF	MCY	0.79	0.81
tblVehicleEF	MCY	1.24	1.25
tblVehicleEF	MCY	3.01	3.02
tblVehicleEF	MCY	0.58	1.86
tblVehicleEF	MCY	1.99	1.75
tblVehicleEF	MCY	0.51	0.36
tblVehicleEF	MCY	0.15	0.24
tblVehicleEF	MCY	18.82	19.04
tblVehicleEF	MCY	9.74	8.61
tblVehicleEF	MCY	182.85	219.05
tblVehicleEF	MCY	44.84	60.06
tblVehicleEF	MCY	1.10	1.10
tblVehicleEF	MCY	0.31	0.27

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tblVehicleEF	MCY	4.0000e-003	4.0000e-003
tblVehicleEF	MCY	2.2780e-003	2.2712e-003
tblVehicleEF	MCY	3.7580e-003	3.1959e-003
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tblVehicleEF	MCY	1.0000e-003	1.0000e-003
tblVehicleEF	MCY	2.1290e-003	2.1228e-003
tblVehicleEF	MCY	3.5380e-003	3.0082e-003
tblVehicleEF	MCY	1.26	1.27
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tblVehicleEF	MCY	0.67	0.68
tblVehicleEF	MCY	2.48	2.49
tblVehicleEF	MCY	0.70	2.25
tblVehicleEF	MCY	2.08	1.85
tblVehicleEF	MCY	2.2110e-003	2.1677e-003
tblVehicleEF	MCY	6.6900e-004	5.9430e-004
tblVehicleEF	MCY	1.26	1.27
tblVehicleEF	MCY	0.87	0.89
tblVehicleEF	MCY	0.67	0.68
tblVehicleEF	MCY	3.08	3.09
tblVehicleEF	MCY	0.70	2.25
tblVehicleEF	MCY	2.27	2.01
tblVehicleEF	MDV	0.01	5.8708e-003
tblVehicleEF	MDV	0.01	0.08
tblVehicleEF	MDV	1.28	1.14
tblVehicleEF	MDV	2.55	3.08
tblVehicleEF	MDV	499.57	414.41
tblVehicleEF	MDV	104.47	83.86
tblVehicleEF	MDV	0.14	0.11
tblVehicleEF	MDV	0.23	0.34

tblVehicleEF	MDV	0.04	0.04
tblVehicleEF	MDV	8.0000e-003	8.0000e-003
tblVehicleEF	MDV	2.1350e-003	1.8904e-003
tblVehicleEF	MDV	2.4500e-003	2.0047e-003
tblVehicleEF	MDV	0.02	0.02
tblVehicleEF	MDV	2.0000e-003	2.0000e-003
tblVehicleEF	MDV	1.9680e-003	1.7429e-003
tblVehicleEF	MDV	2.2530e-003	1.8436e-003
tblVehicleEF	MDV	0.07	0.09
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tblVehicleEF	MDV	0.07	0.09
tblVehicleEF	MDV	0.03	0.03
tblVehicleEF	MDV	0.09	0.44
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tblVehicleEF	MDV	1.0890e-003	8.2986e-004
tblVehicleEF	MDV	0.07	0.09
tblVehicleEF	MDV	0.16	0.14
tblVehicleEF	MDV	0.07	0.09
tblVehicleEF	MDV	0.05	0.04
tblVehicleEF	MDV	0.09	0.44
tblVehicleEF	MDV	0.21	0.44
tblVehicleEF	MDV	0.01	6.3076e-003
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tblVehicleEF	MDV	1.43	1.27
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tblVehicleEF	MDV	525.12	429.09
tblVehicleEF	MDV	104.47	83.00
tblVehicleEF	MDV	0.13	0.09
tblVehicleEF	MDV	0.22	0.32

