

AIR QUALITY AND GREENHOUSE GAS ANALYSIS

MADISON PLAZA

CITY OF RIVERSIDE, COUNTY OF RIVERSIDE, CALIFORNIA

LSA

August 2016

AIR QUALITY AND GREENHOUSE GAS ANALYSIS

**MADISON PLAZA
CITY OF RIVERSIDE, COUNTY OF RIVERSIDE, CALIFORNIA**

Prepared for:

Peninsula Retail Partners
417 29th Street
Newport Beach, California 92663

Prepared by:

LSA Associates, Inc.
20 Executive Park, Suite 200
Irvine, California 92614-4731
(949) 553-0666

Project No. PRP1501

LSA

August 2016

EXECUTIVE SUMMARY

LSA Associates, Inc. (LSA) was retained by Peninsula Retail Partners to prepare an air quality and greenhouse gas (GHG) analysis for a proposed commercial/restaurant development project (proposed project) to be located in the City of Riverside (City), County of Riverside, California.

The air quality study provides a discussion of the proposed project, the physical setting of the project area, and the regulatory framework for air quality. The report provides data on existing air quality and evaluates potential air quality impacts associated with the proposed project. Modeled air quality levels are based on trip generation rates provided for the proposed land uses (LSA 2016).

Emissions with regional effects during project construction, calculated with the California Emissions Estimator Model (CalEEMod) (Version 2013.2.2), would not exceed criteria pollutant thresholds established by the South Coast Air Quality Management District (SCAQMD). Compliance with SCAQMD Rules and Regulations during construction would reduce construction-related air quality impacts from fugitive dust emissions and construction equipment emissions. Standard dust suppression measures recommended by SCAQMD for short-term construction activities were identified to meet SCAQMD emissions thresholds. The proposed project would not exceed the localized significance thresholds (LSTs).

Historical air quality data show that existing carbon monoxide (CO) levels for the project area and the general vicinity do not exceed either State or federal ambient air quality standards. The CO concentrations in the project area are much lower than the federal and State CO standards. The proposed project would not result in measureable or significant increases in CO concentrations at intersections in the project vicinity. Therefore, project-related traffic would not significantly affect local CO levels under future-year conditions, and the CO concentrations would be below the State and federal standards. No significant impact on local CO levels would occur. Pollutant emissions from project operation, also calculated using CalEEMod, would not exceed SCAQMD thresholds for any criteria pollutants. LSTs would not be exceeded by long-term emissions from the operation of the project.

The proposed project is located in the County of Riverside, which has been identified to have ultramafic rock in its soil. However, no such material has been found in the project vicinity in the past 25 years. Therefore, the potential risk for naturally occurring asbestos during project construction is small and less than significant.

This analysis also addresses the potential of the project to affect global climate change. Short-term construction and long-term operational emissions of the principal GHGs, including carbon dioxide and methane, are quantified, and their significance relative to the California Air Resources Board (ARB) Scoping Plan is discussed.

In December 2008, SCAQMD adopted an interim GHG threshold of significance for projects that includes determining GHG emissions significance by determining whether the project is consistent

with a GHG reduction plan that is part of a local General Plan. This concept is equivalent to the existing consistency determination requirements in the California Environmental Quality Act (CEQA) Guidelines, Sections 15064(h)(3), 15125(d), or 15152(a).

According to the Climate Action Plan (CAP) for the City of Riverside, projects that require a discretionary approval must implement project design measures that are consistent with the GHG emission reduction targets of at least 15 percent. The proposed Project incorporates a number of design measures that would reduce operational GHG emissions. These features include but are not limited to: incorporating energy-efficient building design; construction waste diversion; implementing a water conservation strategy; installing electric vehicle charging stations; and implementing a bicycle parking program.

The incorporation of design measures (including those noted above, among others detailed in this report) will help reduce the overall GHG emissions from construction and operation of the proposed Project. The proposed Project would be consistent with applicable policies in the City's CAP and General Plan for promoting sustainability and reducing GHGs. Thus, the proposed Project is consistent with all relevant local plans adopted for the purpose of reducing GHG emissions.

As no project-level or cumulative significant GHG impacts are anticipated for the Project, no mitigation measures are required.

The proposed uses are consistent with the designation of the City's Zoning Code for the project site and its surrounding area, which is consistent with the City's General Plan. The City's General Plan is consistent with the Southern California Association of Governments Regional Comprehensive Plan Guidelines and the SCAQMD Air Quality Management Plan (AQMP). Therefore, the proposed project is consistent with the General Plans and the regional AQMP.

This evaluation was prepared in conformance with appropriate standards, utilizing procedures and methodologies in the SCAQMD *CEQA Air Quality Handbook* (SCAQMD 1993) and associated updates. Air quality data posted on the ARB and United States Environmental Protection Agency websites are included to document the local air quality environment.

TABLE OF CONTENTS

EXECUTIVE SUMMARY	i
TABLE OF CONTENTS	iii
LIST OF ABBREVIATIONS AND ACRONYMS	v
INTRODUCTION.....	1
PROJECT LOCATION AND DESCRIPTION	1
Existing Land Uses on the Project Site and in the Project Vicinity	4
PROJECT SETTING.....	5
REGIONAL AIR QUALITY	5
Climate/Meteorology	8
Description of Global Climate Change and its Sources	10
Emissions Sources and Inventories	13
Air Pollution Constituents and Attainment Status	14
Hazardous Air Pollutants	17
LOCAL AIR QUALITY	17
REGULATORY SETTINGS	18
Federal Regulations/Standards	18
State Regulations/Standards	20
Regional Air Quality Planning Framework	24
Regional Air Quality Management Plan	24
THRESHOLDS OF SIGNIFICANCE	25
STATE THRESHOLDS OF SIGNIFICANCE FOR AIR QUALITY	25
THRESHOLDS OF SIGNIFICANCE FOR POLLUTANTS WITH REGIONAL EFFECTS	25
Regional Thresholds for Construction Emissions	26
Regional Thresholds for Operational Emissions	26
THRESHOLDS FOR LOCALIZED IMPACTS ANALYSIS	27
THRESHOLDS FOR POLLUTANTS THAT AFFECT GLOBAL CLIMATE CHANGE	28
IMPACTS AND MITIGATION	30
CONSTRUCTION IMPACTS	30
Equipment Exhausts and Related Construction Activities	30
Fugitive Dust	32
Architectural Coatings	32
Localized Impacts Analysis	33
Odors	33
Naturally Occurring Asbestos	33
Construction Health Risk Impacts	34
Construction Emissions Conclusions	34
LONG-TERM REGIONAL AIR QUALITY IMPACTS	34
Long-Term Project Operational Emissions	34
Localized Impacts Analysis	35
Toxic Air Contaminants	36
Greenhouse Gas Emissions	36
LONG-TERM MICROSCALE (CO HOT SPOT) ANALYSIS	41

AIR QUALITY MANAGEMENT PLAN CONSISTENCY	42
STANDARD CONDITIONS	43
Construction Operations.....	43
Operations	45
MINIMIZATION MEASURE	45
Global Climate Change Impacts	45
CUMULATIVE IMPACTS	47
IMPACTS TO THE PROPOSED PROJECT FROM GLOBAL CLIMATE CHANGE.....	48
REFERENCES	49

FIGURES

Figure 1: Project Location Map.....	2
Figure 2: Proposed Site Plan	3

TABLES

Table A: Ambient Air Quality Standards	6
Table B: Summary of Health Effects of the Major Criteria Air Pollutants	8
Table C: Global Warming Potential of Greenhouse Gases	11
Table D: Attainment Status of Criteria Pollutants in the South Coast Air Basin	15
Table E: Ambient Air Quality Monitored in the Project Vicinity	19
Table F: Construction Schedule	31
Table G: Diesel Construction Equipment Utilized by Construction Phase.....	31
Table H: Short-Term Regional Construction Emissions	32
Table I: Construction Localized Significance Threshold Impacts	33
Table J: Opening Year Regional Operational Emissions	35
Table K: Long-Term Operational Localized Significance Thresholds	35
Table L: Construction Greenhouse Gas Emissions	38
Table M: Operational Greenhouse Gas Emissions.....	38
Table N: Project Compliance with Greenhouse Gas Emission Reduction Strategies	40

APPENDIX

A: CALEEMOD MODEL PRINTOUTS

LIST OF ABBREVIATIONS AND ACRONYMS

°F	degrees Fahrenheit
°C	degrees Celsius
µg/m ³	micrograms per cubic meter
AAQS	ambient air quality standards
AB	Assembly Bill
ac	acre(s)
APN	Assessor's Parcel Number
AQMP	Air Quality Management Plan
ARB	California Air Resources Board
Basin	South Coast Air Basin
BAU	business-as-usual
CAA	Clean Air Act
CAAQS	California ambient air quality standards
CalEEMod	California Emissions Estimator Model
CalEPA	California Environmental Protection Agency
Caltrans	California Department of Transportation
CCAA	California Clean Air Act
CEC	California Energy Commission
CEQ	Council on Environmental Quality
CEQA	California Environmental Quality Act
CFCs	chlorofluorocarbons
CH ₄	methane
City	City of Riverside
CO	carbon monoxide
CO ₂	carbon dioxide
CO ₂ e	carbon dioxide equivalent
County	County of Riverside
CVC	California Vehicle Code
DPM	diesel particulate matter
EO	Executive Order
EPA	United States Environmental Protection Agency
ft	feet/foot
GCC	global climate change
GHG	greenhouse gas
GWP	global warming potential
H ₂ S	hydrogen sulfide
HFCs	hydrofluorocarbons

IPCC	Intergovernmental Panel on Climate Change
lbs/day	pounds per day
LOS	level of service
LSA	LSA Associates, Inc.
LST	localized significance threshold
m	meter(s)
mg/m ³	milligrams per cubic meter
mi	mile(s)
MMT	million metric tons
MMT CO ₂ e	million metric tons of carbon dioxide equivalent
MMT CO ₂ e/yr	million metric tons of carbon dioxide equivalent per year
mpg	miles per gallon
mph	miles per hour
MPO	Metropolitan Planning Organization
MT	metric tons
MT CO ₂ e	metric tons of carbon dioxide equivalent
MT CO ₂ e/yr	metric tons of carbon dioxide equivalent per year
MW	megawatts
N ₂ O	nitrous oxide
NAAQS	national ambient air quality standards
NAST	National Assessment Synthesis Team
NEPA	National Environmental Policy Act
NHTSA	National Highway Traffic Safety Administration
NO	nitric oxide
NO ₂	nitrogen dioxide
NO _x	nitrogen oxides
O ₃	ozone (or smog)
OMB	White House Office of Management and Budget
OPR	Governor's Office of Planning and Research
PFCs	perfluorocarbons
PM	particulate matter
PM ₁₀	particulate matter less than 10 microns in size
PM _{2.5}	particulate matter less than 2.5 microns in size
ppm	parts per million
PRC	Public Resources Code
ROCs	reactive organic compounds
ROGs	reactive organic gases
RRG	Riverside Restorative Growthprint
RRG-CAP	Riverside Restorative Growthprint Climate Action Plan
RRG-EPAP	Riverside Restorative Growthprint Economic Prosperity Action Plan
RTP/SCS	Regional Transportation Plan/Sustainable Communities Strategy

SB	Senate Bill
SBBM	San Bernardino Baseline and Meridian
SCAG	Southern California Association of Governments
SCAQMD	South Coast Air Quality Management District
sf	square feet/foot
SF ₆	sulfur hexafluoride
SIP	State Implementation Plan
SO ₂	sulfur dioxide
SO _x	sulfur oxides
SR-91	State Route 91
SRA	Source Receptor Area
State	State of California
Subregional CAP	Subregional Climate Action Plan
TACs	toxic air contaminants
T-BACT	toxics best available control technology
UNEP	United Nations Environment Programme
UNFCCC	United Nations Framework Convention on Climate Change
Update	First Update to the Scoping Plan (California Air Resources Board)
USC	United States Code
USGS	United States Geological Survey
VMT	vehicle miles traveled
VOCs	volatile organic compounds
Working Group	GHG CEQA Significance Threshold Working Group
WRCOG	Western Riverside Council of Governments

INTRODUCTION

This air quality and greenhouse gas (GHG) analysis has been prepared to evaluate the potential air quality impacts and the need for any mitigation measures associated with the proposed commercial/restaurant development project (project) in the City of Riverside (City), County of Riverside (County), California. This report provides a project-specific air quality and GHG analysis by examining the impacts of the proposed uses on adjacent sensitive land uses as well as the impacts on the proposed uses on the project site, and evaluating any mitigation measures required as part of the project design. Guidelines identified by the South Coast Air Quality Management District (SCAQMD) in its *CEQA Air Quality Handbook* (SCAQMD 1993) and associated updates will be followed in this analysis.

PROJECT LOCATION AND DESCRIPTION

The project site is on the northwest corner of the intersection of Madison Street and State Route 91 (SR-91), with access provided by one driveway from Madison Street, as shown on Figure 1.

The proposed project includes the construction of an 84,859 square foot (sf) of shopping center. The project site is at 3530 Madison Street in the City in western Riverside County. The project site consists of 8.21 acres and currently contains a fully operational 3,943 sf Denny's restaurant. The Denny's restaurant building would be retained on site and incorporated into the future project. The Mobil Station, car wash, and convenience store are not a part of the project and are on a separate parcel. The western portion of the project site is not developed and is currently a dirt lot.

The proposed project would construct two attached structures on the back side of the site consisting of a 41,117 sf market and a 37,849 sf health and fitness center. The proposed project also includes a 1,950 sf restaurant with drive-through on the eastern portion of the site along the Madison Street frontage between the existing Denny's restaurant and Mobil Station. The proposed project also includes minor architectural modifications to the Denny's restaurant building and modifications to the surrounding drive aisles and parking lots. The proposed project would result in a building coverage of 23.6 percent. The project will also include 432 parking spots.

In addition to the commercial development, the project would also construct three retention basins and an infiltration basin for runoff, in addition to modifications to the existing California Department of Transportation (Caltrans) retention basin located along the westbound SR-91 on-ramp. The project site is further identified by Assessor's Parcel Numbers (APNs) 230-090-002, 230-090-003, 230-090-004, and 230-090-005, and United States Geological Survey (USGS) map, Riverside West quadrangle, T3S, R5W, Section 4 of the San Bernardino Baseline and Meridian (SBBM). The proposed project is anticipated to be completed in 2017. A site plan of the proposed project is provided on Figure 2.

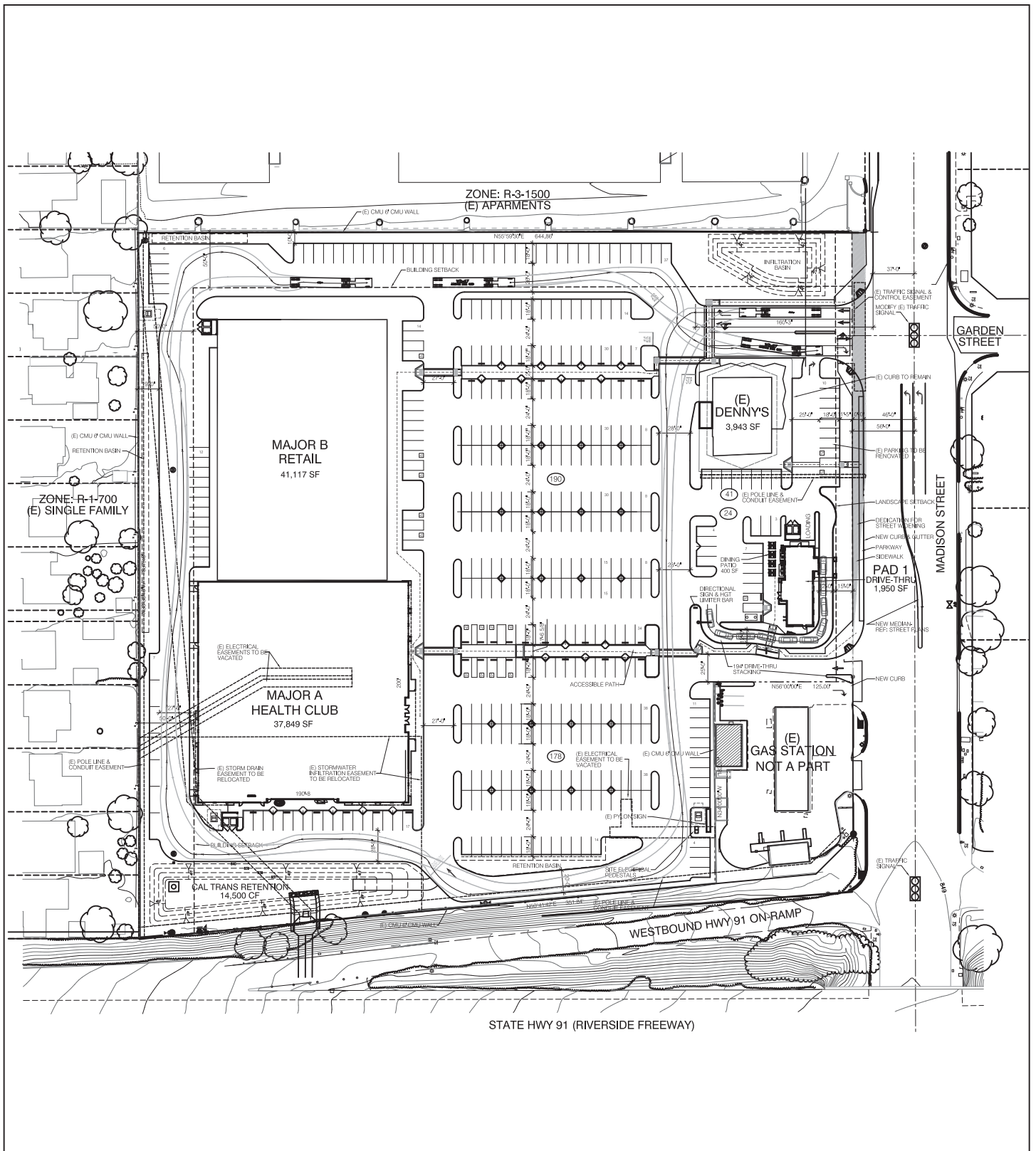
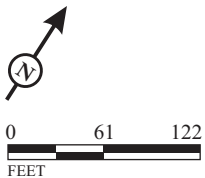


FIGURE 2

LSA



Madison Plaza

Conceptual Site Plan

SOURCE: GK Pierce Architects, December 7, 2012

I:\PRP1501\Reports\Environ\IS_MND\fig2_SitePlan.cdr (12/12/2016)

Existing Land Uses on the Project Site and in the Project Vicinity

Land uses surrounding the project site consist of residential uses to the north and west, with the nearest single-family residential uses approximately 50 feet (ft) to the west of the project boundary. Other existing multifamily residences to the north are approximately 55 ft from the project's northern boundary. Madison Elementary School is located approximately 400 ft north from the project site. The areas adjacent to the project site include the following uses:

- Two-story apartments (north);
- Commercial uses across Madison Street (east);
- Single-family residences (west); and
- SR-91 and westbound on-ramp (south).

The site has a 6 ft high concrete masonry unit wall along its western boundary and a 5 ft high perimeter wall along its northern boundary.

PROJECT SETTING

REGIONAL AIR QUALITY

The project site is located in the nondesert portion of the County of Riverside, California, which is part of the South Coast Air Basin (Basin) and is under the jurisdiction of SCAQMD. The air quality assessment for the proposed project includes estimating emissions associated with short-term construction and long-term operation of the proposed project.