tblVehicleEF	MDV	0.04	0.04
tblVehicleEF	MDV	8.0000e-003	8.0000e-003
tblVehicleEF	MDV	2.1350e-003	1.8904e-003
tblVehicleEF	MDV	2.4500e-003	2.0047e-003
tblVehicleEF	MDV	0.02	0.02
tblVehicleEF	MDV	2.0000e-003	2.0000e-003
tblVehicleEF	MDV	1.9680e-003	1.7429e-003
tblVehicleEF	MDV	2.2530e-003	1.8436e-003
tblVehicleEF	MDV	0.12	0.15
tblVehicleEF	MDV	0.17	0.15
tblVehicleEF	MDV	0.11	0.14
tblVehicleEF	MDV	0.03	0.03
tblVehicleEF	MDV	0.09	0.41
tblVehicleEF	MDV	0.17	0.35
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tblVehicleEF	MDV	1.0830e-003	8.2131e-004
tblVehicleEF	MDV	0.12	0.15
tblVehicleEF	MDV	0.17	0.15
tblVehicleEF	MDV	0.11	0.14
tblVehicleEF	MDV	0.05	0.04
tblVehicleEF	MDV	0.09	0.41
tblVehicleEF	MDV	0.19	0.39
tblVehicleEF	MDV	0.01	5.7419e-003
tblVehicleEF	MDV	0.01	0.08
tblVehicleEF	MDV	1.23	1.10
tblVehicleEF	MDV	2.62	3.17
tblVehicleEF	MDV	491.18	409.59
tblVehicleEF	MDV	104.47	84.04
tblVehicleEF	MDV	0.14	0.10
tblVehicleEF	MDV	0.23	0.35

tblVehicleEF	MDV	0.04	0.04
tblVehicleEF	MDV	8.0000e-003	8.0000e-003
tblVehicleEF	MDV	2.1350e-003	1.8904e-003
tblVehicleEF	MDV	2.4500e-003	2.0047e-003
tblVehicleEF	MDV	0.02	0.02
tblVehicleEF	MDV	2.0000e-003	2.0000e-003
tblVehicleEF	MDV	1.9680e-003	1.7429e-003
tblVehicleEF	MDV	2.2530e-003	1.8436e-003
tblVehicleEF	MDV	0.07	0.08
tblVehicleEF	MDV	0.17	0.15
tblVehicleEF	MDV	0.07	0.09
tblVehicleEF	MDV	0.03	0.02
tblVehicleEF	MDV	0.11	0.51
tblVehicleEF	MDV	0.20	0.41
tblVehicleEF	MDV	4.9200e-003	4.0493e-003
tblVehicleEF	MDV	1.0910e-003	8.3162e-004
tblVehicleEF	MDV	0.07	0.08
tblVehicleEF	MDV	0.17	0.15
tblVehicleEF	MDV	0.07	0.09
tblVehicleEF	MDV	0.04	0.04
tblVehicleEF	MDV	0.11	0.51
tblVehicleEF	MDV	0.22	0.45
tblVehicleEF	MH	0.03	9.6746e-003
tblVehicleEF	MH	0.02	0.02
tblVehicleEF	MH	2.16	1.16
tblVehicleEF	MH	5.59	2.07
tblVehicleEF	MH	1,102.49	1,478.68
tblVehicleEF	MH	59.08	18.78
tblVehicleEF	MH	1.23	1.26
tblVehicleEF	MH	0.79	0.24

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tblVehicleEF	MH	0.01	0.01
tblVehicleEF	MH	0.02	0.03
tblVehicleEF	MH	1.0760e-003	2.6221e-004
tblVehicleEF	MH	0.06	0.06
tblVehicleEF	MH	3.2190e-003	3.2685e-003
tblVehicleEF	MH	0.02	0.02
tblVehicleEF	MH	9.9000e-004	2.4109e-004
tblVehicleEF	MH	1.05	0.90
tblVehicleEF	MH	0.07	0.06
tblVehicleEF	MH	0.43	0.36
tblVehicleEF	MH	0.08	0.06
tblVehicleEF	MH	0.02	1.37
tblVehicleEF	MH	0.32	0.09
tblVehicleEF	MH	0.01	0.01
tblVehicleEF	MH	6.8800e-004	1.8587e-004
tblVehicleEF	MH	1.05	0.90
tblVehicleEF	MH	0.07	0.06
tblVehicleEF	MH	0.43	0.36
tblVehicleEF	MH	0.12	0.08
tblVehicleEF	MH	0.02	1.37
tblVehicleEF	MH	0.35	0.10
tblVehicleEF	MH	0.03	9.8973e-003
tblVehicleEF	MH	0.02	0.02
tblVehicleEF	MH	2.22	1.19
tblVehicleEF	MH	5.25	1.95
tblVehicleEF	MH	1,102.49	1,478.73
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tblVehicleEF	MH	1.13	1.17
tblVehicleEF	MH	0.76	0.23