A number of air quality modeling tools are available to assess the air quality impacts of projects. In addition, certain air districts (e.g., SCAQMD), have created guidelines and requirements for conducting air quality analyses. SCAQMD's current guidelines, included in its *CEQA Air Quality Handbook* (1993) and associated updates, were adhered to in the assessment of air quality impacts for the proposed project.

Both the State of California (State) and the federal government have established health-based ambient air quality standards (AAQS) for seven air pollutants. As detailed in Table A, these pollutants include ozone (O₃), carbon monoxide (CO), nitrogen dioxide (NO₂), sulfur dioxide (SO₂), particulate matter less than 10 microns in size (PM₁₀), particulate matter less than 2.5 microns in size (PM_{2.5}), and lead. In addition, the State has set standards for sulfates, hydrogen sulfide (H₂S), vinyl chloride, and visibility-reducing particles. These standards are designed to protect the health and welfare of the populace with a reasonable margin of safety.

In addition to setting out primary and secondary AAQS, the State has established a set of episode criteria for O₃, CO, NO₂, SO₂, and PM₁₀. These criteria refer to episode levels representing periods of short-term exposure to air pollutants that actually threaten public health. Health effects are progressively more severe as pollutant levels increase from Stage One to Stage Three. An alert level is that concentration of pollutants at which initial stage control actions are to begin. An alert will be declared when any one of the pollutant alert levels is reached at any monitoring site and when meteorological conditions are such that the pollutant concentrations can be expected to remain at these levels for 12 or more hours or increase (or, in the case of oxidants, the situation is likely to recur within the next 24 hours unless control actions are taken).

Pollutant alert levels:

- **O₃:** 392 micrograms per cubic meter (µg/m³) (0.20 parts per million [ppm]), 1-hour average
- **CO:** 17 milligrams per cubic meter (mg/m³) (15 ppm), 8-hour average
- **NO₂:** 1,130 µg/m³ (0.6 ppm), 1-hour average; 282 µg/m³ (0.15 ppm), 24-hour average
- **SO₂:** 800 µg/m³ (0.3 ppm), 24-hour average
- **PM₁₀:** 350 µg/m³, 24-hour average

Table A: Ambient Air Quality Standards

Pollutant	Averaging Time	California Standards ¹		National Standards ²		
		Concentration ³	Method ⁴	Primary ^{3,5}	Secondary ^{3,6}	Method ⁷
Ozone (O ₃) ⁸	1-Hour	0.09 ppm (180 µg/m ³)	Ultraviolet Photometry	—	Same as Primary Standard	Ultraviolet Photometry
	8-Hour	0.070 ppm (137 µg/m ³)		0.070 ppm (137 µg/m ³)		
Respirable Particulate Matter (PM ₁₀) ⁹	24-Hour	50 µg/m ³	Gravimetric or Beta Attenuation	150 µg/m ³	Same as Primary Standard	Inertial Separation and Gravimetric Analysis
	Annual Arithmetic Mean	20 µg/m ³		—		
Fine Particulate Matter (PM _{2.5}) ⁹	24-Hour	—	Gravimetric or Beta Attenuation	35 µg/m ³	Same as Primary Standard	Inertial Separation and Gravimetric Analysis
	Annual Arithmetic Mean	12 µg/m ³		12.0 µg/m ³		
Carbon Monoxide (CO)	8-Hour	9.0 ppm (10 mg/m ³)	Non-Dispersive Infrared Photometry (NDIR)	9 ppm (10 mg/m ³)	—	Non-Dispersive Infrared Photometry (NDIR)
	1-Hour	20 ppm (23 mg/m ³)		35 ppm (40 mg/m ³)	—	
	8-Hour (Lake Tahoe)	6 ppm (7 mg/m ³)		—	—	
Nitrogen Dioxide (NO ₂) ¹⁰	Annual Arithmetic Mean	0.030 ppm (57 µg/m ³)	Gas Phase Chemiluminescence	0.053 ppm (100 µg/m ³)	Same as Primary Standard	Gas Phase Chemiluminescence
	1-Hour	0.18 ppm (339 µg/m ³)		100 ppb (188 µg/m ³)	—	
Sulfur Dioxide (SO ₂) ¹¹	Annual Arithmetic Mean	—	Ultraviolet Fluorescence	0.030 ppm (for certain areas) ¹¹	—	Ultraviolet Fluorescence; Spectrophotometry (Pararosaniline Method)
	24-Hour	0.04 ppm (105 µg/m ³)		0.14 ppm (for certain areas) ¹¹		
	3-Hour	—		—	0.5 ppm (1300 µg/m ³)	
	1-Hour	0.25 ppm (655 µg/m ³)		75 ppb (196 µg/m ³)	—	
Lead ^{12,13}	30 Day Average	1.5 µg/m ³	Atomic Absorption	—	—	High-Volume Sampler and Atomic Absorption
	Calendar Quarter	—		1.5 µg/m ³ (for certain areas) ¹³	Same as Primary Standard	
	Rolling 3-Month Average	—		0.15 µg/m ³		
Visibility-Reducing Particles ¹⁴	8-Hour	See footnote 14	Beta Attenuation and Transmittance through Filter Tape	No National Standards		
Sulfates	24-Hour	25 µg/m ³	Ion Chromatography			
Hydrogen Sulfide	1-Hour	0.03 ppm (42 µg/m ³)	Ultraviolet Fluorescence			
Vinyl Chloride ¹²	24-Hour	0.01 ppm (26 µg/m ³)	Gas Chromatography			

Source: Ambient Air Quality Standards (ARB 2016).

The footnotes for this table are provided on the following page.

Footnotes:

- ¹ California standards for ozone, carbon monoxide (except 8-hour Lake Tahoe), sulfur dioxide (1- and 24-hour), nitrogen dioxide, and particulate matter (PM₁₀, PM_{2.5}, and visibility reducing particles), are values that are not to be exceeded. All others are not to be equaled or exceeded. California ambient air quality standards are listed in the Table of Standards in Section 70200 of Title 17 of the California Code of Regulations.
- ² National standards (other than ozone, particulate matter, and those based on annual arithmetic mean) are not to be exceeded more than once per year. The ozone standard is attained when the fourth highest 8-hour concentration measured at each site in a year, averaged over 3 years, is equal to or less than the standard. For PM₁₀, the 24-hour standard is attained when the expected number of days per calendar year with a 24-hour average concentration above 150 µg/m³ is equal to or less than 1. For PM_{2.5}, the 24-hour standard is attained when 98 percent of the daily concentrations, averaged over 3 years, are equal to or less than the standard. Contact the EPA for further clarification and current national policies.
- ³ Concentration expressed first in units in which it was promulgated. Equivalent units given in parentheses are based upon a reference temperature of 25°C and a reference pressure of 760 torr. Most measurements of air quality are to be corrected to a reference temperature of 25°C and a reference pressure of 760 torr; ppm in this table refers to ppm by volume, or micromoles of pollutant per mole of gas.
- ⁴ Any equivalent procedure which can be shown to the satisfaction of ARB to give equivalent results at or near the level of the air quality standard may be used.
- ⁵ National Primary Standards: The levels of air quality necessary, with an adequate margin of safety to protect the public health.
- ⁶ National Secondary Standards: The levels of air quality necessary to protect the public welfare from any known or anticipated adverse effects of a pollutant.
- ⁷ Reference method as described by the EPA. An “equivalent method” of measurement may be used but must have a “consistent relationship to the reference method” and must be approved by the EPA.
- ⁸ On October 1, 2015, the national 8-hour ozone primary and secondary standards were lowered from 0.075 to 0.070 ppm.
- ⁹ On December 14, 2012, the national annual PM_{2.5} primary standard was lowered from 15 µg/m³ to 12.0 µg/m³. The existing national 24-hour PM_{2.5} standards (primary and secondary) were retained at 35 µg/m³, as was the annual secondary standard of 15 µg/m³. The existing 24-hour PM₁₀ standards (primary and secondary) of 150 µg/m³ also were retained. The form of the annual primary and secondary standards is the annual mean, averaged over 3 years.
- ¹⁰ To attain the 1-hour standard, the 3-year average of the annual 98th percentile of the 1-hour daily maximum concentrations at each site must not exceed 100 ppb. The national 1-hour standard is in units of ppb. California standards are in units of ppm. To directly compare the national 1-hour standard to the California standards, the units can be converted from ppb to ppm. In this case, the national standard of 100 ppb is identical to 0.100 ppm.
- ¹¹ On June 2, 2010, the new 1-hour SO₂ standard was established and the existing 24-hour and annual primary standards were revoked. To attain the 1-hour national standard, the 3-year average of the annual 99th percentile of the 1-hour daily maximum concentrations at each site must not exceed 75 ppb. The 1971 SO₂ national standards (24-hour and annual) remain in effect until 1 year after an area is designated for the 2010 standard, except that in areas designated nonattainment for the 1971 standards, the 1971 standards remain in effect until implementation plans to attain or maintain the 2010 standards are approved.
Note that the 1-hour national standard is in units of ppb. California standards are in units of ppm. To directly compare the 1-hour national standard to the California standard, the units can be converted to ppm. In this case, the national standard of 75 ppb is identical to 0.075 ppm.
- ¹² The ARB has identified lead and vinyl chloride as “toxic air contaminants” with no threshold level of exposure for adverse health effects determined. These actions allow for the implementation of control measures at levels below the ambient concentrations specified for these pollutants.
- ¹³ The national standard for lead was revised on October 15, 2008, to a rolling 3-month average. The 1978 lead standard (1.5 µg/m³ as a quarterly average) remains in effect until 1 year after an area is designated for the 2008 standard, except that in areas designated nonattainment for the 1978 standard, the 1978 standard remains in effect until implementation plans to attain or maintain the 2008 standards are approved.
- ¹⁴ In 1989, the ARB converted both the general Statewide 10-mile visibility standard and the Lake Tahoe 30-mile visibility standard to instrumental equivalents, which are “extinction of 0.23 per kilometer” and “extinction of 0.07 per kilometer” for the Statewide and Lake Tahoe Air Basins, respectively.

°C = degrees Celsius

µg/m³ = micrograms per cubic meter

ARB = California Air Resources Board

EPA = United States Environmental Protection Agency

mg/m³ = milligrams per cubic meter

ppb = parts per billion

ppm = parts per million

Table B summarizes the primary health effects and sources of common air pollutants. Because the concentration standards were set at a level that protects public health with an adequate margin of safety (United States Environmental Protection Agency [EPA]), these health effects will not occur unless the standards are exceeded by a large margin or for a prolonged period of time. State AAQS are more stringent than federal AAQS. Among the pollutants, O₃ and particulate matter (PM_{2.5} and PM₁₀) are considered pollutants with regional effects, while the others have more localized effects.

Table B: Summary of Health Effects of the Major Criteria Air Pollutants

Pollutant	Health Effects	Examples of Sources
Particulate matter (PM ₁₀ : less than or equal to 10 microns)	- Increased respiratory disease - Lung damage - Premature death	- Cars and trucks, especially diesels - Fireplaces, wood stoves - Windblown dust from roadways, agriculture, and construction
Ozone (O ₃)	- Breathing difficulties - Lung damage	Formed by chemical reactions of air pollutants in the presence of sunlight; common sources are motor vehicles, industries, and consumer products
Carbon monoxide (CO)	- Chest pain in heart patients - Headaches, nausea - Reduced mental alertness - Death at very high levels	Any source that burns fuel (e.g., cars, trucks, construction and farming equipment, and residential heaters and stoves)
Nitrogen dioxide (NO ₂)	Lung damage	See CO sources
Toxic air contaminants	- Cancer - Chronic eye, lung, or skin irritation - Neurological and reproductive disorders	- Cars and trucks, especially diesels - Industrial sources (e.g., chrome platers) - Neighborhood businesses (e.g., dry cleaners and service stations) - Building materials and products

Source: ARB Fact Sheet: Air Pollution and Health. Website: <http://www.arb.ca.gov/research/health/fs/fs1/fs1.htm>, accessed July 2016.

ARB = California Air Resources Board

The California Clean Air Act (CCAA) provides SCAQMD and other air districts with the authority to manage transportation activities at indirect sources. Indirect sources of pollution include any facility, building, structure, or installation, or combination thereof, that attracts or generates mobile-source activity that results in emissions of any pollutant. In addition, area sources that are generated when minor sources collectively emit a substantial amount of pollution are also managed by the local air districts. Examples of this would be the motor vehicles at an intersection, a mall, and on highways. SCAQMD also regulates stationary sources of pollution throughout its jurisdictional area. Direct emissions from motor vehicles are regulated by the California Air Resources Board (ARB).

Climate/Meteorology

Air quality in the planning area is not only affected by various emission sources (e.g., mobile and industry), but also by atmospheric conditions (e.g., wind speed, wind direction, temperature, and rainfall). The combination of topography, low mixing height, abundant sunshine, and emissions from the second-largest urban area in the United States gives the Basin the worst air pollution problem in the nation.

The annual average temperature varies little throughout the Basin, ranging from the low to middle 60s, measured in degrees Fahrenheit (°F). With a more pronounced oceanic influence, coastal areas show less variability in annual minimum and maximum temperatures than inland areas. The climatological station closest to the site is the Riverside Citrus Exp Station.¹ However, this weather monitoring station stopped its operations in 2009. The next nearest weather monitoring station is the Riverside Fire Station 3 Station, which provides weather data monitored between 1893 and 2015. The monthly average maximum temperature recorded at this station ranged from 66.8°F in January to 94.4°F in August, with an annual average maximum of 79.5°F. The monthly average minimum temperature recorded at this station ranged from 39.1°F in January to 59.6°F in August, with an annual average minimum of 48.6°F. These levels are still representative of the project area. January is typically the coldest month, and August is typically the warmest month in this area of the Basin.

The majority of annual rainfall in the Basin occurs between November and April. Summer rainfall is minimal and is generally limited to scattered thundershowers in coastal regions and slightly heavier showers in the eastern portion of the Basin and along the coastal side of the mountains. The Riverside Fire Station 3 Station monitored precipitation from 1893 to 2015. Average monthly rainfall during that period varied from 2.20 inches in February to 0.44 inch or less between May and October, with an annual total of 10.21 inches. Patterns in monthly and yearly rainfall totals are unpredictable due to fluctuations in the weather.

The Basin experiences a persistent temperature inversion (increasing temperature with increasing altitude) as a result of the Pacific high. This inversion limits the vertical dispersion of air contaminants, holding them relatively near the ground. As the sun warms the ground and the lower air layer, the temperature of the lower air layer approaches the temperature of the base of the inversion (upper) layer until the inversion layer finally breaks, allowing vertical mixing with the lower layer. This phenomenon is observed in mid-afternoon to late afternoon on hot summer days, when the smog appears to clear up suddenly. Winter inversions frequently break by midmorning.

Winds in the project area blow predominantly from the south-southwest, with relatively low velocities. Wind speeds in the project area average about 5 miles per hour (mph). Summer wind speeds average slightly higher than winter wind speeds. Low average wind speeds, together with a persistent temperature inversion, limit the vertical dispersion of air pollutants throughout the Basin. Strong, dry, north or northeasterly winds, known as Santa Ana winds, occur during the fall and winter months, dispersing air contaminants. The Santa Ana conditions tend to last for several days at a time.

The combination of stagnant wind conditions and low inversions produces the greatest pollutant concentrations. On days of no inversion or high wind speeds, ambient air pollutant concentrations are the lowest. During periods of low inversions and low wind speeds, air pollutants generated in urbanized areas are transported predominantly on shore into Riverside and San Bernardino Counties. In the winter, the greatest pollution problems are CO and nitrogen oxides (NO_x) because of extremely low inversions and air stagnation during the night and early morning hours. In the summer, the longer daylight hours and brighter sunshine combine to cause a reaction between hydrocarbons and NO_x to form photochemical smog.

¹ Western Regional Climate Center. Website: <http://www.wrcc.dri.edu>, accessed July 2016.

Description of Global Climate Change and its Sources

Global climate change (GCC) is the observed increase in the average temperature of the Earth's atmosphere and oceans along with other significant changes in climate (e.g., precipitation or wind) that last for an extended period of time. The term "global climate change" is often used interchangeably with the term "global warming," but "global climate change" is preferred to "global warming" because it helps convey that there are other changes in addition to rising temperatures.

Climate change refers to any change in measures of weather (e.g., temperature, precipitation, or wind) lasting for an extended period (decades or longer). Climate change may result from natural factors (e.g., changes in the sun's intensity); natural processes within the climate system (e.g., changes in ocean circulation); or human activities (e.g., the burning of fossil fuels, land clearing, or agriculture). The primary observed effect of GCC has been a rise in the average global tropospheric¹ temperature of 0.36°F per decade, determined from meteorological measurements worldwide between 1990 and 2005. Climate change modeling shows that further warming may occur, which may induce additional changes in the global climate system during the current century. Changes to the global climate system, ecosystems, and the environment of the State could include higher sea levels, drier or wetter weather, changes in ocean salinity, changes in wind patterns, or more energetic aspects of extreme weather, including droughts, heavy precipitation, heat waves, extreme cold, and increased intensity of tropical cyclones. Specific effects in the State might include a decline in the Sierra Nevada snowpack, erosion of the State's coastline, and seawater intrusion in the San Joaquin Delta.

Global surface temperatures have risen by 1.33°F ±0.32°F over the last 100 years (1906 to 2005). The rate of warming over the last 50 years is almost double that over the last 100 years (IPCC 2013). The latest projections, based on state-of-the-art climate models, indicate that temperatures in the State are expected to rise by 3–10.5°F by the end of the century (State of California 2013). The prevailing scientific opinion on climate change is that "most of the warming observed over the last 60 years is attributable to human activities" (IPCC 2013). Increased amounts of carbon dioxide (CO₂) and other GHGs are the primary causes of the human-induced component of warming. The observed warming effect associated with the presence of GHGs in the atmosphere (from either natural or human sources) is often referred to as "the greenhouse effect."²

GHGs are present in the atmosphere naturally, are released by natural sources, or are formed from secondary reactions taking place in the atmosphere. The gases that are widely seen as the principal contributors to human-induced GCC are:³

¹ The troposphere is the zone of the atmosphere characterized by water vapor, weather, winds, and decreasing temperature with increasing altitude.

² The temperature on Earth is regulated by a system commonly known as the "greenhouse effect." Just as the glass in a greenhouse lets in heat from sunlight and reduces the amount of heat that escapes, GHGs like CO₂, CH₄, and N₂O in the atmosphere keep the Earth at a relatively even temperature. Without the greenhouse effect, the Earth would be a frozen globe; thus, the *naturally occurring* greenhouse effect is necessary to keep our planet at a comfortable temperature.

³ The GHGs listed are consistent with the definition in Assembly Bill 32 (Government Code 38505), as discussed later in this section.

- CO₂
- Methane (CH₄)
- Nitrous oxide (N₂O)
- Hydrofluorocarbons (HFCs)
- Perfluorocarbons (PFCs)
- Sulfur hexafluoride (SF₆)

Over the last 200 years, human activities have caused substantial quantities of GHGs to be released into the atmosphere. These extra emissions are increasing GHG concentrations in the atmosphere and enhancing the natural greenhouse effect, which some scientist believe can cause causing global warming. While GHGs produced by human activities include naturally occurring GHGs (e.g., CO₂, CH₄, and N₂O), some gases (e.g., HFCs, PFCs, and SF₆), are completely new to the atmosphere. Certain other gases (e.g., water vapor) are short-lived in the atmosphere as compared to these GHGs, which remain in the atmosphere for significant periods of time and contribute to climate change in the long term. Water vapor is generally excluded from the list of GHGs because it is short-lived in the atmosphere and its atmospheric concentrations are largely determined by natural processes (e.g., oceanic evaporation). For the purposes of this air quality study, the term “GHGs” will refer collectively to the six gases identified in the bulleted list provided above.

These gases vary considerably in terms of global warming potential (GWP), which is a concept developed to compare the ability of each GHG to trap heat in the atmosphere relative to another gas. GWP is based on several factors, including the relative effectiveness of a gas in absorbing infrared radiation and the length of time that the gas remains in the atmosphere (“atmospheric lifetime”). The GWP of each gas is measured relative to CO₂, the most abundant GHG. The definition of GWP for a particular GHG is the ratio of heat trapped by one unit mass of the GHG to the ratio of heat trapped by one unit mass of CO₂ over a specified time period. GHG emissions are typically measured in terms of metric tons¹ of “CO₂ equivalents” (MT CO₂e). For example, N₂O is 265 times more potent at contributing to global warming than CO₂. Table C identifies the GWP for each GHG analyzed in this report.

Table C: Global Warming Potential of Greenhouse Gases

Gas	Atmospheric Lifetime (Years)	Global Warming Potential (100-year Time Horizon)
Carbon Dioxide (CO ₂)	~100	1
Methane (CH ₄)	12	28
Nitrous Oxide (N ₂ O)	121	265

Source: First Update to the Climate Change Scoping Plan: Building on the Framework (ARB 2014).

ARB = California Air Resources Board

¹ A metric ton is equivalent to approximately 1.1 tons.

The following discussion summarizes the characteristics of the six primary GHGs.

Carbon Dioxide. In the atmosphere, carbon generally exists in its oxidized form, as CO₂. Natural sources of CO₂ include the respiration (breathing) of humans, animals, and plants; volcanic outgassing; decomposition of organic matter; and evaporation from the oceans. Human-caused sources of CO₂ include the combustion of fossil fuels and wood, waste incineration, mineral production, and deforestation. The Earth maintains a natural carbon balance, and when concentrations of CO₂ are upset, the system gradually returns to its natural state through natural processes. Natural changes to the carbon cycle work slowly, especially compared to the rapid rate at which humans are adding CO₂ to the atmosphere. Natural removal processes (e.g., photosynthesis by land- and ocean-dwelling plant species) cannot keep pace with this extra input of human-made CO₂, and consequently the gas is building up in the atmosphere. The concentration of CO₂ in the atmosphere has risen approximately 30 percent since the late 1800s (NAST 2001).

The transportation sector remains the largest source of GHG emissions in 2012, representing 36 percent of the State's GHG emission inventory. The largest emissions category within the transportation sector is on-road, which consists of passenger vehicles (cars, motorcycles, and light-duty trucks) and heavy-duty trucks and buses. Emissions from on-road sources constitute over 92 percent of the transportation sector total. Industry and electricity generation were the State's second- and third-largest categories of GHG emissions, respectively.

Methane. CH₄ is produced when organic matter decomposes in environments lacking sufficient oxygen. Natural sources of CH₄ include fires, geologic processes, and bacteria that produce CH₄ in a variety of settings (most notably, wetlands) (EPA 2010). Anthropogenic sources include rice cultivation, livestock, landfills and waste treatment, biomass burning, and fossil fuel combustion (e.g., the burning of coal, oil, and natural gas). As with CO₂, the major removal process of atmospheric CH₄—a chemical breakdown in the atmosphere—cannot keep pace with source emissions, and CH₄ concentrations in the atmosphere are increasing.

Nitrous Oxide. N₂O is produced naturally by a wide variety of biological sources, particularly microbial action in soils and water. Tropical soils and oceans account for the majority of natural source emissions. N₂O is also a product of the reaction that occurs between nitrogen and oxygen during fuel combustion. Both mobile and stationary combustion sources emit N₂O. The quantity of N₂O emitted varies according to the type of fuel, technology, and pollution control device used, as well as maintenance and operating practices. Agricultural soil management and fossil fuel combustion are the primary sources of human-generated N₂O emissions in the State.

Hydrofluorocarbons, Perfluorocarbons, and Sulfur Hexafluoride. HFCs are primarily used as substitutes for O₃-depleting substances regulated under the Montreal Protocol.¹ PFCs and SF₆ are

¹ The Montreal Protocol is an international treaty that was approved on January 1, 1989, and was designated to protect the O₃ layer by phasing out the production of several groups of halogenated hydrocarbons that are believed to be responsible for O₃ depletion and are also potent GHGs.

emitted from various industrial processes, including aluminum smelting, semiconductor manufacturing, electric power transmission and distribution, and magnesium casting. There is no aluminum or magnesium production in the State; however, the rapid growth in the semiconductor industry, which is active in the State, has led to greater use of PFCs. However, there are no known project-related emissions of these three GHGs; therefore, these substances are not discussed further in this analysis.

Emissions Sources and Inventories

An emissions inventory that identifies and quantifies the primary human-generated sources and sinks of GHGs is a well-recognized and useful tool for addressing climate change. This section summarizes the latest information on global, national, State, and local GHG emission inventories. However, because GHGs persist for a long time in the atmosphere (see Table C), accumulate over time, and are generally well mixed, their impact on the atmosphere and climate cannot be tied to a specific point of emission.

Global Emissions. Worldwide emissions of GHGs in 2012 totaled 29 billion metric tons of carbon dioxide equivalent per year (MT CO₂e/yr).¹ Global estimates are based on country inventories developed as part of the programs of the United Nations Framework Convention on Climate Change (UNFCCC).

United States Emissions. In 2013, the United States emitted approximately 6.7 billion MT CO₂e, down from 7.3 billion MT CO₂e in 2007. Of the six major sectors nationwide (i.e., electric power industry, transportation, industry, agriculture, commercial, and residential) the electric power industry and transportation sectors combined account for approximately 70 percent of the GHG emissions; the majority of the electric power industry and all of the transportation emissions are generated from direct fossil fuel combustion. In 2013, the total United States GHG emissions were approximately 9 percent less than 2005 levels (EPA 2016).

State of California Emissions. According to ARB emission inventory estimates, the State emitted approximately 459 million metric tons of CO₂e (MMT CO₂e) emissions in 2013. This is a decrease of 1.5 MMT CO₂e from 2012 and a 7 percent decrease since 2004 (ARB 2015b).

The ARB estimates that transportation was the source of approximately 37 percent of the State's GHG emissions in 2013, followed by electricity generation (both in-State and out-of-State) at 20 percent and industrial sources at 20 percent. The remaining sources of GHG emissions were residential and commercial activities at 9 percent, agriculture at 8 percent, high-GWP gases at 4 percent, and recycling and waste at 2 percent (ARB 2015b).

¹ United Nations Framework Convention on Climate Change (UNFCCC). Combined total of Annex I and Non-Annex I Country CO₂e emissions. Greenhouse Gas Inventory Data. Website: http://unfccc.int/ghg_data/ghg_data_unfccc/items/4146.php, accessed July 2016.

The ARB is responsible for developing the State GHG Emission Inventory. This inventory estimates the amount of GHGs emitted to and removed from the atmosphere by human activities within the State and supports the Assembly Bill (AB) 32 Climate Change Program. The ARB's current GHG emission inventory covers 1990–2013 and is based on fuel use, equipment activity, industrial processes, and other relevant data (e.g., housing, landfill activity, and agricultural lands).

The ARB staff has projected Statewide unregulated GHG emissions for 2020, which represent the emissions that would be expected to occur in the absence of any GHG reduction actions, at 509 MMT CO₂e. GHG emissions from the transportation and electricity sectors as a whole are expected to increase but remain at approximately 30 percent and 32 percent of total CO₂e emissions, respectively (ARB 2014).

Air Pollution Constituents and Attainment Status

The ARB coordinates and oversees both State and federal air pollution control programs in the State. The ARB oversees activities of local air quality management agencies and maintains air quality monitoring stations throughout the State in conjunction with the EPA and local air districts. The ARB has divided the State into 15 air basins based on meteorological and topographical factors of air pollution. Data collected at these stations are used by the ARB and EPA to classify air basins as attainment, nonattainment, nonattainment-transitional, or unclassified, based on air quality data for the most recent 3 calendar years compared with the AAQS.

Attainment areas may be:

- Attainment/unclassified (“unclassifiable” in some lists), which have never violated the air quality standard of interest or do not have enough monitoring data to establish attainment or nonattainment status;
- Attainment-maintenance (national ambient air quality standards [NAAQS] only), which violated a NAAQS that is currently in use (was nonattainment) in or after 1990, but now attains the standard and is officially redesignated as attainment by the EPA with a maintenance State Implementation Plan (SIP); or
- Attainment (usually only for California ambient air quality standards [CAAQS], but sometimes for NAAQS), which have adequate monitoring data to show attainment, have never been nonattainment, or, for NAAQS, have completed the official maintenance period.

Nonattainment areas are imposed with additional restrictions as required by the EPA. The air quality data are also used to monitor progress in attaining air quality standards. Table D lists the attainment status for the criteria pollutants in the Basin.

Ozone. O₃ (smog) is formed by photochemical reactions between NO_x and reactive organic gases (ROGs) rather than being directly emitted. O₃ is a pungent, colorless gas typical of Southern California smog. Elevated O₃ concentrations result in reduced lung function, particularly during vigorous physical activity. This health problem is particularly acute in sensitive receptors (e.g., the sick, the elderly, and young children). O₃ levels peak during summer and early fall. The entire Basin is

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

Pollutant	State	Federal
O ₃ 1-hour	Nonattainment	N/A
O ₃ 8-hour	Nonattainment	Extreme Nonattainment
PM ₁₀	Nonattainment	Attainment/Maintenance
PM _{2.5}	Nonattainment	Nonattainment
CO	Attainment	Attainment/Maintenance
NO ₂	Nonattainment	Attainment/Maintenance
SO ₂	Attainment	Attainment
Lead	Attainment ¹	Attainment ¹
All others	Attainment/Unclassified	N/A

Source: California Air Resources Board. Air Quality Standards and Area Designations. Website: <http://www.arb.ca.gov/design/design.htm>, accessed July 2016.

¹ Except in Los Angeles County.

CO = carbon monoxide

PM₁₀ = particulate matter less than 10 microns in size

N/A = not applicable

PM_{2.5} = particulate matter less than 2.5 microns in size

NO₂ = nitrogen dioxide

SO₂ = sulfur dioxide

O₃ = ozone

designated as a nonattainment area for the State 1-hour and 8-hour O₃ standards. The EPA has officially designated the status for most of the Basin regarding the 8-hour O₃ standard as “extreme nonattainment,” which means the Basin has until 2024 to attain the federal 8-hour O₃ standard.

Carbon Monoxide. CO is formed by the incomplete combustion of fossil fuels, almost entirely from automobiles. CO is a colorless, odorless gas that can cause dizziness, fatigue, and impairments to central nervous system functions. The entire Basin is in attainment for the State standards for CO. The Basin is designated as an “attainment/maintenance” area under the federal CO standards.

Nitrogen Oxides. NO₂, a reddish brown gas, and nitric oxide (NO), a colorless, odorless gas, are formed from fuel combustion under high temperature or pressure. These compounds are referred to as NO_x. NO_x is a primary component of the photochemical smog reaction. NO_x also contributes to other pollution problems, including a high concentration of fine particulate matter (PM_{2.5}), poor visibility, and acid deposition (i.e., acid rain). NO₂ decreases lung function and may reduce resistance to infection. The entire Basin is designated as nonattainment for the State NO₂ standard and as an “attainment/maintenance” area under the federal NO₂ standard.

Sulfur Dioxide. SO₂ is a colorless, irritating gas formed primarily from incomplete combustion of fuels containing sulfur. Industrial facilities also contribute to gaseous SO₂ levels. SO₂ irritates the respiratory tract, can injure lung tissue when combined with fine particulate matter, and reduces visibility and the level of sunlight. The entire Basin is in attainment with both federal and State SO₂ standards.

Lead. Lead is found in old paints and coatings, plumbing, and a variety of other materials. Once in the bloodstream, lead can cause damage to the brain, nervous system, and other body systems. Children are highly susceptible to the effects of lead. The Los Angeles County portion of the Basin was redesignated as nonattainment for the State and federal standards for lead in 2010.

Particulate Matter. Particulate matter is the term used for a mixture of solid particles and liquid droplets found in the air. Coarse particles (PM_{10}) derive from a variety of sources, including windblown dust and grinding operations. Fuel combustion and resultant exhaust from power plants and diesel buses and trucks are primarily responsible for $PM_{2.5}$ levels. Fine particles can also be formed in the atmosphere through chemical reactions. PM_{10} can accumulate in the respiratory system and aggravate health problems (e.g., asthma). The EPA's scientific review concluded that $PM_{2.5}$, which penetrates deeply into the lungs, is more likely than PM_{10} to contribute to the health effects listed in a number of recently published community epidemiological studies at concentrations that extend well below those allowed by the current PM_{10} standards. These health effects include premature death and increased hospital admissions and emergency room visits (primarily among the elderly and individuals with cardiopulmonary disease); increased respiratory symptoms and disease (children and individuals with cardiopulmonary disease [e.g., asthma]); decreased lung function (particularly in children and individuals with asthma); and alterations in lung tissue and structure and in respiratory tract defense mechanisms. The Basin is designated nonattainment for the federal and State $PM_{2.5}$ standards and State PM_{10} standard, and attainment/maintenance for the federal PM_{10} standard.

Volatile Organic Compounds. Volatile organic compounds (VOCs; also known as ROGs, and reactive organic compounds [ROCs]) are formed from the combustion of fuels and the evaporation of organic solvents. VOCs are not defined as criteria pollutants, however, because VOCs accumulate in the atmosphere more quickly during the winter, when sunlight is limited and photochemical reactions are slower, they are a prime component of the photochemical smog reaction. There are no attainment designations for VOCs.

Sulfates. Sulfates occur in combination with metal and/or hydrogen ions. In California, emissions of sulfur compounds occur primarily from the combustion of petroleum-derived fuels (e.g., gasoline and diesel fuel) that contain sulfur. This sulfur is oxidized to SO_2 during the combustion process and subsequently is converted to sulfate compounds in the atmosphere. The conversion of SO_2 to sulfates takes place comparatively rapidly and completely in urban areas of the State due to regional meteorological features. The entire Basin is in attainment for the State standard for sulfates.

Hydrogen Sulfide. H_2S is a colorless gas with the odor of rotten eggs. H_2S is formed during bacterial decomposition of sulfur-containing organic substances. In addition, H_2S can be present in sewer gas and some natural gas and can be emitted as the result of geothermal energy exploitation. In 1984, an ARB committee concluded that the ambient standard for H_2S is adequate to protect public health and to significantly reduce odor annoyance. The entire Basin is unclassified for the State standard for H_2S .

Visibility-Reducing Particles. Visibility-reducing particles consist of suspended particulate matter, which is a complex mixture of tiny particles that consists of dry solid fragments, solid cores with liquid coatings, and small droplets of liquid. These particles vary greatly in shape, size, and chemical composition, and can be made up of many different materials (e.g., metals, soot, soil, dust, and salt). The Statewide standard is intended to limit the frequency and severity of visibility impairment due to regional haze. The entire Basin is unclassified for the State standard for visibility-reducing particles.

Hazardous Air Pollutants

The public's exposure to toxic air contaminants (TACs) is a significant environmental health issue in the State. In 1983, the State Legislature enacted a program to identify the health effects of TACs and to reduce exposure to these contaminants to protect the public health. The Health and Safety Code defines a TAC as "an air pollutant which may cause or contribute to an increase in mortality or in serious illness, or which may pose a present or potential hazard to human health." A substance that is listed as a hazardous air pollutant pursuant to subsection (b) of Section 112 of the Federal Act (42 United States Code [USC] Section 7412[b]) is a TAC. Under State law, the California Environmental Protection Agency (CalEPA), acting through the ARB, is authorized to identify a substance as a TAC if it determines the substance is an air pollutant that may cause or contribute to an increase in mortality or an increase in serious illness, or that may pose a present or potential hazard to human health.

The State regulates TACs primarily through AB 1807 (Tanner Air Toxics Act) and AB 2588 (Air Toxics "Hot Spot" Information and Assessment Act of 1987). The Tanner Air Toxics Act sets forth a formal procedure for the ARB to designate substances as TACs. Once a TAC is identified, the ARB adopts an "airborne toxics control measure" for sources that emit designated TACs. If there is a safe threshold for a substance at which there is no toxic effect, the control measure must reduce exposure to below that threshold. If there is no safe threshold, the measure must incorporate toxics best available control technology (T-BACT) to minimize emissions.

Air toxics from stationary sources are also regulated in the State under the Air Toxics "Hot Spot" Information and Assessment Act of 1987. Under AB 2588, TAC emissions from individual facilities are quantified and prioritized by the air quality management district or air pollution control district. High-priority facilities are required to perform a health risk assessment and, if specific thresholds are exceeded, required to communicate the results to the public in the form of notices and public meetings.

To date, the ARB has designated nearly 200 compounds as TACs. Additionally, the ARB has implemented control measures for a number of compounds that pose high risks and show potential for effective control. The majority of the estimated health risks from TACs can be attributed to relatively few compounds, the most important being particulate matter from diesel-fueled engines (DPM).

LOCAL AIR QUALITY

SCAQMD, together with the ARB, maintains ambient air quality monitoring stations in the Basin. The air quality monitoring station closest to the site is the Riverside Rubidoux station, which monitors all criteria air pollutants data. The air quality trends from this station are used to represent

the ambient air quality in the project area. The pollutants monitored are CO, O₃, PM₁₀, PM_{2.5}, NO₂, and SO₂.^{1,2} The ambient air quality data in Table E show that NO₂, SO₂, and CO levels are below the applicable State and federal standards, and O₃, PM_{2.5}, and PM₁₀, regularly exceed the applicable federal and/or State standards.

REGULATORY SETTINGS

Federal Regulations/Standards

Pursuant to the federal Clean Air Act (CAA) of 1970, the EPA established the NAAQS. The NAAQS were established for six major pollutants, termed “criteria” pollutants. Criteria pollutants are defined as those pollutants for which the federal and State governments have established AAQS, or criteria, for outdoor concentrations in order to protect public health.

Data collected at permanent monitoring stations are used by the EPA to classify regions as “attainment” or “nonattainment,” depending on whether the regions met the requirements stated in the primary NAAQS. Nonattainment areas are imposed with additional restrictions as required by the EPA. The EPA has designated the Southern California Association of Governments (SCAG) as the Metropolitan Planning Organization (MPO) responsible for ensuring compliance with the requirements of the CAA for the Basin.

In an effort to help federal agencies ensure the integrity of their environmental reviews and promote sound governmental decision making, the Council on Environmental Quality (CEQ) issued on January 14, 2011, final guidance on the “Appropriate Use of Mitigation and Monitoring and Clarifying the Appropriate Use of Mitigated Findings of No Significant Impact.” This guidance was developed as part of CEQ’s effort to modernize and reinvigorate federal agency implementation of the National Environmental Policy Act (NEPA). The EPA established new national air quality standards for ground-level O₃ and PM_{2.5} in 1997. On May 14, 1999, the Court of Appeals for the District of Columbia Circuit issued a decision ruling that the CAA, as applied in setting the new public health standards for O₃ and PM_{2.5}, was unconstitutional as an improper delegation of legislative authority to the EPA. On February 27, 2001, the United States Supreme Court upheld the way the government sets air quality standards under the CAA. The court unanimously rejected industry arguments that the EPA must consider financial cost, as well as health benefits, in writing standards. The justices also rejected arguments that the EPA took too much lawmaking power from Congress when it set tougher standards for O₃ and soot in 1997. Nevertheless, the court threw out the EPA’s policy for implementing new O₃ rules, saying that the agency ignored a section of the law that restricts its authority to enforce such rules.