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tblVehicleEF	MH	0.01	0.01
tblVehicleEF	MH	0.02	0.03
tblVehicleEF	MH	1.0760e-003	2.6221e-004
tblVehicleEF	MH	0.06	0.06
tblVehicleEF	MH	3.2190e-003	3.2685e-003
tblVehicleEF	MH	0.02	0.02
tblVehicleEF	MH	9.9000e-004	2.4109e-004
tblVehicleEF	MH	1.62	1.38
tblVehicleEF	MH	0.07	0.06
tblVehicleEF	MH	0.66	0.56
tblVehicleEF	MH	0.09	0.06
tblVehicleEF	MH	0.02	1.35
tblVehicleEF	MH	0.31	0.09
tblVehicleEF	MH	0.01	0.01
tblVehicleEF	MH	6.8200e-004	1.8387e-004
tblVehicleEF	MH	1.62	1.38
tblVehicleEF	MH	0.07	0.06
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tblVehicleEF	MH	0.12	0.08
tblVehicleEF	MH	0.02	1.35
tblVehicleEF	MH	0.34	0.10
tblVehicleEF	MH	0.03	9.6224e-003
tblVehicleEF	MH	0.02	0.02
tblVehicleEF	MH	2.14	1.15
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tblVehicleEF	MH	1,102.49	1,478.67
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tblVehicleEF	MH	0.79	0.24

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tblVehicleEF	MH	0.01	0.01
tblVehicleEF	MH	0.02	0.03
tblVehicleEF	MH	1.0760e-003	2.6221e-004
tblVehicleEF	MH	0.06	0.06
tblVehicleEF	MH	3.2190e-003	3.2685e-003
tblVehicleEF	MH	0.02	0.02
tblVehicleEF	MH	9.9000e-004	2.4109e-004
tblVehicleEF	MH	1.15	0.97
tblVehicleEF	MH	0.08	0.07
tblVehicleEF	MH	0.43	0.37
tblVehicleEF	MH	0.08	0.06
tblVehicleEF	MH	0.02	1.45
tblVehicleEF	MH	0.32	0.09
tblVehicleEF	MH	0.01	0.01
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tblVehicleEF	MH	1.15	0.97
tblVehicleEF	MH	0.08	0.07
tblVehicleEF	MH	0.43	0.37
tblVehicleEF	MH	0.11	0.08
tblVehicleEF	MH	0.02	1.45
tblVehicleEF	MH	0.35	0.10
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tblVehicleEF	MHD	4.1830e-003	4.0318e-003
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tblVehicleEF	MHD	0.36	0.38
tblVehicleEF	MHD	0.33	0.41
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tblVehicleEF	MHD	1,135.28	1,044.05

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tblVehicleEF	MHD	7.9400e-004	1.2136e-004
tblVehicleEF	MHD	3.0700e-004	1.0281e-003
tblVehicleEF	MHD	0.06	0.06
tblVehicleEF	MHD	3.0000e-003	3.0000e-003
tblVehicleEF	MHD	4.9220e-003	0.03
tblVehicleEF	MHD	7.3000e-004	1.1159e-004
tblVehicleEF	MHD	1.1590e-003	5.9622e-004
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tblVehicleEF	MHD	0.03	0.02
tblVehicleEF	MHD	7.2500e-004	3.7541e-004
tblVehicleEF	MHD	0.04	0.06
tblVehicleEF	MHD	0.02	0.12
tblVehicleEF	MHD	0.35	0.06
tblVehicleEF	MHD	1.3570e-003	6.1731e-004
tblVehicleEF	MHD	0.01	9.9735e-003
tblVehicleEF	MHD	7.0100e-004	1.1154e-004
tblVehicleEF	MHD	1.1590e-003	5.9622e-004
tblVehicleEF	MHD	0.04	0.02
tblVehicleEF	MHD	0.04	0.03
tblVehicleEF	MHD	7.2500e-004	3.7541e-004
tblVehicleEF	MHD	0.05	0.07
tblVehicleEF	MHD	0.02	0.12