¹ United States Environmental Protection Agency (EPA). 2012–2014 Air Quality Data. Website: <http://www.epa.gov/airquality/airdata>, accessed July 2016.

² California Air Resources Board (ARB). iADAM: Air Quality Data Statistics. Website: <http://www.arb.ca.gov/adam>, accessed July 2016.

Table E: Ambient Air Quality Monitored in the Project Vicinity

Pollutant	Standard	2013	2014	2015
Carbon Monoxide (CO) – taken from Riverside-Rubidoux Station				
Maximum 1-hr concentration (ppm)		2.5	2.4	4.1
Number of days exceeded:	State: > 20 ppm	0	0	0
	Federal: > 35 ppm	0	0	0
Maximum 8-hr concentration (ppm)		2.0	1.9	1.5
Number of days exceeded:	State: ≥ 9.0 ppm	0	0	0
	Federal: ≥ 9 ppm	0	0	0
Ozone (O₃) – taken from Riverside-Rubidoux Station				
Maximum 1-hr concentration (ppm)		0.123	0.141	0.132
Number of days exceeded:	State: > 0.09 ppm	13	29	31
Maximum 8-hr concentration (ppm)		0.103	0.104	0.105
Number of days exceeded:	State: > 0.07 ppm	38	69	59
	Federal: > 0.075 ppm	26	41	39
Coarse Particulates (PM₁₀) – taken from Riverside-Rubidoux Station				
Maximum 24-hr concentration (µg/m ³)		91	100.0	64
Number of days exceeded:	State: > 50 µg/m ³	86	119	87
	Federal: > 150 µg/m ³	0	0	0
Annual arithmetic average concentration (µg/m ³)		36.2	36.6	31.1
Exceeded for the year:	State: > 20 µg/m ³	Yes	Yes	Yes
Fine Particulates (PM_{2.5}) – taken from Riverside-Rubidoux Station				
Maximum 24-hr concentration (µg/m ³)		58.6	37.2	36.0
Number of days exceeded:	Federal: > 35 µg/m ³	6	5	9
Annual arithmetic average concentration (µg/m ³)		12.9	13.6	10.5
Exceeded for the year:	State: > 12 µg/m ³	Yes	Yes	No
	Federal: > 15 µg/m ³	Yes	Yes	No
Nitrogen Dioxide (NO₂) – taken from Riverside-Rubidoux Station				
Maximum 1-hr concentration (ppm)		0.060	0.060	0.057
Number of days exceeded:	State: > 0.18 ppm	0	0	0
Annual arithmetic average concentration (ppm)		0.030	0.029	0.029
Exceeded for the year:	State: > 0.030 ppm	No	No	No
	Federal: > 0.053 ppm	No	No	No
Sulfur Dioxide (SO₂) – taken from Riverside-Rubidoux Station				
Maximum 24-hr concentration (ppm)		0.0075	0.0056	0.0019
Number of days exceeded:	State: > 0.04 ppm	0	0	0
	Federal: > 0.14 ppm	0	0	0
Annual arithmetic average concentration (ppm)		0.0005	0.0008	0.0006
Exceeded for the year:	Federal: > 0.030 ppm	0	0	0

Source 1: United States Environmental Protection Agency (EPA). Air Quality Data. Website: <http://www.epa.gov/airquality/airdata>, accessed July 2016.

Source 2: California Air Resources Board (ARB). iADAM: Air Quality Data Statistics. Website: <http://www.arb.ca.gov/adam>, accessed July 2016.

¹ The exceedances of the federal 8-hr O₃ standard are based on the old 0.08 ppm standard. In April 2008, the EPA revised the standard to 0.075 ppm.

µg/m³ = micrograms per cubic meter

hr = hour

ND = no data available

PM_{2.5} = particulate matter less than 2.5 microns in size

PM₁₀ = particulate matter less than 10 microns in size

ppm = parts per million

In April 2003, the EPA was cleared by the White House Office of Management and Budget (OMB) to implement the 8-hour ground-level O₃ standard. The EPA issued the proposed rule implementing the 8-hour O₃ standard in April 2003. The EPA completed final 8-hour nonattainment status on April 15, 2004. The EPA revoked the 1-hour O₃ standard on June 15, 2005, and lowered the 8-hour O₃ standard from 0.08 ppm to 0.075 ppm on April 1, 2008.

The EPA issued the final PM_{2.5} implementation rule in fall 2004. The EPA lowered the 24-hour PM_{2.5} standard from 65 to 35 µg/m³ and revoked the annual PM₁₀ standard on December 17, 2006. The EPA issued final designations for the 2006 24-hour PM_{2.5} standard on December 12, 2008.

The United States has historically had a voluntary approach to reducing GHG emissions. However, on April 2, 2007, the United States Supreme Court ruled that the EPA has the authority to regulate CO₂ emissions under the CAA. While there currently are no adopted federal regulations for the control or reduction of GHG emissions, the EPA commenced several actions in 2009 that are required to implement a regulatory approach to GCC.

On September 30, 2009, the EPA announced a proposal that focuses on large facilities emitting over 25,000 tons of GHG emissions per year. These facilities would be required to obtain permits that would demonstrate they are using the best practices and technologies to minimize GHG emissions.

On December 7, 2009, the EPA Administrator signed a final action under the CAA, finding that six GHGs (CO₂, CH₄, N₂O, HFCs, PFCs, and SF₆) constitute a threat to public health and welfare, and that the combined emissions from motor vehicles cause and contribute to GCC. This EPA action does not impose any requirements on industry or other entities. However, the findings are a prerequisite to finalizing the GHG emission standards for light-duty vehicles mentioned below.

On April 1, 2010, the EPA and the Department of Transportation's National Highway Traffic Safety Administration (NHTSA) announced a final joint rule to establish a national program consisting of new standards for model year 2012 through 2016 light-duty vehicles that will reduce GHG emissions and improve fuel economy. The EPA is finalizing the first-ever national GHG emissions standards under the CAA, and the NHTSA is finalizing Corporate Average Fuel Economy (CAFE) standards under the Energy Policy and Conservation Act. The EPA GHG standards require these vehicles to meet an estimated combined average emissions level of 250 grams of CO₂ per mile in model year 2016, equivalent to 35.5 miles per gallon (mpg).

State Regulations/Standards

In 1967, the State Legislature passed the Mulford-Carrell Act, which combined two Department of Health bureaus, the Bureau of Air Sanitation and the Motor Vehicle Pollution Control Board, to establish the ARB. Since its formation, the ARB has worked with the public, the business sector, and local governments to find solutions to the State's air pollution problems.

California adopted the CCAA in 1988. The ARB administers CAAQS for the 10 air pollutants designated in the CCAA. These 10 State air pollutants are the six criteria pollutants designated by the federal CAA as well as visibility-reducing particulates, H₂S, sulfates, and vinyl chloride.

The ARB identified DPM as TACs in August 1998. Following the identification process, the ARB was required by law to determine whether there is a need for further control. In September 2000, the

ARB adopted the Diesel Risk Reduction Plan, which recommends many control measures to reduce the risks associated with DPM and to achieve goals of 75 percent DPM reduction by 2010 and 85 percent by 2020.

From the 2010 Climate Action Team Report – California Climate Action Milestones. In 1988, AB 4420 directed the California Energy Commission (CEC) to report on “how global warming trends may affect the State’s energy supply and demand, economy, environment, agriculture, and water supplies” and offer “recommendations for avoiding, reducing and addressing the impacts.” This marked the first statutory direction to a State agency to address climate change.

The California Climate Action Registry was created to encourage voluntary reporting and early reductions of GHG emissions with the adoption of Senate Bill (SB) 1771 in 2000. The CEC was directed to assist by developing metrics and identifying and qualifying third-party organizations to provide technical assistance and advice to GHG emission reporters. The next year, SB 527 amended SB 1771 to emphasize third-party verification.

SB 1711 also contained several additional requirements for the CEC, including (a) updating the State’s GHG inventory from an existing 1998 report and continuing to update it every 5 years; (b) acquiring, developing, and distributing information on GCC to agencies and businesses; (c) establishing a State interagency task force to ensure policy coordination; and (d) establishing a climate change advisory committee to make recommendations on the most equitable and efficient ways to implement GCC requirements. In 2006, AB 1803 transferred preparation of the inventory from the CEC to the ARB by AB 1803. The ARB updates the inventory annually.

AB 1493, authored by Assembly Member Fran Pavley in 2002, directed the ARB to adopt regulations to achieve the maximum feasible and cost-effective reduction of GHG emissions from motor vehicles. The so-called “Pavley” regulations, or Clean Car regulations, were approved by the ARB in 2004. The ARB submitted a request to the EPA to implement the regulations in December 2005. After several years of requests to the federal government and accompanying litigation, this waiver request was granted on June 30, 2009. The ARB has since combined the control of smog-causing pollutants and GHG emissions to develop a single coordinated package of standards known as Low Emission Vehicles III. These regulations are expected to reduce GHG emissions from State passenger vehicles by approximately 22 percent in 2012 and approximately 30 percent in 2016, all while improving fuel efficiency and reducing motorists’ costs. AB 1493 also directed the State’s Climate Action Registry to adopt protocols for reporting reductions in GHG emissions from mobile sources prior to the operative date of the regulations.

SB 812 added forest management practices to the State’s Climate Action Registry members’ reportable emissions actions. SB 812 also directed the Registry to adopt forestry procedures and protocols to monitor, estimate, calculate, report, and certify CO stores and CO₂ emissions that resulted from the conservation and conservation-based management of forests in the State.

The California Renewable Portfolio Standard Program, which requires electric utilities and other entities under the jurisdiction of the California Public Utilities Commission to meet 20 percent of their retail sales with renewable power by 2017, was established by SB 1078 in 2002. The Renewable Portfolio Standard was accelerated to 20 percent by 2010 by SB 107 in 2006. The program was

subsequently expanded by the renewable electricity standard approved by the ARB in September 2010, requiring all utilities to meet a 33 percent target by 2020. The renewable electricity standard is projected to reduce GHG emissions from the electricity sector by at least 12 MMT CO₂e in 2020.

In December 2004, Governor Arnold Schwarzenegger signed Executive Order (EO) S-20-04, which set a goal of reducing energy use in State-owned buildings by 20 percent by 2015 (from a 2003 baseline) and encouraged cities, counties, schools, and the private sector to take all cost-effective measures to reduce building electricity use. This action built upon the State's strong history of energy-efficiency efforts that have saved Californians and State businesses energy and money for decades. They are a cornerstone of GHG reduction efforts.

EO S-3-05 (June 2005) established GHG targets for the State, including returning to year 2000 emission levels by 2010, to 1990 levels by 2020, and to 80 percent below 1990 levels by 2050. EO S-3-05 directed the Secretary of CalEPA to coordinate efforts to meet the targets with the heads of other State agencies. This group became the Climate Action Team.

California's Million Solar Roofs plan was boosted by the passage of SB 1 in 2006. The plan is estimated to result in 3,000 megawatts (MW) of new electricity generating capacity and avoidance of 2.1 MMT CO₂e emissions. The main components of the bill included expanding the program to more customers, requiring the State's municipal utilities to create their own solar rebate programs, and making solar panels a standard option on new homes.

The California Global Warming Solutions Act of 2006, best known by its bill number, AB 32, created a first-in-the-country comprehensive program to achieve real, quantifiable, and cost-effective reductions in GHGs. The law set an economy-wide cap on the State's GHG emissions at 1990 levels by 2020, and directed the ARB to prepare, approve, and implement a Scoping Plan for achieving the maximum technologically feasible and cost-effective reductions in GHG emissions. EO S-20-06, signed in October 2006, directed the Secretary for Environmental Protection to establish a Market Advisory Committee of national and international experts. The committee made recommendations to the ARB on the design of a market-based program for GHG emissions reduction. The ARB adopted the first Scoping Plan, describing a portfolio of measures to achieve the target, in December 2008. All of the major regulatory measures necessary for meeting the 2020 emissions target were adopted by December 2010.

The ARB approved the First Update to the Scoping Plan (Update) on May 22, 2014. The Update identifies the next steps for California's climate change strategy. It shows how California continues on its path to meet the near-term 2020 GHG limit, but also sets a path toward long-term, deep GHG emission reductions. The report establishes a broad framework for continued emission reductions beyond 2020, with a goal of 80 percent below 1990 levels by 2050. The Update identifies progress made to meet the near-term objectives of AB 32 and defines California's climate change priorities and activities Climate for the next several years. The Update does not set new targets for the State but rather describes a path that would achieve the long-term 2050 goal of EO S-05-03 for emissions to decline to 80 percent below 1990 levels by 2050.

The governors of California, Arizona, New Mexico, Oregon, and Washington entered into a Memorandum of Understanding in February 2007 establishing the Western Climate Initiative. The governors agreed to set a regional goal for emissions reductions consistent with state-by-state goals;

develop a design for a regional market-based multi-sector mechanism to achieve the goals; and participate in a multistate GHG registry. The initiative has since grown to include Montana, Utah, and the Canadian provinces of British Columbia, Manitoba, Ontario, and Québec.

California is implementing the world's first Low Carbon Fuel Standard for transportation fuels, pursuant to both EO S-01-07 (signed January 2007) and AB 32. The standard requires a reduction of at least 10 percent in the CO intensity of the State's transportation fuels by 2020. This reduction is expected to reduce GHG emissions in 2020 by 17.6 MMT CO₂e. Also in 2007, AB 118 created the Alternative and Renewable Fuel and Vehicle Technology Program. The CEC and the ARB administer the program. This act provides funding for alternative fuel and vehicle technology research, development, and deployment in order to attain the State's climate change goals, achieve the State's petroleum reduction objectives and clean air and GHG emission reduction standards, develop public-private partnerships, and ensure a secure and reliable fuel supply.

In addition to vehicle emissions regulations and the Low Carbon Fuel Standard, the third effort to reduce GHG emissions from transportation is the reduction in the demand for personal vehicle travel (i.e., vehicle miles traveled, or VMT). This measure was addressed in September 2008 through the Sustainable Communities and Climate Protection Act of 2008, or SB 375. The enactment of SB 375 initiated an important new regional land use planning process to mitigate GHG emissions by integrating and aligning planning for housing, land use, and transportation for California's 18 MPOs. The bill directed the ARB to set regional GHG emission reduction targets for most areas of the State. SB 375 also contained important elements related to federally mandated regional transportation plans and the alignment of State transportation and housing planning processes.

Also codified in 2008, SB 97 required the Governor's Office of Planning and Research (OPR) to develop GHG emissions criteria for use in determining project impacts under the California Environmental Quality Act (CEQA). These criteria were developed in 2009 and went into effect in 2010.

EO S-13-08 launched a major initiative for improving the State's adaptation to climate impacts from sea level rise, increased temperatures, shifting precipitation, and extreme weather events. The law ordered a California Sea Level Rise Assessment Report to be requested from the National Academy of Sciences. EO S-13-08 also ordered the development of a Climate Adaptation Strategy. The strategy, published in December 2009, assesses the State's vulnerability to climate change impacts, and outlines possible solutions that can be implemented within and across State agencies to promote resiliency. The Strategy focused on seven areas: public health, biodiversity and habitat, ocean and coastal resources, water management, agriculture, forestry, and transportation and energy infrastructure.

On April 29, 2015, Governor Edmund G. Brown, Jr. issued an EO to establish a California GHG reduction target of 40 percent below 1990 levels by 2030. The Governor's EO aligns California's GHG reduction targets with those of leading international governments ahead of the United Nations Climate Change Conference in Paris set for late 2015. The EO sets a new interim Statewide GHG emission reduction target to reduce GHG emissions to 40 percent below 1990 levels by 2030 in order to ensure California meets its target of reducing GHG emissions to 80 percent below 1990 levels by 2050, and directs the ARB to update the Climate Change Scoping Plan to express the 2030 target in terms of MMT CO₂e. The EO also requires the State's climate adaptation plan to be updated every

3 years and for the State to continue its climate change research program, among other provisions. As with EO S-3-05, this EO is not legally enforceable against local governments and the private sector. Legislation that would update AB 32 to make post-2020 targets and requirements a mandate is in process in the State Legislature

The initiatives, EOs, and statutes outlined above comprise the major milestones in California's efforts to address climate change through coordinated action on climate research, GHG mitigation, and climate change adaptation. There are numerous other related efforts that have been undertaken by State agencies and departments to address specific questions and programmatic needs. The Climate Action Team coordinates these efforts and others, which comprise the State's climate program. The sections below describe these efforts.

Regional Air Quality Planning Framework

The 1976 Lewis Air Quality Management Act established SCAQMD and other air districts throughout the State. The federal CAA Amendments of 1977 required that each state adopt an implementation plan outlining pollution control measures to attain the federal standards in nonattainment areas of the State.

The ARB is responsible for incorporating air quality management plans for local air basins into an SIP for EPA approval. Significant authority for air quality control within them has been given to local air districts that regulate stationary-source emissions and develop local nonattainment plans.

Regional Air Quality Management Plan

SCAQMD and SCAG are responsible for formulating and implementing the Air Quality Management Plan (AQMP) for the Basin. The main purpose of an AQMP is to bring the area into compliance with federal and State air quality standards. Every 3 years, SCAQMD prepares a new AQMP, updating the previous plan and having a 20-year horizon. SCAQMD adopted the 2012 AQMP in December 2012. The ARB approved it on January 23, 2013, and forwarded it to the EPA.

The 2012 AQMP incorporates the latest scientific and technological information and planning assumptions, including the 2012 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) and updated emission inventory methodologies for various source categories. The 2012 AQMP included the new and changing federal requirements, implementation of new technology measures, and continued development of economically sound, flexible compliance approaches.

The 2016 RTP/SCS was adopted by SCAG in April 2016. SCAQMD is developing the 2016 AQMP for adoption in late 2016 or early 2017.

THRESHOLDS OF SIGNIFICANCE

A number of modeling tools are available to assess the air quality impacts of projects. In addition, certain air districts (e.g., SCAQMD) have created guidelines and requirements to conduct air quality analysis. SCAQMD's current guidelines, the *CEQA Air Quality Handbook* (SCAQMD 1993) with associated updates, and the City guidelines were adhered to in the assessment of air quality impacts for the proposed project. The current air quality model, California Emissions Estimator Model (CalEEMod) Version 2013.2.2 was used to estimate project-related mobile- and stationary-source emissions in this air quality and greenhouse gas emissions analysis.

This air quality and GHG analysis includes estimated emissions associated with short-term construction and long-term operation of the proposed project. Criteria pollutants with regional impacts would be emitted by project-related vehicular trips, as well as by emissions associated with stationary sources used on site. Localized air quality impacts (i.e., higher CO concentrations [CO hot spots] near intersections or roadway segments in the project vicinity) would be small and less than significant due to the generally low ambient CO concentrations (maximum 2.5 ppm for the 1-hour period and 1.6 ppm for the 8-hour period) in the project area.

The net increase in pollutant emissions determines the significance and impact on regional air quality as a result of the proposed project. The results also allow the local government to determine whether the proposed project would deter the region from achieving the goal of reducing pollutants in accordance with the AQMP in order to comply with the NAAQS and CAAQS.