tblVehicleEF	MHD	0.39	0.06
tblVehicleEF	MHD	0.02	3.9786e-003
tblVehicleEF	MHD	4.2400e-003	4.0723e-003
tblVehicleEF	MHD	0.05	0.01
tblVehicleEF	MHD	0.26	0.31
tblVehicleEF	MHD	0.33	0.42
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tblVehicleEF	MHD	1,135.28	1,044.05
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tblVehicleEF	MHD	10.55	1.31
tblVehicleEF	MHD	2.7000e-004	9.0840e-004
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tblVehicleEF	MHD	0.01	0.01
tblVehicleEF	MHD	5.1490e-003	0.03
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tblVehicleEF	MHD	0.06	0.06
tblVehicleEF	MHD	3.0000e-003	3.0000e-003
tblVehicleEF	MHD	4.9220e-003	0.03
tblVehicleEF	MHD	7.3000e-004	1.1159e-004
tblVehicleEF	MHD	1.8110e-003	9.2226e-004
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tblVehicleEF	MHD	0.02	0.02
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tblVehicleEF	MHD	0.04	0.06
tblVehicleEF	MHD	0.02	0.12
tblVehicleEF	MHD	0.34	0.06

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tblVehicleEF	MHD	0.01	9.9736e-003
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tblVehicleEF	MHD	1.8110e-003	9.2226e-004
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tblVehicleEF	MHD	0.03	0.03
tblVehicleEF	MHD	1.0870e-003	5.5868e-004
tblVehicleEF	MHD	0.05	0.07
tblVehicleEF	MHD	0.02	0.12
tblVehicleEF	MHD	0.37	0.06
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tblVehicleEF	MHD	4.1660e-003	4.0186e-003
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tblVehicleEF	MHD	0.33	0.41
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tblVehicleEF	MHD	0.50	0.46
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tblVehicleEF	MHD	10.59	1.31
tblVehicleEF	MHD	3.9000e-004	1.3042e-003
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tblVehicleEF	MHD	0.01	0.01
tblVehicleEF	MHD	5.1490e-003	0.03
tblVehicleEF	MHD	7.9400e-004	1.2136e-004
tblVehicleEF	MHD	3.7300e-004	1.2478e-003
tblVehicleEF	MHD	0.06	0.06
tblVehicleEF	MHD	3.0000e-003	3.0000e-003

tblVehicleEF	MHD	4.9220e-003	0.03
tblVehicleEF	MHD	7.3000e-004	1.1159e-004
tblVehicleEF	MHD	1.1430e-003	5.9436e-004
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tblVehicleEF	MHD	0.03	0.02
tblVehicleEF	MHD	6.9800e-004	3.6353e-004
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tblVehicleEF	MHD	0.02	0.13
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tblVehicleEF	MHD	1.1430e-003	5.9436e-004
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tblVehicleEF	MHD	0.04	0.03
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tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	6.9700e-003	0.02
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tblVehicleEF	OBUS	0.06	0.06
tblVehicleEF	OBUS	3.0000e-003	3.0000e-003
tblVehicleEF	OBUS	6.6520e-003	0.02
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tblVehicleEF	OBUS	1.5340e-003	1.9532e-003
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tblVehicleEF	OBUS	0.05	0.07
tblVehicleEF	OBUS	7.9200e-004	9.7417e-004
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tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	6.9700e-003	0.02
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tblVehicleEF	OBUS	7.6200e-004	1.8293e-004
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tblVehicleEF	OBUS	1.1860e-003	1.4442e-003
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tblVehicleEF	SBUS	5.6260e-003	1.7224e-003
tblVehicleEF	SBUS	0.03	9.3972e-003
tblVehicleEF	SBUS	0.94	0.34
tblVehicleEF	SBUS	2.8700e-003	8.7954e-004
tblVehicleEF	SBUS	0.11	0.10
tblVehicleEF	SBUS	0.01	0.05
tblVehicleEF	SBUS	0.34	0.04
tblVehicleEF	SBUS	0.01	3.4810e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	6.4000e-004	5.3826e-005
tblVehicleEF	SBUS	5.6260e-003	1.7224e-003
tblVehicleEF	SBUS	0.03	9.3972e-003
tblVehicleEF	SBUS	1.36	0.49

tblVehicleEF	SBUS	2.8700e-003	8.7954e-004
tblVehicleEF	SBUS	0.13	0.12
tblVehicleEF	SBUS	0.01	0.05
tblVehicleEF	SBUS	0.37	0.04
tblVehicleEF	SBUS	0.84	0.07
tblVehicleEF	SBUS	0.01	7.7871e-003
tblVehicleEF	SBUS	0.07	7.0886e-003
tblVehicleEF	SBUS	8.10	3.00
tblVehicleEF	SBUS	0.75	0.67
tblVehicleEF	SBUS	7.60	0.98
tblVehicleEF	SBUS	1,061.23	344.19
tblVehicleEF	SBUS	1,090.38	1,104.99
tblVehicleEF	SBUS	53.84	5.82
tblVehicleEF	SBUS	8.96	3.22
tblVehicleEF	SBUS	4.20	4.88
tblVehicleEF	SBUS	12.37	0.82
tblVehicleEF	SBUS	0.01	5.2229e-003
tblVehicleEF	SBUS	0.74	0.74
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.02	0.03
tblVehicleEF	SBUS	7.5100e-004	5.3615e-005
tblVehicleEF	SBUS	0.01	4.9969e-003
tblVehicleEF	SBUS	0.32	0.32
tblVehicleEF	SBUS	2.6840e-003	2.6612e-003
tblVehicleEF	SBUS	0.02	0.03
tblVehicleEF	SBUS	6.9100e-004	4.9297e-005
tblVehicleEF	SBUS	3.5410e-003	1.0863e-003
tblVehicleEF	SBUS	0.03	9.6015e-003
tblVehicleEF	SBUS	0.95	0.34
tblVehicleEF	SBUS	1.8040e-003	5.5621e-004

tblVehicleEF	SBUS	0.11	0.10
tblVehicleEF	SBUS	0.02	0.07
tblVehicleEF	SBUS	0.40	0.04
tblVehicleEF	SBUS	0.01	3.2870e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	6.7000e-004	5.7598e-005
tblVehicleEF	SBUS	3.5410e-003	1.0863e-003
tblVehicleEF	SBUS	0.03	9.6015e-003
tblVehicleEF	SBUS	1.37	0.49
tblVehicleEF	SBUS	1.8040e-003	5.5621e-004
tblVehicleEF	SBUS	0.13	0.12
tblVehicleEF	SBUS	0.02	0.07
tblVehicleEF	SBUS	0.44	0.04
tblVehicleEF	UBUS	2.35	5.43
tblVehicleEF	UBUS	0.06	0.02
tblVehicleEF	UBUS	10.43	42.26
tblVehicleEF	UBUS	10.25	0.95
tblVehicleEF	UBUS	1,922.34	1,952.53
tblVehicleEF	UBUS	110.12	11.60
tblVehicleEF	UBUS	8.39	0.45
tblVehicleEF	UBUS	14.66	0.12
tblVehicleEF	UBUS	0.58	0.07
tblVehicleEF	UBUS	0.01	0.03
tblVehicleEF	UBUS	0.11	3.0743e-003
tblVehicleEF	UBUS	1.1660e-003	5.9592e-005
tblVehicleEF	UBUS	0.25	0.03
tblVehicleEF	UBUS	3.0000e-003	7.5896e-003
tblVehicleEF	UBUS	0.10	2.9364e-003
tblVehicleEF	UBUS	1.0720e-003	5.4793e-005
tblVehicleEF	UBUS	5.1000e-003	9.7732e-004