STATE THRESHOLDS OF SIGNIFICANCE FOR AIR QUALITY

Based on *Guidelines for the Implementation of California Environmental Quality Act*, Appendix G, Public Resources Code (PRC) Sections 15000–15387, a project would normally be considered to have a significant effect on air quality if it would violate any State AAQS, contribute substantially to an existing air quality violation, expose sensitive receptors to substantial pollutant concentrations, or conflict with adopted environmental plans and goals of the community in which it is located.

THRESHOLDS OF SIGNIFICANCE FOR POLLUTANTS WITH REGIONAL EFFECTS

In addition to the NAAQS and CAAQS, SCAQMD has established daily emissions thresholds for construction and operation of a proposed project in the Basin. The emissions thresholds were established based on the attainment status of the Basin with regard to air quality standards for specific criteria pollutants. Because the concentration standards were set at a level that protects public health with an adequate margin of safety (EPA), these emissions thresholds are regarded as conservative and would overstate an individual project's contribution to health risks.

Regional Thresholds for Construction Emissions

The following CEQA significance thresholds for construction emissions have been established for the Basin:

- 75 pounds per day (lbs/day) of VOC
- 100 lbs/day of NO_x
- 550 lbs/day of CO
- 150 lbs/day of PM₁₀
- 55 lbs/day of PM_{2.5}
- 150 lbs/day of sulfur oxides (SO_x)

Projects in the Basin with construction-related emissions that exceed any of these emission thresholds are considered to be significant under SCAQMD guidelines.

Regional Thresholds for Operational Emissions

The following CEQA significance thresholds for operational emissions have been established for the Basin:

- 55 lbs/day of VOC
- 55 lbs/day of NO_x
- 550 lbs/day of CO
- 150 lbs/day of PM₁₀
- 55 lbs/day of PM_{2.5}
- 150 lbs/day of SO_x

Projects in the Basin with operational emissions that exceed any of these emission thresholds are considered significant under SCAQMD guidelines.

Local Microscale Concentration Standards. The significance of localized project impacts under CEQA depends on whether ambient CO levels in the vicinity of the project are above or below State and federal CO standards. If ambient levels are below the standards, a project is considered to have a significant impact if project emissions result in an exceedance of one or more of these standards. If ambient levels already exceed a State or federal standard, project emissions are considered significant if they increase 1-hour CO concentrations by 1.0 ppm or more or 8-hour CO concentrations by 0.45 ppm or more. The following are applicable local emission concentration standards for CO:

- California State 1-hour CO standard of 20.0 ppm
- California State 8-hour CO standard of 9.0 ppm

THRESHOLDS FOR LOCALIZED IMPACTS ANALYSIS

SCAQMD published its *Final Localized Significance Threshold Methodology* in June 2003, followed by the *Final – Methodology to Calculate Particulate Matter (PM) 2.5 and PM 2.5 Significance Thresholds* in October 2006, recommending that all air quality analyses include an assessment of both construction and operational impacts on the air quality of nearby sensitive receptors. Localized significance thresholds (LSTs) represent the maximum emissions from a project site that are not expected to result in an exceedance of the NAAQS or CAAQS, as previously shown in Table A. LSTs are based on the ambient concentrations of that pollutant within the project Source Receptor Area (SRA) and the distance to the nearest sensitive receptor. For this project, the appropriate SRA for the LST is the Metropolitan Riverside County area (SRA 23).

In the case of CO and NO₂, if ambient levels are below the standards, a project is considered to have a significant impact if project emissions result in an exceedance of one or more of these standards. If ambient levels already exceed a State or federal standard, then project emissions are considered significant if they increase ambient concentrations by a measurable amount. This would apply to PM₁₀ and PM_{2.5}, both of which are nonattainment pollutants. For these two, the significance criteria are the pollutant concentration thresholds presented in SCAQMD Rules 403 and 1301. The Rule 403 threshold of 10.4 µg/m³ applies to construction emissions. The Rule 1301 threshold of 2.5 µg/m³ applies to operational activities.

To avoid the need for every air quality analysis to perform air dispersion modeling, SCAQMD performed air dispersion modeling for a range of construction sites less than or equal to 5 acres (ac) in size and created reference tables that correlate pollutant emissions rates with project size to screen out projects that are unlikely to generate enough emissions to result in a locally significant concentration of any criteria pollutant. These reference tables can also be used as screening criteria for larger projects to determine whether or not dispersion modeling may be required.

For construction and operational emissions, the localized significance for a project smaller than 5 ac can be determined by performing the screening-level analysis before using the dispersion modeling because the screening-level analysis is more conservative, and if no exceedance of the screening-level thresholds is identified, then the chance of operational LSTs exceeding concentration standards is small. The total gross area for the project site is 8.21 ac and the existing Denny's restaurant and the parking area around the restaurant on will remain undisturbed on-site. The total daily disturbed acreage would be less than 8 ac; therefore, LST screening thresholds for the 5 ac tables were used in this analysis. Operational emissions are also compared against the SCAQMD LST screening thresholds.

Sensitive receptors include residences, schools, hospitals, and similar uses that are sensitive to adverse air quality. For the purposes of a CEQA analysis, SCAQMD considers a sensitive receptor to be a receptor (e.g., a residence, hospital, or convalescent facility) where it is possible that an individual could remain for 24 hours. Commercial and industrial facilities are not included in the definition of a sensitive receptor because employees do not typically remain on site for a full 24 hours but are present for shorter periods of time (e.g., 8 hours). Therefore, applying a 24-hour standard for PM₁₀ is appropriate not only because the averaging period for the State standard is 24 hours, but also because, according to the SCAQMD definition, the sensitive receptor would be present at the location for a full 24 hours. Existing residences are located within 25 meters (m) (or 82 ft) of the project site. Therefore, use of the SCAQMD LST's 25 m threshold for PM_{2.5} and PM₁₀ would be appropriate.

Using the LST thresholds for receptors at 25 m for NO_x, CO, PM₁₀ and PM_{2.5} from a 5 ac site for this project would result in a conservative analysis. Therefore, the following emissions thresholds for SRA 23, Metropolitan Riverside County area, would be applicable during project construction and operations:

- **Construction LST Thresholds**

- 270 lbs/day of NO_x
- 1,577 lbs/day of CO
- 13 lbs/day of PM₁₀
- 8 lbs/day of PM_{2.5}

- **Operation LST Thresholds**

- 270 lbs/day of NO_x
- 1,577 lbs/day of CO
- 4 lbs/day of PM₁₀
- 2 lbs/day of PM_{2.5}

THRESHOLDS FOR POLLUTANTS THAT AFFECT GLOBAL CLIMATE CHANGE

State CEQA Guidelines Section 15064(b) provides that the “determination of whether a project may have a significant effect on the environment calls for careful judgment on the part of the public agency involved, based to the extent possible on scientific and factual data,” and further states that an “ironclad definition of significant effect is not always possible because the significance of an activity may vary with the setting.”

The City has adopted Appendix G of the *State CEQA Guidelines* as the significance threshold for GHG emissions. A project would normally have a significant effect on the environment if it would:

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

On December 30, 2009, the Natural Resources Agency adopted amendments to the *State CEQA Guidelines* that became effective on March 18, 2010. The amendments to the *State CEQA Guidelines* include new requirements to evaluate GHG emissions. Pursuant to the amended *State CEQA Guidelines*, a lead agency should consider the following when assessing the significance of impacts from GHG emissions on the environment:

1. The extent to which the project may increase (or reduce) GHG emissions compared to the existing environmental setting;

2. Whether the project emissions exceed a threshold of significance that the lead agency determines applies to the project; and
3. The extent to which the project complies with regulations or requirements adopted to implement an adopted Statewide, regional, or local plan for the reduction or mitigation of GHG emissions.

The City adopted its Riverside Restorative Growthprint (RRG) Economic Prosperity Action Plan (RRG-EPAP) and Climate Action Plan (RRG-CAP) in January 2016. In 2014, the City was 1 of 12 that collaborated with the Western Riverside Council of Governments (WRCOG) on a Subregional Climate Action Plan (Subregional CAP) that includes 36 measures to guide the City's GHG reduction efforts through 2020. Through the WRCOG Subregional CAP process, the City has committed to a 2020 emissions target of 2,224,908 MT CO₂e, which is 26.4 percent below the City's 2007 baseline and 15 percent below 2010 emissions. This represents a reduction of 779,304 MT CO₂e from the City's 2020 business-as-usual (BAU) forecast. The City is aiming for a 2035 emissions target of 1,542,274 MT CO₂e, which is 49 percent below the 2007 baseline and represents a reduction of 2,120,931 MT CO₂e from the 2035 BAU forecast.

The RRG-CAP expands upon the efforts of the WRCOG Subregional CAP, employing local measures to help the City achieve deep GHG reductions through the year 2035. To further develop local GHG reduction measures for the RRG-CAP, the City conducted a detailed assessment of local strategies and actions related to the measures identified in the Subregional CAP and expanded the discussion and analysis with respect to implementation (particularly post-2020), costs and funding, performance metrics, and local cobenefits. Importantly, the discussions identify local economic and entrepreneurship opportunities that can be integrated with local, regional, and global GHG reductions (e.g., the development of green enterprise zones).

Currently, there is no Statewide GHG emissions threshold used to determine potential GHG emissions impacts of a project. Air districts in the State are still developing and revising threshold methodology and thresholds. To provide guidance to local lead agencies on determining significance for GHG emissions in their CEQA documents, SCAQMD convened a GHG CEQA Significance Threshold Working Group (Working Group). Based on the last Working Group meeting (Meeting No. 15) held in September 2010, SCAQMD is proposing to adopt a tiered approach for evaluating GHG emissions for development projects where SCAQMD is not the lead agency. The applicable tier for this project is Tier 2 (determining whether the project is consistent with a GHG reduction plan). This concept is equivalent to the existing consistency determination requirements in *CEQA Guidelines* Sections 15064(h)(3), 15125(d), or 15152(a). This analysis considers GHG emission significance by determining the project's consistency with the policies and goals in the RRG-EPAP and RRG-CAP.

IMPACTS AND MITIGATION

Air pollutant emissions associated with the project would occur over the short term from construction activities (e.g., fugitive dust from site preparation and grading) and emissions from equipment exhaust. There would be long-term regional emissions associated with project-related vehicular trips and due to energy consumption (e.g., electricity usage by the proposed land uses).

CONSTRUCTION IMPACTS

Equipment Exhausts and Related Construction Activities

Construction activities produce air emissions from various sources (e.g., grading, site preparation, heavy duty construction equipment, utility engines, heavy duty trucks, and motor vehicles transporting the construction crew). Construction equipment within the Project site that would generate criteria air pollutants would include but not limited to backhoes, dozers, excavators, loaders, and haul trucks.

For purposes of this analysis, the proposed project is broken down into six construction phases. Initial construction will be grading and underground utilities. These phases include site preparation, utility trenching, grading, building construction, architectural coating and paving. The site would not require major earthwork, however, 500 cubic yards of fill would be imported to balance the project site. Equipment would be used during site preparation and grading activities as well as when structures are constructed on the project site. In addition, emissions for site preparation, utility trenching, and grading activities would include construction of three retention basins and an infiltration basin, in addition to modifications to the existing Caltrans retention basin, for stormwater runoff control. Exhaust emissions from construction activities envisioned on site would vary daily as construction activity levels change and would result in localized exhaust emissions.

Table F lists the tentative project construction schedule for the proposed project based on an estimated start date, a planned completion in 2017, and the assumption that the architectural coatings would be applied during the latter portion of the building construction phase. Table G lists the potential construction equipment that would be used during project construction under each project alternative.

The most recent version of CalEEMod (Version 2013.2.2) was used to calculate the construction emissions. The construction emissions are shown in Table H. Construction emission calculations assume that dust control measures (watering a minimum of two times daily) would be employed to reduce emissions of fugitive dust during site grading. Further, all construction would be required to comply with SCAQMD Rule 403 regarding the emission of fugitive dust. It is assumed that low-VOC coatings (less than 50 g/L), compliant with SCAQMD Rule 1113 would be used during construction.

In accordance with the City's General Plan Policy AQ 4.2 which requires a reduction in particulate emissions from off-road construction equipment, the City would require the entire construction fleet to use any combination of diesel catalytic converters, diesel oxidation catalysts, diesel particulate filters and/or ARB certified Tier 2, 3 or 4 equipment. Construction equipment assumed to the use of a minimum of Tier 2 engine and Level 2 diesel particulate filter (DPF); as these devices are verified by the ARB. The results shown in Table H are representative of the maximum daily emissions during all construction phases.

Because no exceedances of any criteria pollutants are expected, no significant impacts would occur for project construction. Standard conditions to reduce construction emissions are discussed in page 43 of this report. CalEEMod output is included in Appendix A.

Table F: Construction Schedule

Phase Name	Phase Start Date	Phase End Date	Days/Week	TotalDays
Site Preparation	9/1/2016	9/14/2016	5	10
Utility Trenching	9/15/2016	9/28/2016	5	10
Grading	9/29/2016	10/26/2016	5	20
Building Construction	10/27/2016	3/29/2017	5	110
Architectural Coating	1/30/2017	4/14/2017	5	55
Paving	3/30/2017	4/12/2017	5	10

Source: Compiled by LSA Associates, Inc. (July 2016).

Table G: Diesel Construction Equipment Utilized by Construction Phase

Construction Phase	Off-Road Equipment Type	Off-Road Equipment Unit Amount	Hours Used per Day	Horsepower	Load Factor
Site Preparation	Rubber Tired Dozers	3	8	255	0.40
	Tractors/Loaders/Backhoes	4	8	97	0.37
Utility Trenching	Excavators	1	8	162	0.38
	Rubber Tired Dozers	1	8	255	0.40
	Tractors/Loaders/Backhoes	1	8	97	0.37
Grading	Excavators	1	8	162	0.38
	Graders	1	8	174	0.41
	Rubber Tired Dozers	1	8	255	0.40
	Tractors/Loaders/Backhoes	3	7	97	0.37
Building Construction	Cranes	1	7	226	0.29
	Forklifts	3	8	89	0.20
	Generator Sets	1	8	84	0.74
	Tractors/Loaders/Backhoes	3	7	97	0.37
	Welders	1	8	46	0.45
Architectural Coating	Air Compressors	1	6	78	0.48
Paving	Pavers	1	8	125	0.42
	Paving Equipment	2	8	130	0.36
	Rollers	2	8	80	0.38

Source: Compiled by LSA Associates, Inc. (July 2016).

Table H: Short-Term Regional Construction Emissions

Construction Phase	Total Regional Pollutant Emissions, lbs/day							
	VOC	NO _x	CO	SO ₂	Fugitive PM ₁₀	Exhaust PM ₁₀	Fugitive PM _{2.5}	Exhaust PM _{2.5}
Site Preparation	1.30	35	24	0.04	8.33	0.96	4.52	0.96
Utility Trenching	0.60	15	11	0.02	0.09	0.42	0.02	0.42
Grading	1.20	27	22	0.03	3.13	0.84	1.57	0.84
Building Construction	2.16	30	32	0.06	2.12	1.01	0.57	1.01
Architectural Coatings	37	2.49	3.41	0.01	0.35	0.10	0.09	0.10
Paving	1.75	16	14	0.02	0.15	0.54	0.04	0.54
Peak Daily	39	35	35	0.07	9.29		5.48	
SCAQMD Thresholds	75	100	550	150	150		55	
Significant Emissions?	No	No	No	No	No		No	

Source: Compiled by LSA Associates, Inc. (July 2016).

Note: all values with less than 10 lbs/day are rounded into two decimal places. Project plans specify that 107,360 sf would be paved providing 432 parking spaces.

CO = carbon monoxide

lbs/day = pounds per day

NO_x = nitrogen oxides

PM_{2.5} = particulate matter less than 2.5 microns in size

PM₁₀ = particulate matter less than 10 microns in size

SCAQMD = South Coast Air Quality Management District

SO₂ = sulfur dioxide

VOC = volatile organic compounds

Fugitive Dust

Fugitive dust emissions are generally associated with land clearing and exposure of soils to the air and wind, as well as cut-and-fill grading operations. Dust generated during construction varies substantially on a project-by-project basis, depending on the level of activity, the specific operations, and weather conditions at the time of construction. The proposed project will be required to comply with SCAQMD Rules 402 and 403 to control fugitive dust.

Table H lists total construction emissions (i.e., fugitive dust emissions and construction equipment exhausts). The proposed project would incorporate a number of feasible control measures that can be reasonably implemented to significantly reduce PM₁₀ emissions from construction.

Architectural Coatings

Architectural coatings contain VOCs that are an O₃ precursor. Application of the architectural coatings for the proposed peak construction day is estimated to result in a combined peak of 39 lbs/day of VOC. Therefore, VOC emissions would not exceed the SCAQMD VOC threshold of 75 lbs/day.

Localized Impacts Analysis

SCAQMD has issued guidance on applying CalEEMod modeling results to localized impacts analyses.¹ Sensitive receptors include residences, schools, hospitals, and similar uses that are sensitive to adverse air quality. Table I shows that the construction emission rates would not exceed the PM₁₀ and PM_{2.5} LSTs, and the NO_x and CO for existing sensitive receptors within 82 ft (or 25 m) from the project site for LST analyses.

Table I: Construction Localized Significance Threshold Impacts

Emissions Sources	NO _x	CO	PM ₁₀	PM _{2.5}
On-site Emissions (lbs/day)	34	23	9.09	5.43
LST Thresholds	270	1,577	13.0	8
Significant Emissions?	No	No	No	No

Source: Compiled by LSA Associates, Inc. (July 2016).

Source Receptor Area: Metropolitan Riverside County Area, 5 acres, 82 ft (25m) distance.

CO = carbon monoxide

NO_x = nitrogen oxides

lbs/day = pounds per day

PM_{2.5} = particulate matter less than 2.5 microns in size

LST = localized significance threshold

PM₁₀ = particulate matter less than 10 microns in size

Odors

Heavy-duty equipment in the project area during construction would emit odors, primarily from equipment exhaust. However, the construction activity would cease to occur after individual construction is completed. No other sources of objectionable odors have been identified for the proposed project, and no mitigation measures are required.

SCAQMD Rule 402 regarding nuisances states: “A person shall not discharge from any source whatsoever such quantities of air contaminants or other material which cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public, or which endanger the comfort, repose, health or safety of any such persons or the public, or which cause, or have a natural tendency to cause, injury or damage to business or property.” The proposed uses are not anticipated to emit any objectionable odors. Therefore, objectionable odors posing a health risk to potential on-site and existing off-site uses would not occur as a result of the proposed project.

Naturally Occurring Asbestos

The proposed project is located in the County of Riverside, which is among the counties that are found to have serpentine and ultramafic rock in their soils.² However, no such rock materials have been found in the project area in the past 25 years. Therefore, the potential risk for naturally occurring asbestos during project construction would be minimal.

¹ South Coast Air Quality Management District (SCAQMD). Fact Sheet for Applying CalEEMod to Localized Significance Thresholds. Website: <http://www.aqmd.gov/docs/default-source/ceqa/handbook/localized-significance-thresholds/caleemod-guidance.pdf?sfvrsn=2>, accessed July 2016.

² California Department of Conservation. Asbestos. Website: http://www.conservation.ca.gov/cgs/minerals/hazardous_minerals/asbestos/Pages/index.aspx, accessed July 2016.