tblVehicleEF	UBUS	0.08	0.01
tblVehicleEF	UBUS	2.8840e-003	7.6488e-004
tblVehicleEF	UBUS	0.74	0.08
tblVehicleEF	UBUS	0.02	0.08
tblVehicleEF	UBUS	0.79	0.07
tblVehicleEF	UBUS	9.5950e-003	2.3120e-003
tblVehicleEF	UBUS	1.2860e-003	1.1476e-004
tblVehicleEF	UBUS	5.1000e-003	9.7732e-004
tblVehicleEF	UBUS	0.08	0.01
tblVehicleEF	UBUS	2.8840e-003	7.6488e-004
tblVehicleEF	UBUS	3.18	5.55
tblVehicleEF	UBUS	0.02	0.08
tblVehicleEF	UBUS	0.86	0.07
tblVehicleEF	UBUS	2.36	5.43
tblVehicleEF	UBUS	0.05	0.01
tblVehicleEF	UBUS	10.48	42.26
tblVehicleEF	UBUS	8.90	0.83
tblVehicleEF	UBUS	1,922.34	1,952.53
tblVehicleEF	UBUS	110.12	11.40
tblVehicleEF	UBUS	7.90	0.45
tblVehicleEF	UBUS	14.60	0.11
tblVehicleEF	UBUS	0.58	0.07
tblVehicleEF	UBUS	0.01	0.03
tblVehicleEF	UBUS	0.11	3.0743e-003
tblVehicleEF	UBUS	1.1660e-003	5.9592e-005
tblVehicleEF	UBUS	0.25	0.03
tblVehicleEF	UBUS	3.0000e-003	7.5896e-003
tblVehicleEF	UBUS	0.10	2.9364e-003
tblVehicleEF	UBUS	1.0720e-003	5.4793e-005
tblVehicleEF	UBUS	7.6030e-003	1.4423e-003

tblVehicleEF	UBUS	0.08	0.01
tblVehicleEF	UBUS	4.3100e-003	1.1013e-003
tblVehicleEF	UBUS	0.75	0.08
tblVehicleEF	UBUS	0.02	0.07
tblVehicleEF	UBUS	0.72	0.06
tblVehicleEF	UBUS	9.5960e-003	2.3120e-003
tblVehicleEF	UBUS	1.2630e-003	1.1277e-004
tblVehicleEF	UBUS	7.6030e-003	1.4423e-003
tblVehicleEF	UBUS	0.08	0.01
tblVehicleEF	UBUS	4.3100e-003	1.1013e-003
tblVehicleEF	UBUS	3.19	5.55
tblVehicleEF	UBUS	0.02	0.07
tblVehicleEF	UBUS	0.79	0.07
tblVehicleEF	UBUS	2.35	5.43
tblVehicleEF	UBUS	0.06	0.02
tblVehicleEF	UBUS	10.41	42.26
tblVehicleEF	UBUS	10.46	0.96
tblVehicleEF	UBUS	1,922.34	1,952.53
tblVehicleEF	UBUS	110.12	11.63
tblVehicleEF	UBUS	8.23	0.45
tblVehicleEF	UBUS	14.67	0.12
tblVehicleEF	UBUS	0.58	0.07
tblVehicleEF	UBUS	0.01	0.03
tblVehicleEF	UBUS	0.11	3.0743e-003
tblVehicleEF	UBUS	1.1660e-003	5.9592e-005
tblVehicleEF	UBUS	0.25	0.03
tblVehicleEF	UBUS	3.0000e-003	7.5896e-003
tblVehicleEF	UBUS	0.10	2.9364e-003
tblVehicleEF	UBUS	1.0720e-003	5.4793e-005
tblVehicleEF	UBUS	5.5780e-003	9.5046e-004

tblVehicleEF	UBUS	0.10	0.01
tblVehicleEF	UBUS	2.9770e-003	7.3313e-004
tblVehicleEF	UBUS	0.74	0.08
tblVehicleEF	UBUS	0.03	0.10
tblVehicleEF	UBUS	0.80	0.07
tblVehicleEF	UBUS	9.5950e-003	2.3120e-003
tblVehicleEF	UBUS	1.2900e-003	1.1506e-004
tblVehicleEF	UBUS	5.5780e-003	9.5046e-004
tblVehicleEF	UBUS	0.10	0.01
tblVehicleEF	UBUS	2.9770e-003	7.3313e-004
tblVehicleEF	UBUS	3.18	5.55
tblVehicleEF	UBUS	0.03	0.10
tblVehicleEF	UBUS	0.88	0.07
tblVehicleTrips	ST_TR	8.19	8.36
tblVehicleTrips	SU_TR	5.95	8.36
tblVehicleTrips	WD_TR	8.17	8.36



## 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	0.8583	0.8376	6.4297	0.0132	1.3143	0.0116	1.3259	0.3508	0.0109	0.3616	0.0000	1,220.6533	1,220.6533	0.0881	0.0000	1,222.8548
Unmitigated	0.8583	0.8376	6.4297	0.0132	1.3143	0.0116	1.3259	0.3508	0.0109	0.3616	0.0000	1,220.6533	1,220.6533	0.0881	0.0000	1,222.8548

### 4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Enclosed Parking with Elevator	0.00	0.00	0.00		
Hotel	1,463.00	1,463.00	1,463.00	3,490,968	3,490,968
Total	1,463.00	1,463.00	1,463.00	3,490,968	3,490,968

### 4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	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
Enclosed Parking with Elevator	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Hotel	16.60	8.40	6.90	19.40	61.60	19.00	58	38	4

### 4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Enclosed Parking with Elevator	0.543376	0.059966	0.184357	0.131187	0.023843	0.006245	0.012012	0.009162	0.000826	0.000515	0.023898	0.000748	0.003864
Hotel	0.543376	0.059966	0.184357	0.131187	0.023843	0.006245	0.012012	0.009162	0.000826	0.000515	0.023898	0.000748	0.003864

## 5.0 Energy Detail

Historical Energy Use: N

### 5.1 Mitigation Measures Energy

	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	357.7888	357.7888	0.0148	3.0600e-003	359.0688
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	357.7888	357.7888	0.0148	3.0600e-003	359.0688
NaturalGas Mitigated	0.0158	0.1434	0.1205	8.6000e-004		0.0109	0.0109		0.0109	0.0109	0.0000	156.1190	156.1190	2.9900e-003	2.8600e-003	157.0468
NaturalGas Unmitigated	0.0158	0.1434	0.1205	8.6000e-004		0.0109	0.0109		0.0109	0.0109	0.0000	156.1190	156.1190	2.9900e-003	2.8600e-003	157.0468

### 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					
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hotel	2.92556e+006	0.0158	0.1434	0.1205	8.6000e-004		0.0109	0.0109		0.0109	0.0109	0.0000	156.1190	156.1190	2.9900e-003	2.8600e-003	157.0468
<b>Total</b>		<b>0.0158</b>	<b>0.1434</b>	<b>0.1205</b>	<b>8.6000e-004</b>		<b>0.0109</b>	<b>0.0109</b>		<b>0.0109</b>	<b>0.0109</b>	<b>0.0000</b>	<b>156.1190</b>	<b>156.1190</b>	<b>2.9900e-003</b>	<b>2.8600e-003</b>	<b>157.0468</b>

#### 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					
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hotel	2.92556e+006	0.0158	0.1434	0.1205	8.6000e-004		0.0109	0.0109		0.0109	0.0109	0.0000	156.1190	156.1190	2.9900e-003	2.8600e-003	157.0468
<b>Total</b>		<b>0.0158</b>	<b>0.1434</b>	<b>0.1205</b>	<b>8.6000e-004</b>		<b>0.0109</b>	<b>0.0109</b>		<b>0.0109</b>	<b>0.0109</b>	<b>0.0000</b>	<b>156.1190</b>	<b>156.1190</b>	<b>2.9900e-003</b>	<b>2.8600e-003</b>	<b>157.0468</b>