Construction Health Risk Impacts

Construction of the proposed project would include the use of diesel-powered equipment that release DPM, a TAC with known carcinogenic and chronic health effects. For construction analyses, the emissions of DPM will be included in the exhaust PM₁₀ emissions. Table H shows that the exhaust PM₁₀ emissions from construction would vary from 1.01 lbs/day to 0.10 lbs/day during the different phases. This DPM emissions rate is very low while it is occurring, and to determine the carcinogenic and chronic health risk levels, this emissions rate would be spread over a 30-year exposure period. The low average DPM emissions rate combined with the fact that the nearest sensitive receptors are approximately 82 ft from the project site indicates that the construction health risk associated with construction emissions would be very low and would be well below thresholds of significance.

Construction Emissions Conclusions

Results of the analysis presented in Tables H and I indicate that daily regional construction emissions would not exceed the daily thresholds of any criteria pollutant emission thresholds established by SCAQMD and locally significant impacts would not occur.

LONG-TERM REGIONAL AIR QUALITY IMPACTS

Long-Term Project Operational Emissions

Long-term air pollutant emission impacts are those associated with stationary sources and mobile sources involving any project-related changes. The proposed project would result in net increases in both stationary- and mobile-source emissions. The stationary-source emissions would come from many sources, including the use of consumer products, landscape equipment, general energy, and solid waste.

The trip generation rates included in the *Traffic Impact Analysis for Madison Plaza* (LSA 2016), are entered into CalEEMod. Long-term operational emissions associated with the existing uses on the project site and the proposed project are shown in Table J.

Area sources include architectural coatings, consumer products, hearths, and landscaping. Energy sources include natural gas consumption for heating and cooking. Table J shows that the project related generation of all criteria pollutants resulting from the proposed project would not exceed the corresponding SCAQMD daily emission thresholds for any criteria pollutants. Therefore, project-related long-term air quality impacts would be less-than-significant.

Table J: Opening Year Regional Operational Emissions

Source	Pollutant Emissions, lbs/day					
	VOC	NO _x	CO	SO _x	PM ₁₀	PM _{2.5}
Existing Scenario						
Area	0.10	<0.01	<0.01	0	0	0
Energy	0.03	0.29	0.25	<0.01	0.02	0.02
Mobile	1.50	1.50	10	0.02	1.80	0.49
Total Existing Emissions	1.60	1.80	11	0.02	1.80	0.51
Proposed Scenario						
Area	8.90	<0.01	0.05	0	<0.01	<0.01
Energy	0.11	1.00	0.84	<0.01	0.08	0.08
Mobile	17	23	127	0.28	21	5.78
Total Project Emissions	26	24	128	0.28	21	5.90
Net New Emissions	24	22	117	0.26	19	5.30
SCAQMD Thresholds	55	55	550	150	150	55
Significant?	No	No	No	No	No	No

Source: Compiled by LSA Associates, Inc. (July 2016).

CO = carbon monoxide

lbs/day = pounds per day

NO_x = nitrogen oxides

PM_{2.5} = particulate matter less than 2.5 microns in size

PM₁₀ = particulate matter less than 10 microns in size

SCAQMD = South Coast Air Quality Management District

SO_x = sulfur oxides

VOC = volatile organic compounds

Localized Impacts Analysis

Table K shows the calculated emissions for the proposed operational activities compared with the appropriate LSTs. By design, the localized impacts analysis only includes on-site sources; however, CalEEMod outputs do not separate on-site and off-site emissions for mobile sources. For a worst-case scenario assessment, the emissions shown in Table K include all on-site project-related stationary sources and 5 percent of the project-related new mobile sources, which is an estimate of the amount of project-related new vehicle traffic that would occur on site. The total of 5 percent is considered conservative because the average trip lengths assumed are 14.7 miles (mi) for home to work, 5.9 mi for home to shopping, and 8.7 mi for other types of trips. It is unlikely that the average on-site distance driven would be even 1,000 ft, which is approximately 2.2 percent of the total miles traveled. Considering the total trip length included in CalEEMod, the 5 percent assumption is conservative.

Table K: Long-Term Operational Localized Significance Thresholds

Emissions Sources	NO _x	CO	PM ₁₀	PM _{2.5}
On-site emissions (lbs/day)	1.14	6.40	1.05	0.29
LST Thresholds	270	1,577	4	2
Significant Emissions?	No	No	No	No

Source: Compiled by LSA Associates, Inc. (July 2016).

Source Receptor Area: Metropolitan Riverside County Area, 5 acres, 25meter distance, on-site traffic 5 percent of total.

CO = carbon monoxide

lbs/day = pounds per day

LST = localized significance thresholds

NO_x = nitrogen oxides

PM_{2.5} = particulate matter less than 2.5 microns in size

PM₁₀ = particulate matter less than 10 microns in size

Table K shows that the operational emission rates would not exceed the NO_x, CO, PM₁₀ and PM_{2.5} LSTs for the existing sensitive receptors located at least 82 ft from the project site. Therefore, the proposed operational activity would not result in a locally significant air quality impact.

Toxic Air Contaminants

For land use projects that do not propose stationary sources of pollutants regulated by SCAQMD, DPM emissions from delivery trucks would be the primary TAC of concern. The ARB *Air Quality and Land Use Handbook* (April 2005) provides recommendations on siting sources of air pollution near sensitive land uses. The list of air pollution sources includes: high traffic freeways and roads; distribution centers; rail yards; ports; refineries; chrome plating facilities; dry cleaners; and large gas dispensing facilities. The proposed Project would develop commercial retail uses. The proposed project would not include any of the types of uses identified as sources of air pollution by ARB and would not place sensitive receptors within the ARB siting distances of the listed air pollutant sources. Further, emissions of particulate matter (both PM₁₀ and PM_{2.5}) during operation on the proposed project would be below LST screening level thresholds. Air quality impacts related to exposure of sensitive receptors to substantial pollutant concentrations would be less than significant.

Greenhouse Gas Emissions

This section evaluates potential significant impacts to GCC that could result from implementation of the proposed project. Because it is not possible to tie specific GHG emissions to actual changes in climate, this evaluation focuses on the project's emission of GHGs. Mitigation measures are identified as appropriate.

GHG Emissions Background. Emissions estimates for the proposed project are discussed below. GHG emissions estimates are provided herein for informational purposes only because there is no established quantified GHG emissions threshold. Bearing in mind that CEQA does not require “perfection” but instead “adequacy, completeness, and a good faith effort at full disclosure,” the analysis below is based on methodologies and information available to the City and the applicant at the time this analysis was prepared. Estimation of GHG emissions in the future does not account for all changes in technology that may reduce such emissions; therefore, the estimates are based on past performance and represent a scenario that is worse than that which is likely to be encountered (after energy-efficient technologies have been implemented). While the information presented below would assist the public and decision-makers in understanding the project's potential contribution to GCC impacts, information available to local jurisdictions is not sufficiently detailed to allow a direct comparison between a particular project and particular climate change impact or between any particular proposed mitigation measure and any reduction in climate change impacts.

Construction and operation of project development would generate GHG emissions, with the majority of energy consumption (and associated generation of GHG emissions) occurring during the project's operation (as opposed to during its construction). Typically, more than 80 percent of the total energy consumption takes place during the use of buildings and less than 20 percent of energy is consumed

during construction (UNEP 2007). As of yet, there is no study that quantitatively assesses all of the GHG emissions associated with each phase of the construction and use of an individual development.

Overall, the following activities associated with the proposed project could either directly or indirectly contribute to the generation of GHG emissions:

- **Construction Activities:** During construction of the project, GHGs would be emitted through the operation of construction equipment and from worker and vendor vehicles, each of which typically uses fossil-based fuels to operate. The combustion of fossil-based fuels creates GHGs (e.g., CO₂, CH₄, and N₂O). Furthermore, CH₄ is emitted during the fueling of heavy equipment.
- **Gas, Electricity, and Water Use:** Natural gas use results in the emission of two GHGs: CH₄ (the major component of natural gas) and CO₂ (from the combustion of natural gas). Electricity use can result in GHG production if the electricity is generated by combusting fossil fuel. California's water conveyance system is energy-intensive. Preliminary estimates indicate that the total energy used to pump and treat this water exceeds 6.5 percent of the total electricity used in the State per year (State of California 2008).
- **Solid Waste Disposal:** Solid waste generated by the project could contribute to GHG emissions in a variety of ways. Landfilling and other methods of disposal use energy for transporting and managing the waste, and they produce additional GHGs to varying degrees. Landfilling, the most common waste management practice, results in the release of CH₄ from the anaerobic decomposition of organic materials. CH₄ is 25 times more potent a GHG than CO₂. However, landfill CH₄ can also be a source of energy. In addition, many materials in landfills do not decompose fully, and the carbon that remains is sequestered in the landfill and not released into the atmosphere.
- **Motor Vehicle Use:** Transportation associated with the proposed project would result in GHG emissions from the combustion of fossil fuels in daily automobile and truck trips.

Preliminary guidance from OPR and recent letters from the Attorney General critical of CEQA documents that have taken different approaches indicate that lead agencies should calculate, or estimate, emissions from vehicular traffic, energy consumption, water conveyance and treatment, waste generation, and construction activities. Table L lists the annual CO₂ emissions for each of the planned construction phases (see the CalEEMod printouts in Appendix A for details).

Table L: Construction Greenhouse Gas Emissions

Construction Phase		Total Regional Pollutant Emissions (MT/yr)			
		CO ₂	CH ₄	N ₂ O	CO ₂ e
2016	Site Preparation	19	<0.01	0	19
	Utility Trenching	9	<0.01	0	9
	Grading	32	<0.01	0	32
	Building Construction	119	0.02	0	119
2017	Building Construction	156	0.02	0	156
	Architectural Coating	15	<0.01	0	15
	Paving	9	<0.01	0	9
Total Construction Emissions		359	0.06	0	359
Amortized over 30 years		12	<0.01	0	12

Source: Compiled by LSA Associates, Inc. (July 2016).

Notes:

CH₄ = methane

MT/yr = metric tons per year

CO₂ = carbon dioxideN₂O = nitrous oxideCO₂e = carbon dioxide equivalent

Long-term operation of the proposed project would generate GHG emissions from area and mobile sources and indirect emissions from stationary sources associated with energy consumption. Mobile-source emissions of GHGs would include project-generated vehicle trips associated with on-site facilities and customers and visitors to the project site. Area-source emissions would be associated with activities (e.g., landscaping and maintenance of proposed land uses, natural gas for heating, and other sources). Increases in stationary-source emissions would also occur at off-site utility providers because of demand for electricity, natural gas, and water by the proposed uses.

The GHG emission estimates presented in Table M shows the emissions associated with the level of development envisioned by the proposed project at opening. Appendix A includes the worksheets for the GHG emissions.

Table M: Operational Greenhouse Gas Emissions

Source	Pollutant Emissions, MT/year					
	Bio-CO ₂	NBio-CO ₂	Total CO ₂	CH ₄	N ₂ O	CO ₂ e
Construction emissions amortized over 30 years	0	12	12	<0.01	0	12
Operational Emissions						
Area Sources	0	0.01	0.01	<0.01	0	0.01
Energy Sources	0	1,695	1,695	0.04	0.01	1,699
Mobile Sources	0	3,456	3,456	0.14	0	3,459
Waste Sources	105	0	105	6.20	0	235
Water Usage	3	67	70	0.24	<0.01	76
Total Project Emissions	108	5,231	5,338	6.61	0.01	5,482
Total Existing Emissions	10	423	433	0.60	0	447
Net New Emissions	98	4,808	4,905	6.01	0.01	5,035

Source: Compiled by LSA Associates, Inc. (July 2016).

Note: All values with less than 10 MT/yr are rounded into two decimal places.

Bio-CO₂ = biologically generated CO₂

MT = metric tons

CH₄ = methaneN₂O = nitrous oxideCO₂ = carbon dioxideNBio-CO₂ = Nonbiologically generated CO₂CO₂e = carbon dioxide equivalent

As shown in Table M, the project would result in a net increase of 5,035 MT CO₂e/yr. In September 2010, SCAQMD adopted an interim GHG threshold of significance for projects that includes determining whether the project is consistent with an adopted GHG reduction plan. The City adopted its RRG-EPAP and RRG-CAP in January 2016. This analysis considers GHG emission significance by determining the proposed project's consistency with the policies and goals in the Riverside RRG-EPAP and RRG-CAP.

Table N lists the applicable strategies and goals from the RRG-CAP and indicates how the proposed project achieves compliance. With implementation of these strategies/measures, the project's contribution to cumulative GHG emissions would be reduced.

Specific development projects proposed under the project would comply with existing State and federal regulations regarding the energy efficiency of buildings, appliances, and lighting, which would reduce the project's electricity demand. The new buildings constructed in accordance with current energy efficiency standards would be more energy-efficient than older buildings. Beginning on January 1, 2016, several new 2016 CalGreen Building Codes will be enforced in California. All commercial retail structures would be constructed under the new 2016 California Building Code to improve public health, safety, and general welfare by enhancing the design and construction of buildings using building concepts having a positive environmental impact and by encouraging sustainable construction practices.

Table N: Project Compliance with Greenhouse Gas Emission Reduction Strategies

Strategy	Project Compliance
Energy Efficiency Measures	
Measure SR-2: 2013 California Building Energy Efficiency Standards (Title 24, Part 6). Maximize energy efficiency building and appliance standards, and pursue additional efficiency efforts including new technologies, and new policy and implementation mechanisms. Pursue comparable investment in energy efficiency from all retail providers of electricity in California (including both investor-owned and publicly owned utilities). Green Building Strategy. Expand the use of green building practices to reduce the carbon footprint of California's new and existing inventory of buildings.	Compliant. The proposed project would comply with the requirements of Measure SR-2: 2016 California Building Energy Efficiency Standards (Title 24, Part 6) including measures to incorporate energy-efficient building design features.
Water Conservation and Efficiency Measures	
Water Use Efficiency. Reduce per capita water use by 20% by 2020. SB X7-7 is part of a California legislative package passed in 2009 that requires urban retail water suppliers to reduce per-capita water use by 10% from a baseline level by 2015, and to reduce per-capita water use by 20% by 2020. Green accountability performance (GAP) Goal 16 directly aligns with SB X7-7. In Southern California, energy costs and GHG emissions associated with the transport, treatment, and delivery of water from outlying regions are high. Therefore, the region has extra incentive to reduce water consumption. While this is considered a state measure, it is up to the local water retailers, jurisdictions, and water users to meet these targets.	Compliant. The project would comply with the requirements of Measure W-1: Water Conservation and Efficiency, including measures to increase water use efficiency. Water-efficient irrigation systems and devices and drought-tolerant landscaping would be installed on the project site.
Solid Waste Reduction Measures	
Construction and Demolition Waste Diversion. Meet mandatory requirement to divert 50% of C&D waste from landfills by 2020 and exceed requirement by diverting 90% of C&D waste from landfills by 2035. Effective July 1, 2014, CALGreen, the state's Green Building Standards Code, requires jurisdictions to divert a minimum of 50% of their nonhazardous C&D waste from landfills. Reductions for the year 2020 assume that 100% of new construction and applicable retrofit projects meet the minimum diversion rates established by the State. For 2035, this measure assumes that C&D waste diversion would increase to 90% for new construction and retrofit projects. This increase is in line with GAP Goal 6.A which aims to develop measures to encourage that a minimum of 90% of recoverable waste from all construction sites be recycled throughout Riverside by 2015, beginning with 40% in 2010 and increasing by 10% each year thereafter.	Compliant. The project would comply with Measure SR-13: Construction and Demolition Waste Diversion. At least 50 percent of the demolished and/or grubbed construction materials (including, but not limited to, soil, vegetation, concrete, lumber, metal, and cardboard) would be reused/recycled.
Transportation and Motor Vehicle Measures	
Measure SR-6: Pavley and Low Carbon Fuel Standard (LCFS). ARB identified this measure as a Discrete Early Action Measure. This measure would reduce the carbon intensity of California's transportation fuels by at least 10 percent by 2020. Measure SR-12: Electric Vehicle Plan and Infrastructure. SCAG has developed a regional plug-in electric vehicle (PEV) readiness plan, and WRCOG has a similar subregional plan for PEV readiness. Together, these plans identify viable locations for charging stations, changes to development codes, and other strategies to encourage the purchase and use of electric vehicles. This measure is anticipated to reduce nearly 82,000 MT CO₂e in participating WRCOG jurisdictions by 2020.	Compliant. The project does not involve the manufacture, sale, or purchase of vehicles. However, vehicles that operate within and access the project site would comply with Measure SR-6: Pavley and Low Carbon Fuel Standard. The project would comply with Measure SR-12: Electric Vehicle Plan and Infrastructure. Electric vehicle charging stations would be provided on the project site.

Table N: Project Compliance with Greenhouse Gas Emission Reduction Strategies

Strategy	Project Compliance
Mixed-Use Development. Provide for a variety of development types and uses. Increasing the level of mixed-use within each City can provide more opportunities for walking, biking, and transit trips by allowing persons to satisfy multiple trip needs within one automobile trip.	Compliant. The project would comply with Measure T-7: Mixed-Use Development because the project includes a health club, restaurant, and supermarket.
Shade Trees. Strategically plant trees at new developments to reduce the urban heat island effect. Planting additional trees in urban environments has a number of benefits, including lowering peak-load energy demands during the hottest months, enhancing the visual aesthetic of a community, and naturally sequestering carbon dioxide. Properly selected and located shade trees can help keep indoor temperatures low, thereby reducing air conditioner demands and utility costs. Trees can also provide shade for parking lots and other paved areas, reducing urban heat island effect communitywide.	Compliant. The project would comply with Measure E-2: Shade Trees. Landscaping and shade trees would be provided throughout the project site.
Bicycle Parking. Provide additional options for bicycle parking. Safe and convenient bicycle parking is a relatively low-cost action that leads to a demonstrated shift from automobile use to bicycle use. The City intends to help business owners understand the potential benefits of bicycle parking and requiring new development projects to include bike racks as a condition of approval can facilitate implementation of this measure.	Compliant. The project would comply with Measure T-2: Bicycle Parking. Bicycle parking would be provided around the health club on the project site.

Source: Compiled by LSA Associates, Inc. (April 2016).

ARB = California Air Resources Board

GHG = greenhouse gas

Project implementation would not conflict with any applicable plan, policy, or regulation of an agency adopted for the purpose of reducing the emissions of GHG. With implementation of applicable sustainable measures, this impact would be less than significant. The proposed project would be required to comply with 2016 CalGreen building standards, as well as implement various sustainability measures with which the project applicant is required to comply. These measures would foster, among other benefits, reductions in energy consumption, waste generation, and associated pollution. In addition, newer construction materials and practices, current energy efficiency requirements, and newer appliances tend to emit lower levels of air pollutant emissions, including GHGs, as compared to materials and equipment used years ago. Accordingly, all project-related operational GHG emissions would be less than significant.

To ensure that the proposed project would not conflict with or impede the implementation of the GHG reduction goals identified in the Riverside RRG-CAP, Assembly Bill (AB) 32, the Governor's Executive Order (EO) S-3-05, and other strategies to help reduce GHGs, the project would implement a variety of measures to reduce GHG emissions as outlined in the Greenhouse Gas Minimization Measures GCC-1.