### 5.3 Energy by Land Use - Electricity

#### Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Enclosed Parking with Elevator	198168	63.1405	2.6100e-003	5.4000e-004	63.3663
Hotel	924760	294.6484	0.0122	2.5200e-003	295.7025
<b>Total</b>		<b>357.7888</b>	<b>0.0148</b>	<b>3.0600e-003</b>	<b>359.0688</b>

#### Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Enclosed Parking with Elevator	198168	63.1405	2.6100e-003	5.4000e-004	63.3663
Hotel	924760	294.6484	0.0122	2.5200e-003	295.7025
<b>Total</b>		<b>357.7888</b>	<b>0.0148</b>	<b>3.0600e-003</b>	<b>359.0688</b>

## 6.0 Area Detail

### 6.1 Mitigation Measures Area

	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	0.5005	4.0000e-005	4.9000e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	9.5100e-003	9.5100e-003	3.0000e-005	0.0000	0.0101
Unmitigated	0.5005	4.0000e-005	4.9000e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	9.5100e-003	9.5100e-003	3.0000e-005	0.0000	0.0101

## 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	0.0570						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Consumer Products	0.4430						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Landscaping	4.6000e-004	4.0000e-005	4.9000e-003	0.0000			2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	9.5100e-003	9.5100e-003	3.0000e-005	0.0000	0.0101
<b>Total</b>	<b>0.5005</b>	<b>4.0000e-005</b>	<b>4.9000e-003</b>	<b>0.0000</b>			<b>2.0000e-005</b>	<b>2.0000e-005</b>		<b>2.0000e-005</b>	<b>2.0000e-005</b>	<b>0.0000</b>	<b>9.5100e-003</b>	<b>9.5100e-003</b>	<b>3.0000e-005</b>	<b>0.0000</b>	<b>0.0101</b>

### 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	0.0570						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Consumer Products	0.4430						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Landscaping	4.6000e-004	4.0000e-005	4.9000e-003	0.0000			2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	9.5100e-003	9.5100e-003	3.0000e-005	0.0000	0.0101
<b>Total</b>	<b>0.5005</b>	<b>4.0000e-005</b>	<b>4.9000e-003</b>	<b>0.0000</b>			<b>2.0000e-005</b>	<b>2.0000e-005</b>		<b>2.0000e-005</b>	<b>2.0000e-005</b>	<b>0.0000</b>	<b>9.5100e-003</b>	<b>9.5100e-003</b>	<b>3.0000e-005</b>	<b>0.0000</b>	<b>0.0101</b>

## 7.0 Water Detail

### 7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	21.5715	0.1455	3.5900e-003	26.2778
Unmitigated	21.5715	0.1455	3.5900e-003	26.2778

## 7.2 Water by Land Use

### Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Enclosed Parking with Elevator	0 / 0	0.0000	0.0000	0.0000	0.0000
Hotel	4.43918 / 0.493243	21.5715	0.1455	3.5900e-003	26.2778
<b>Total</b>		<b>21.5715</b>	<b>0.1455</b>	<b>3.5900e-003</b>	<b>26.2778</b>

### Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Enclosed Parking with Elevator	0 / 0	0.0000	0.0000	0.0000	0.0000
Hotel	4.43918 / 0.493243	21.5715	0.1455	3.5900e-003	26.2778
<b>Total</b>		<b>21.5715</b>	<b>0.1455</b>	<b>3.5900e-003</b>	<b>26.2778</b>

## 8.0 Waste Detail

### 8.1 Mitigation Measures Waste

#### Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	19.4486	1.1494	0.0000	48.1830
Unmitigated	19.4486	1.1494	0.0000	48.1830

## 8.2 Waste by Land Use

### Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
Hotel	95.81	19.4486	1.1494	0.0000	48.1830
<b>Total</b>		<b>19.4486</b>	<b>1.1494</b>	<b>0.0000</b>	<b>48.1830</b>

### Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
Hotel	95.81	19.4486	1.1494	0.0000	48.1830
<b>Total</b>		<b>19.4486</b>	<b>1.1494</b>	<b>0.0000</b>	<b>48.1830</b>

## 9.0 Operational Offroad

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

### Fire Pumps and Emergency Generators

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

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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### User Defined Equipment

Equipment Type	Number
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## 11.0 Vegetation