LONG-TERM MICROSCALE (CO HOT SPOT) ANALYSIS

Vehicular trips associated with the proposed project would contribute to congestion at intersections and along roadway segments in the project vicinity. Localized air quality impacts would occur when emissions from vehicular traffic increase as a result of the proposed project. The primary mobile-source pollutant of local concern is CO, a direct function of vehicle idling time and, thus, of traffic

flow conditions. CO transport is extremely limited; under normal meteorological conditions, CO disperses rapidly with distance from the source. However, under certain extreme meteorological conditions, CO concentrations near a congested roadway or intersection may reach unhealthful levels, affecting local sensitive receptors (e.g., residents, schoolchildren, the elderly, and hospital patients). Typically, high CO concentrations are associated with roadways or intersections operating at unacceptable levels of service or with extremely high traffic volumes. In areas with high ambient background CO concentrations, modeling is recommended to determine a project's effect on local CO levels.

An assessment of project-related impacts on localized ambient air quality requires that future ambient air quality levels be projected. Existing CO concentrations in the immediate project vicinity are not available. Ambient CO levels monitored at the Riverside-Rubidoux Station, the closest station with complete monitored CO data approximately 4.3 miles north of the project site, showed a highest recorded 1-hour concentration of 2.5 ppm (the State standard is 20 ppm) and a highest 8-hour concentration of 1.6 ppm (the State standard is 9 ppm) during the past 3 years (see Table F). The highest CO concentrations would normally occur during peak traffic hours; hence, CO impacts calculated under peak traffic conditions represent a worst-case analysis.

As described in the *Traffic Impact Analysis for Madison Plaza* prepared for the proposed project (LSA 2016), all study area intersections currently operate at satisfactory level of service (LOS). With addition of the project in the existing setting, all study area intersections would continue to operate at satisfactory LOS.

Therefore, the proposed project can be implemented in an existing setting with no significant peak-hour intersection impacts. Given the extremely low level of CO concentrations in the project area and the lack of traffic impacts at any intersections, project-related vehicles are not expected to contribute significantly to CO concentrations exceeding the State or federal CO standards. Because no CO hot spot would occur, there would be no project-related impacts on CO concentrations.

AIR QUALITY MANAGEMENT PLAN CONSISTENCY

A consistency determination plays an essential role in local agency project review by linking local planning and unique individual projects to the air quality plans. A consistency determination fulfills the CEQA goal of fully informing local agency decision-makers of the environmental costs of the project under consideration at a stage early enough to ensure that air quality concerns are addressed. Only new or amended General Plan elements, Specific Plans, and significantly unique projects are required to undergo a consistency review because the air quality plan strategy is based on projections from local General Plans.

The AQMP is based on regional growth projections developed by the SCAG. The proposed project is a residential development and is not defined as a regionally significant project under CEQA; therefore, it does not meet the SCAG's Intergovernmental Review criteria.

The proposed uses are consistent with the zoning designation for the project site and its surrounding area, which is consistent with the Specific Plan and General Plan of the City. The City's General Plan is consistent with the SCAG Regional Comprehensive Plan Guidelines and the SCAQMD AQMP. Pursuant to the methodology provided in Chapter 12 of the 1993 SCAQMD *CEQA Air Quality*

Handbook, consistency with the Basin 2012 AQMP is affirmed when a project (1) does not increase the frequency or severity of an air quality standards violation or cause a new violation, and (2) is consistent with the growth assumptions in the AQMP. Consistency review is presented below:

1. The project would result in short-term construction and long-term pollutant emissions that are less than the CEQA significance emissions thresholds established by SCAQMD, as demonstrated above; therefore, the project could not result in an increase in the frequency or severity of any air quality standards violation and will not cause a new air quality standard violation.
2. The *CEQA Air Quality Handbook* indicates that consistency with AQMP growth assumptions must be analyzed for new or amended General Plan elements, Specific Plans, and significant projects. Significant projects include airports, electrical generating facilities, petroleum and gas refineries, designation of oil drilling districts, water ports, solid waste disposal sites, and offshore drilling facilities; therefore, the proposed project is not defined as significant.

Based on the consistency analysis presented above, the proposed project is consistent with the City's General Plan and the regional AQMP.

STANDARD CONDITIONS

Construction Operations

Construction of the project would be required to comply with regional rules that assist in reducing short-term air pollutant emissions. SCAQMD Rule 403 requires that fugitive dust be controlled with best-available control measures so that the presence of such dust does not remain visible in the atmosphere beyond the property line of the emission source. In addition, SCAQMD Rule 403 requires implementation of dust suppression techniques to prevent fugitive dust from creating a nuisance off site. Applicable dust suppression techniques from Rule 403 are summarized below. Implementation of these dust suppression techniques can reduce the fugitive dust generation (and thus the PM₁₀ component). Compliance with these rules would reduce impacts on nearby sensitive receptors (see SCAQMD Rule 403 [2005]). As shown in Table H, implementation of Rule 403 measures results in dust emissions below SCAQMD thresholds.

The applicable Rule 403 measures are as follows:

- Apply nontoxic chemical soil stabilizers according to manufacturers' specifications to all inactive construction areas (previously graded areas inactive for 10 days or more).
- Water active sites at least twice daily. (Locations where grading is to occur will be thoroughly watered prior to earthmoving.)
- Cover all trucks hauling dirt, sand, soil, or other loose materials, or maintain at least 2 ft (0.6 m) of freeboard (vertical space between the top of the load and the top of the trailer) in accordance with the requirements of California Vehicle Code (CVC) Section 23114.
- Pave construction access roads at least 100 ft (30 m) onto the site from the main road.
- Reduce traffic speeds on all unpaved roads to 15 mph or less.

Additionally, the following construction emissions control measures from the SCAQMD CEQA Handbook are recommended to further minimize fugitive dust emissions:

- a. Dust suppression measures:
 1. Revegetate disturbed areas as quickly as possible.
 2. All excavating and grading operations shall be suspended when wind speeds (as instantaneous gusts) exceed 25 mph.
 3. All streets shall be swept once per day if visible soil materials are carried to adjacent streets (recommend water sweepers with reclaimed water).
 4. Install wheel washers where vehicles enter and exit unpaved roads onto paved roads, or wash trucks and any equipment leaving the site each trip.
 5. All on-site roads shall be paved as soon as feasible, watered periodically, or chemically stabilized.
 6. The area disturbed by clearing, grading, earthmoving, or excavation operations shall be minimized at all times.
- b. The construction contractor shall select the construction equipment used on site based on low-emission factors and high-energy efficiency. The construction contractor shall ensure that construction-grading plans include a statement that all construction equipment will be tuned and maintained in accordance with the manufacturers' specifications.
- c. The construction contractor shall utilize electric or diesel-powered equipment in lieu of gasoline-powered engines where feasible.
- d. The construction contractor shall ensure that construction-grading plans include a statement that work crews will shut off equipment when not in use. During smog season (May through October), the overall length of the construction period will be extended, thereby decreasing the size of the area prepared each day, to minimize vehicles and equipment operating at the same time.
- e. The construction contractor shall time the construction activities so as to not interfere with peak-hour traffic and minimize obstruction of through traffic lanes adjacent to the site; if necessary, a flagperson shall be retained to maintain safety adjacent to existing roadways.
- f. The construction contractor shall support and encourage ridesharing and transit incentives for the construction crew.

The project would also be required to comply with the following measures which would further reduce construction emissions:

Equipment Idling. Title 13, California Code of Regulations, Section 2449(d)(d) requires an operator of applicable off-road vehicles (self-propelled diesel-fueled vehicles 25 horsepower and up that were not designed to be driven on-road) to limit idling to no more than five minutes. Therefore, all construction vehicles shall be prohibited from idling in excess of 5 minutes, both on and off site.

Construction Materials. The applicable California Department of Resources Recycling and Recovery (CalRecycle) Sustainable (Green) Building Program Measures are:

- California's Green Building Standards Code (CALGreen) requires the diversion of at least 50 percent of the construction waste generated (CALGreen Sections 4.408 and 5.408).¹
- Use "green building materials" such as those materials that are rapidly renewable or resource-efficient, and recycled and manufactured in an environmentally friendly way, for at least 10 percent of the project, as specified on the CalRecycle website.²

Operations

The proposed project is required to comply with Title 24 of the California Code of Regulations established by the CEC regarding energy conservation and green building standards. The project applicant shall incorporate the following in building plans:

- Low-emission water heaters shall be used. Solar water heaters are encouraged.
- Exterior windows shall utilize window treatments for efficient energy conservation.

These measures will result in reduced emissions during the construction and operation phases of the proposed project.

MINIMIZATION MEASURE

Global Climate Change Impacts

Minimization Measure GCC-1: To ensure that the proposed project complies with and would not conflict with or impede the implementation of reduction goals identified in the Riverside RRG-CAP, Assembly Bill (AB) 32, the Governor's Executive Order (EO) S-3-05, and other strategies to help reduce greenhouse gases (GHGs) to the level proposed by the Governor, the project will implement a variety of measures that will reduce its GHG emissions. To the extent feasible, and to the satisfaction of the City of Riverside (City), the following CalGreen and other sustainable measures will be incorporated into the design and construction of the project:

Construction and Building Materials.

- Use locally produced and/or manufactured building materials for at least 10 percent of the construction materials used for the project.
- Recycle/reuse at least 50 percent of the demolished and/or grubbed construction materials (including, but not limited to,

¹ California Green Building Standards Code - C&D Waste Diversion Ordinance
<http://www.calrecycle.ca.gov/LGCentral/Library/CandDModel/Instruction/FAQ.htm#CALGreen>, accessed July 2016

² California Department of Resources Recycling and Recovery (CalRecycle). Website:
<http://www.calrecycle.ca.gov>, accessed February 2016.

soil, vegetation, concrete, lumber, metal, and cardboard) if feasible.

- Use “green building materials,” such as those materials that are resource-efficient and are recycled and manufactured in an environmentally friendly way, for at least 10 percent of the project.

Energy Efficiency Measures.

- Design all project buildings to meet or exceed the California Building Code’s (CBC) Title 24 energy standard, including, but not limited to, any combination of the following:
 - Increase insulation such that heat transfer and thermal bridging is minimized;
 - Limit air leakage through the structure or within the heating and cooling distribution system to minimize energy consumption; and
 - Incorporate ENERGY STAR® or better rated windows, space heating and cooling equipment, light fixtures, appliances, or other applicable electrical equipment.
- Install efficient lighting and lighting control systems. Use daylight as an integral part of the lighting systems in buildings.
- Install “cool” roofs and cool pavements.
- Install energy-efficient heating and cooling systems, appliances and equipment, and control systems.
- Install solar lights or light-emitting diodes (LEDs) for outdoor lighting or outdoor lighting that meets the City Code.

Water Conservation and Efficiency Measures.

- Devise a comprehensive water conservation strategy appropriate for the project and its location. The strategy may include the following, plus other innovative measures that may be appropriate:
 - Create water-efficient landscapes within the development.
 - Install water-efficient irrigation systems and devices, such as soil moisture-based irrigation controls.
 - Use reclaimed water, if available, for landscape irrigation within the project. Install the infrastructure to deliver and use reclaimed water, if available.
 - Design buildings to be water-efficient. Install water-efficient fixtures and appliances, including low-flow faucets and waterless urinals.

- o Restrict watering methods (e.g., prohibit systems that apply water to nonvegetated surfaces) and control runoff.

Solid Waste Measures.

- To facilitate and encourage recycling to reduce landfill-associated emissions, among others, the project will provide trash enclosures that include additional enclosed area(s) for collection of recyclable materials. The recycling collection area(s) will be located within, near, or adjacent to each trash and rubbish disposal area. The recycling collection area will be a minimum of 50 percent of the area provided for the trash/rubbish enclosure(s) or as approved by the Waste Management Department of the City of Riverside.
- Provide employee education on waste reduction and available recycling services.

Transportation Measures.

- To facilitate and encourage nonmotorized transportation, bicycle racks shall be provided in convenient locations to facilitate bicycle access to the project area. The bicycle racks shall be shown on project landscaping and improvement plans submitted for Planning Department approval and shall be installed in accordance with those plans.
- Provide pedestrian walkway and connectivity requirements.

In addition, the proposed project would be subject to all applicable regulatory requirements, which would also reduce the GHG emissions of the project. With implementation of Minimization Measure GCC-1 and application of regulatory requirements, the proposed project would not conflict with or impede implementation of the reduction goals identified in AB 32, EO S-3-05, and other strategies to help reduce GHGs to the level proposed by the Governor. Therefore, the project's contribution to cumulative GHG emissions would be less than significant.

CUMULATIVE IMPACTS

The cumulative impacts analysis is based on projections in the regional AQMP. As described in the consistency analysis presented above, the proposed project is consistent with the growth assumptions in the City's General Plan, the recently adopted 2016 RTP/SCS, and the regional AQMP. Further, the proposed project does not increase the frequency or severity of an air quality standards violation or cause a new violation. As described in the *Traffic Impact Analysis for Madison Plaza* (LSA 2016), the cumulative analysis includes projects in Riverside and adjacent cities (i.e., Moreno Valley, Corona, and Norco). This study area is described as the appropriate tool to evaluate discrete project-related circulation impacts for the City, which encompass the air quality impacts from the proposed project. As shown in the *Traffic Impact Analysis for Madison Plaza* (LSA 2016), the proposed project plus pending and approved baselines (the cumulative scenarios) would not result in any significant LOS change or intersection delay, thus the combined effects of the related projects would be less than

significant. Because there is no cumulative significant impact and the proposed project is consistent with the growth assumptions in the 2016 RTP/SCS and the draft 2016 AQMP, the combined effects are not cumulatively significant. Therefore, the proposed project would not result in a significant long-term cumulative impact.

IMPACTS TO THE PROPOSED PROJECT FROM GLOBAL CLIMATE CHANGE

Local temperatures could increase in time as a result of GCC with or without development as envisioned by the proposed project. This increase in temperature could lead to other climate effects, including, but not limited to, increased flooding due to increased precipitation and runoff. At present, the extent of GCC impacts is uncertain, and more extensive monitoring of runoff is necessary for greater understanding of changes in hydrologic patterns. Studies indicate that increased temperatures could result in a greater portion of peak stream flows occurring earlier in the spring, with decreases in late spring and early summer. These changes could have implications for water supply, flood management, and ecosystem health. In addition, there is a potential for sea level rising due to global warming. However, as the project site is located more than 5 mi from the ocean and at an elevation that would not subject the site to local flooding, the proposed project is not expected to be significantly affected by GCC.

REFERENCES

- California Air Resources Board (ARB). May 2014. First Update to the Climate Change Scoping Plan: Building on the Framework Pursuant to AB 32, the California Global Warming Solutions Act of 2006. Website: http://www.arb.ca.gov/cc/scopingplan/2013_update/first_update_climate_change_scoping_plan.pdf, accessed July 2016.
- . September 2014. Quality Assurance Air Monitoring Site Information. Rubidoux-Mission Boulevard Station. Website: https://www.arb.ca.gov/qaweb/site.php?s_arb_code=33144, accessed July 2016.
- . October 2016. Ambient Air Quality Standards. Website: <http://www.arb.ca.gov/research/aaqs/aaqs2.pdf>, accessed July 2016.
- . 2015b. Greenhouse Gas Inventory Data – 2015 Edition. Website: <http://www.arb.ca.gov/cc/inventory/data/data.htm>, accessed July 2016.
- . Air Quality Standards and Area Designations. Website: <http://www.arb.ca.gov/design/design.htm>, accessed July 2016.
- . ARB Fact Sheet: Air Pollution and Health. Website: <http://www.arb.ca.gov/research/health/fs/fs1/fs1.htm>, accessed July 2016.
- . iADAM: Air Quality Data Statistics. Website: <http://www.arb.ca.gov/adam>, accessed July 2016.
- California Department of Conservation. Asbestos. Website: http://www.conservation.ca.gov/cgs/minerals/hazardous_minerals/asbestos/Pages/index.aspx, accessed July 2016.
- California Department of Resources Recycling and Recovery. Website: <http://www.calrecycle.ca.gov>, accessed July 2016.
- California Energy Commission (CEC). November 2005. California's Water-Energy Relationship. Website: <http://www.energy.ca.gov/2005publications/CEC-700-2005-011/CEC-700-2005-011-SF.PDF>, accessed July 2016.
- California Integrated Waste Management Board (CIWMB). Residential Developments: Estimated Solid Waste Generation Rates. Website: <http://www.calrecycle.ca.gov/wastechar/wastegenrates/Residential.htm>, accessed July 2016.
- Intergovernmental Panel on Climate Change (IPCC). 2013. Climate Change 2013: The Physical Science Basis. Contribution of Working Group I to the Fifth Assessment Report of the IPCC. Website: <http://www.ipcc.ch/report/ar5/wg1>, accessed July 2016.

LSA Associates, Inc. (LSA). 2016. *Traffic Impact Analysis for Madison Plaza*. July.

National Assessment Synthesis Team (NAST). 2001. *Climate Change Impacts on the United States: The Potential Consequences of Climate Variability and Change*, Report for the US Global Change Research Program. Website: <http://data.globalchange.gov/assets/e9/97/436129058f2107f4925aee13ed8/nca-2000-foundation-report.pdf>, accessed July 2016.

South Coast Air Quality Management District (SCAQMD). April 1993. *CEQA Air Quality Handbook*.

———. June 2003. Final Localized Significance Threshold Methodology.

———. June 2005 (amended). Rule 403, Fugitive Dust. Website: <http://www.aqmd.gov/docs/default-source/rule-book/rule-iv/rule-403.pdf?sfvrsn=4>, accessed July 2016.

———. October 2006. Final – Methodology to Calculate Particulate Matter (PM) 2.5 and PM 2.5 Significance Thresholds.

———. 2012. Air Quality Management Plan.

———. Fact Sheet for Applying CalEEMod to Localized Significance Thresholds. Website: <http://www.aqmd.gov/docs/default-source/ceqa/handbook/localized-significance-thresholds/caleemod-guidance.pdf?sfvrsn=2>, accessed July 2016.

State of California. April 2008. Water-Energy Sector Summary, AB 32 Scoping Plan, GHG Emission Reduction Strategies. Website: http://www.climatechange.ca.gov/climate_action_team/reports/CAT_subgroup_reports/Water_Sector_Summary_and_Analyses.pdf, accessed July 2016.

———. October 2013. “Preparing California for Extreme Heat – Guidance and Recommendations.” Website: http://www.climatechange.ca.gov/climate_action_team/reports/Preparing_California_for_Extreme_Heat.pdf, accessed July 2016.

United Nations Environment Programme (UNEP). 2007. Buildings and Climate Change: Status, Challenges and Opportunities. Paris, France. Website: <http://www.unep.fr/shared/publications/pdf/DTIx0916xPA-BuildingsClimate.pdf>, accessed July 2016.

United Nations Framework Convention on Climate Change (UNFCCC). 2015. Combined Total of Annex I and Non-Annex I Country CO₂e emissions, Greenhouse Gas Inventory Data. Website: http://unfccc.int/ghg_data/ghg_data_unfccc/items/4146.php, accessed July 2016.

United States Environmental Protection Agency (EPA). April 2010. *Methane and Nitrous Oxide Emissions from Natural Sources*. Website: <http://nepis.epa.gov/Exe/ZyNET.exe/P100717T.TXT?ZyActionD=ZyDocument&Client=EPA&Index=2006+Thru+2010&Docs=&Query=&Time=&EndTime=&SearchMethod=1&TocRestrict=n&Toc=&TocEntry=&QField=&QFieldYear=&QFieldMonth=&QFieldDay=&IntQFieldOp=0&ExtQFieldOp=0>

&XmlQuery=&File=D%3A%5Czyfiles%5CIndex%20Data%5C06thru10%5CTxt%5C00000017%5CP100717T.txt&User=ANONYMOUS&Password=anonymous&SortMethod=h%7C-&MaximumDocuments=1&FuzzyDegree=0&ImageQuality=r75g8/r75g8/x150y150g16/i425&Display=p%7Cf&DefSeekPage=x&SearchBack=ZyActionL&Back=ZyActionS&BackDesc=Results%20page&MaximumPages=1&ZyEntry=1&SeekPage=x&ZyPURL, accessed July 2016.

———. February 2016. Draft U.S. Greenhouse Gas Inventory Report: 1990–2014. EPA 430-R-16-002. Website: <https://www3.epa.gov/climatechange/Downloads/ghgemissions/US-GHG-Inventory-2016-Main-Text.pdf>, accessed July 2016.

———. 2012–2014 Air Quality Data. Website: <http://www.epa.gov/airquality/airdata>, accessed July 2016.

Western Regional Climate Center. Recent Climate in the West. Website: <http://www.wrcc.dri.edu>, accessed July 2016.

APPENDIX A

CALEEMOD MODEL PRINTOUTS

Peninsula Retail Partners Commercial/Restaurant-Existing
Riverside-South Coast County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Parking Lot	4.00	Acre	4.00	0.00	0
High Turnover (Sit Down Restaurant)	3.90	1000sqft	0.09	3,900.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.4	Precipitation Freq (Days)	28
Climate Zone	10			Operational Year	2014
Utility Company	Riverside Public Utilities				
CO2 Intensity (lb/MW hr)	1325.65	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Estimated existing parking lot size from Google Aerial.

Construction Phase - Existing condition - no construction

Off-road Equipment -

Off-road Equipment - Existing condition - no construction

Trips and VMT - Existing condition - no construction

On-road Fugitive Dust -

Grading - Grading information provided by contractor

Vehicle Trips - Existing Dennys Restaurant

Vehicle Emission Factors - Adjusted fleet mix for a restaurant.

Vehicle Emission Factors - Adjusted fleet mix for a restaurant.

Vehicle Emission Factors - Adjusted fleet mix for a restaurant.

Construction Off-road Equipment Mitigation - Existing condition - no construction

Energy Mitigation -

Water Mitigation -

Energy Use - Existing Denny's Restaurant building is more than 20 years old.

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	230.00	0.00
tblEnergyUse	LightingElect	0.88	0.88
tblLandUse	LandUseSquareFeet	174,240.00	0.00
tblVehicleEF	HHD	0.02	0.02
tblVehicleEF	HHD	0.01	8.8790e-003
tblVehicleEF	HHD	2.78	2.88
tblVehicleEF	HHD	1.70	1.42
tblVehicleEF	HHD	60.65	51.71
tblVehicleEF	HHD	576.70	557.78
tblVehicleEF	HHD	1,629.98	1,560.95
tblVehicleEF	HHD	66.79	55.76
tblVehicleEF	HHD	0.04	0.02
tblVehicleEF	HHD	5.80	4.57
tblVehicleEF	HHD	7.75	5.37
tblVehicleEF	HHD	3.83	3.44
tblVehicleEF	HHD	0.03	0.01
tblVehicleEF	HHD	0.06	0.06
tblVehicleEF	HHD	0.03	0.04
tblVehicleEF	HHD	0.17	0.10
tblVehicleEF	HHD	5.0390e-003	2.0760e-003
tblVehicleEF	HHD	0.03	9.6140e-003
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	8.7490e-003	8.7560e-003
tblVehicleEF	HHD	0.15	0.09
tblVehicleEF	HHD	3.9960e-003	1.7220e-003

tblVehicleEF	HHD	3.7260e-003	2.1340e-003
tblVehicleEF	HHD	0.19	0.09
tblVehicleEF	HHD	0.52	0.51
tblVehicleEF	HHD	1.9840e-003	1.2460e-003
tblVehicleEF	HHD	0.26	0.19
tblVehicleEF	HHD	0.65	0.35
tblVehicleEF	HHD	2.49	1.66
tblVehicleEF	HHD	5.5860e-003	5.6020e-003
tblVehicleEF	HHD	0.02	0.02
tblVehicleEF	HHD	1.7070e-003	1.4500e-003
tblVehicleEF	HHD	3.7260e-003	2.1340e-003
tblVehicleEF	HHD	0.19	0.09
tblVehicleEF	HHD	0.59	0.58
tblVehicleEF	HHD	1.9840e-003	1.2460e-003
tblVehicleEF	HHD	0.30	0.22
tblVehicleEF	HHD	0.65	0.35
tblVehicleEF	HHD	2.67	1.77
tblVehicleEF	HHD	0.02	0.02
tblVehicleEF	HHD	0.01	8.8790e-003
tblVehicleEF	HHD	2.02	2.09
tblVehicleEF	HHD	1.70	1.42
tblVehicleEF	HHD	51.86	42.39
tblVehicleEF	HHD	610.97	590.92
tblVehicleEF	HHD	1,629.98	1,560.95
tblVehicleEF	HHD	66.79	55.76
tblVehicleEF	HHD	0.04	0.02
tblVehicleEF	HHD	5.98	4.71
tblVehicleEF	HHD	7.32	5.07
tblVehicleEF	HHD	3.67	3.30
tblVehicleEF	HHD	0.02	8.8100e-003
tblVehicleEF	HHD	0.06	0.06
tblVehicleEF	HHD	0.03	0.04

tblVehicleEF	HHD	0.17	0.10
tblVehicleEF	HHD	5.0390e-003	2.0760e-003
tblVehicleEF	HHD	0.02	8.1050e-003
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	8.7490e-003	8.7560e-003
tblVehicleEF	HHD	0.15	0.09
tblVehicleEF	HHD	3.9960e-003	1.7220e-003
tblVehicleEF	HHD	7.0560e-003	3.9730e-003
tblVehicleEF	HHD	0.21	0.11
tblVehicleEF	HHD	0.49	0.48
tblVehicleEF	HHD	4.3530e-003	2.6270e-003
tblVehicleEF	HHD	0.26	0.19
tblVehicleEF	HHD	0.65	0.36
tblVehicleEF	HHD	2.15	1.44
tblVehicleEF	HHD	5.9180e-003	5.9340e-003
tblVehicleEF	HHD	0.02	0.02
tblVehicleEF	HHD	1.5590e-003	1.2970e-003
tblVehicleEF	HHD	7.0560e-003	3.9730e-003
tblVehicleEF	HHD	0.21	0.11
tblVehicleEF	HHD	0.56	0.55
tblVehicleEF	HHD	4.3530e-003	2.6270e-003
tblVehicleEF	HHD	0.30	0.22
tblVehicleEF	HHD	0.65	0.36
tblVehicleEF	HHD	2.31	1.54
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	0.01	8.8790e-003
tblVehicleEF	HHD	3.83	3.97
tblVehicleEF	HHD	1.70	1.42
tblVehicleEF	HHD	57.31	48.65
tblVehicleEF	HHD	529.39	512.02
tblVehicleEF	HHD	1,629.98	1,560.95
tblVehicleEF	HHD	66.79	55.76

tblVehicleEF	HHD	0.04	0.02
tblVehicleEF	HHD	5.54	4.36
tblVehicleEF	HHD	7.64	5.29
tblVehicleEF	HHD	3.79	3.40
tblVehicleEF	HHD	0.03	0.01
tblVehicleEF	HHD	0.06	0.06
tblVehicleEF	HHD	0.03	0.04
tblVehicleEF	HHD	0.17	0.10
tblVehicleEF	HHD	5.0390e-003	2.0760e-003
tblVehicleEF	HHD	0.03	0.01
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	8.7490e-003	8.7560e-003
tblVehicleEF	HHD	0.15	0.09
tblVehicleEF	HHD	3.9960e-003	1.7220e-003
tblVehicleEF	HHD	4.3990e-003	2.3610e-003
tblVehicleEF	HHD	0.25	0.12
tblVehicleEF	HHD	0.56	0.55
tblVehicleEF	HHD	2.2590e-003	1.3700e-003
tblVehicleEF	HHD	0.26	0.19
tblVehicleEF	HHD	0.69	0.38
tblVehicleEF	HHD	2.36	1.59
tblVehicleEF	HHD	5.1280e-003	5.1420e-003
tblVehicleEF	HHD	0.02	0.02
tblVehicleEF	HHD	1.6510e-003	1.4000e-003
tblVehicleEF	HHD	4.3990e-003	2.3610e-003
tblVehicleEF	HHD	0.25	0.12
tblVehicleEF	HHD	0.64	0.63
tblVehicleEF	HHD	2.2590e-003	1.3700e-003
tblVehicleEF	HHD	0.30	0.22
tblVehicleEF	HHD	0.69	0.38
tblVehicleEF	HHD	2.53	1.70
tblVehicleEF	LDA	0.01	9.1850e-003

tblVehicleEF	LDA	0.01	7.2120e-003
tblVehicleEF	LDA	1.18	0.83
tblVehicleEF	LDA	2.47	1.71
tblVehicleEF	LDA	293.38	256.87
tblVehicleEF	LDA	66.78	59.48
tblVehicleEF	LDA	0.47	0.78
tblVehicleEF	LDA	0.11	0.08
tblVehicleEF	LDA	0.17	0.11
tblVehicleEF	LDA	1.5970e-003	1.4380e-003
tblVehicleEF	LDA	2.7190e-003	2.8280e-003
tblVehicleEF	LDA	1.4560e-003	1.3260e-003
tblVehicleEF	LDA	2.4750e-003	2.6090e-003
tblVehicleEF	LDA	0.08	0.06
tblVehicleEF	LDA	0.15	0.12
tblVehicleEF	LDA	0.05	0.04
tblVehicleEF	LDA	0.03	0.02
tblVehicleEF	LDA	0.35	0.26
tblVehicleEF	LDA	0.20	0.13
tblVehicleEF	LDA	3.3310e-003	3.3130e-003
tblVehicleEF	LDA	7.7800e-004	7.6500e-004
tblVehicleEF	LDA	0.08	0.06
tblVehicleEF	LDA	0.15	0.12
tblVehicleEF	LDA	0.05	0.04
tblVehicleEF	LDA	0.04	0.03
tblVehicleEF	LDA	0.35	0.26
tblVehicleEF	LDA	0.22	0.14
tblVehicleEF	LDA	0.01	9.1850e-003
tblVehicleEF	LDA	0.01	7.2120e-003
tblVehicleEF	LDA	1.38	0.99
tblVehicleEF	LDA	1.92	1.32
tblVehicleEF	LDA	317.69	278.16
tblVehicleEF	LDA	66.78	59.48

tblVehicleEF	LDA	0.47	0.78
tblVehicleEF	LDA	0.10	0.07
tblVehicleEF	LDA	0.16	0.11
tblVehicleEF	LDA	1.5970e-003	1.4380e-003
tblVehicleEF	LDA	2.7190e-003	2.8280e-003
tblVehicleEF	LDA	1.4560e-003	1.3260e-003
tblVehicleEF	LDA	2.4750e-003	2.6090e-003
tblVehicleEF	LDA	0.15	0.10
tblVehicleEF	LDA	0.18	0.13
tblVehicleEF	LDA	0.11	0.08
tblVehicleEF	LDA	0.03	0.02
tblVehicleEF	LDA	0.34	0.25
tblVehicleEF	LDA	0.17	0.11
tblVehicleEF	LDA	3.6100e-003	3.5920e-003
tblVehicleEF	LDA	7.6800e-004	7.5800e-004
tblVehicleEF	LDA	0.15	0.10
tblVehicleEF	LDA	0.18	0.13
tblVehicleEF	LDA	0.11	0.08
tblVehicleEF	LDA	0.05	0.03
tblVehicleEF	LDA	0.34	0.25
tblVehicleEF	LDA	0.18	0.11
tblVehicleEF	LDA	0.01	9.1850e-003
tblVehicleEF	LDA	0.01	7.2120e-003
tblVehicleEF	LDA	1.13	0.80
tblVehicleEF	LDA	2.43	1.68
tblVehicleEF	LDA	289.27	253.27
tblVehicleEF	LDA	66.78	59.48
tblVehicleEF	LDA	0.47	0.78
tblVehicleEF	LDA	0.10	0.07
tblVehicleEF	LDA	0.17	0.11
tblVehicleEF	LDA	1.5970e-003	1.4380e-003
tblVehicleEF	LDA	2.7190e-003	2.8280e-003

tblVehicleEF	LDA	1.4560e-003	1.3260e-003
tblVehicleEF	LDA	2.4750e-003	2.6090e-003
tblVehicleEF	LDA	0.08	0.06
tblVehicleEF	LDA	0.18	0.13
tblVehicleEF	LDA	0.05	0.04
tblVehicleEF	LDA	0.03	0.02
tblVehicleEF	LDA	0.39	0.29
tblVehicleEF	LDA	0.20	0.12
tblVehicleEF	LDA	3.2830e-003	3.2660e-003
tblVehicleEF	LDA	7.7700e-004	7.6500e-004
tblVehicleEF	LDA	0.08	0.06
tblVehicleEF	LDA	0.18	0.13
tblVehicleEF	LDA	0.05	0.04
tblVehicleEF	LDA	0.04	0.03
tblVehicleEF	LDA	0.39	0.29
tblVehicleEF	LDA	0.21	0.13
tblVehicleEF	LDT1	0.03	0.02
tblVehicleEF	LDT1	0.03	0.02
tblVehicleEF	LDT1	2.86	2.05
tblVehicleEF	LDT1	5.83	4.41
tblVehicleEF	LDT1	341.86	305.42
tblVehicleEF	LDT1	77.04	69.78
tblVehicleEF	LDT1	0.07	0.08
tblVehicleEF	LDT1	0.29	0.21
tblVehicleEF	LDT1	0.34	0.26
tblVehicleEF	LDT1	3.8410e-003	3.0640e-003
tblVehicleEF	LDT1	5.4650e-003	4.8140e-003
tblVehicleEF	LDT1	3.5130e-003	2.8290e-003
tblVehicleEF	LDT1	5.0010e-003	4.4470e-003
tblVehicleEF	LDT1	0.21	0.18
tblVehicleEF	LDT1	0.34	0.29
tblVehicleEF	LDT1	0.13	0.12

tblVehicleEF	LDT1	0.08	0.05
tblVehicleEF	LDT1	1.21	1.01
tblVehicleEF	LDT1	0.47	0.34
tblVehicleEF	LDT1	3.8580e-003	3.8400e-003
tblVehicleEF	LDT1	9.4400e-004	9.2100e-004
tblVehicleEF	LDT1	0.21	0.18
tblVehicleEF	LDT1	0.34	0.29
tblVehicleEF	LDT1	0.13	0.12
tblVehicleEF	LDT1	0.11	0.07
tblVehicleEF	LDT1	1.21	1.01
tblVehicleEF	LDT1	0.50	0.36
tblVehicleEF	LDT1	0.03	0.02
tblVehicleEF	LDT1	0.03	0.02
tblVehicleEF	LDT1	3.28	2.38
tblVehicleEF	LDT1	4.53	3.40
tblVehicleEF	LDT1	368.23	329.19
tblVehicleEF	LDT1	77.04	69.78
tblVehicleEF	LDT1	0.07	0.08
tblVehicleEF	LDT1	0.26	0.19
tblVehicleEF	LDT1	0.32	0.24
tblVehicleEF	LDT1	3.8410e-003	3.0640e-003
tblVehicleEF	LDT1	5.4650e-003	4.8140e-003
tblVehicleEF	LDT1	3.5130e-003	2.8290e-003
tblVehicleEF	LDT1	5.0010e-003	4.4470e-003
tblVehicleEF	LDT1	0.40	0.34
tblVehicleEF	LDT1	0.41	0.35
tblVehicleEF	LDT1	0.27	0.23
tblVehicleEF	LDT1	0.09	0.05
tblVehicleEF	LDT1	1.19	0.99
tblVehicleEF	LDT1	0.39	0.28
tblVehicleEF	LDT1	4.1610e-003	4.1450e-003
tblVehicleEF	LDT1	9.2100e-004	9.0300e-004

tblVehicleEF	LDT1	0.40	0.34
tblVehicleEF	LDT1	0.41	0.35
tblVehicleEF	LDT1	0.27	0.23
tblVehicleEF	LDT1	0.12	0.07
tblVehicleEF	LDT1	1.19	0.99
tblVehicleEF	LDT1	0.42	0.30
tblVehicleEF	LDT1	0.03	0.02
tblVehicleEF	LDT1	0.03	0.02
tblVehicleEF	LDT1	2.76	1.98
tblVehicleEF	LDT1	5.72	4.33
tblVehicleEF	LDT1	337.41	301.40
tblVehicleEF	LDT1	77.04	69.78
tblVehicleEF	LDT1	0.07	0.08
tblVehicleEF	LDT1	0.28	0.20
tblVehicleEF	LDT1	0.34	0.26
tblVehicleEF	LDT1	3.8410e-003	3.0640e-003
tblVehicleEF	LDT1	5.4650e-003	4.8140e-003
tblVehicleEF	LDT1	3.5130e-003	2.8290e-003
tblVehicleEF	LDT1	5.0010e-003	4.4470e-003
tblVehicleEF	LDT1	0.23	0.19
tblVehicleEF	LDT1	0.41	0.34
tblVehicleEF	LDT1	0.13	0.12
tblVehicleEF	LDT1	0.08	0.05
tblVehicleEF	LDT1	1.41	1.18
tblVehicleEF	LDT1	0.46	0.33
tblVehicleEF	LDT1	3.8060e-003	3.7880e-003
tblVehicleEF	LDT1	9.4200e-004	9.1900e-004
tblVehicleEF	LDT1	0.23	0.19
tblVehicleEF	LDT1	0.41	0.34
tblVehicleEF	LDT1	0.13	0.12
tblVehicleEF	LDT1	0.11	0.07
tblVehicleEF	LDT1	1.41	1.18

tblVehicleEF	LDT1	0.49	0.36
tblVehicleEF	LDT2	0.02	0.01
tblVehicleEF	LDT2	0.02	0.01
tblVehicleEF	LDT2	1.62	1.15
tblVehicleEF	LDT2	3.47	2.47
tblVehicleEF	LDT2	413.27	372.37
tblVehicleEF	LDT2	92.96	84.91
tblVehicleEF	LDT2	0.18	0.06
tblVehicleEF	LDT2	0.20	0.13
tblVehicleEF	LDT2	0.34	0.23
tblVehicleEF	LDT2	1.6530e-003	1.4850e-003
tblVehicleEF	LDT2	2.7330e-003	2.9040e-003
tblVehicleEF	LDT2	1.5090e-003	1.3700e-003
tblVehicleEF	LDT2	2.5010e-003	2.6830e-003
tblVehicleEF	LDT2	0.09	0.07
tblVehicleEF	LDT2	0.17	0.14
tblVehicleEF	LDT2	0.06	0.06
tblVehicleEF	LDT2	0.04	0.02
tblVehicleEF	LDT2	0.52	0.43
tblVehicleEF	LDT2	0.26	0.18
tblVehicleEF	LDT2	4.5420e-003	4.5120e-003
tblVehicleEF	LDT2	1.0610e-003	1.0460e-003
tblVehicleEF	LDT2	0.09	0.07
tblVehicleEF	LDT2	0.17	0.14
tblVehicleEF	LDT2	0.06	0.06
tblVehicleEF	LDT2	0.06	0.04
tblVehicleEF	LDT2	0.52	0.43
tblVehicleEF	LDT2	0.28	0.19
tblVehicleEF	LDT2	0.02	0.01
tblVehicleEF	LDT2	0.02	0.01
tblVehicleEF	LDT2	1.89	1.35
tblVehicleEF	LDT2	2.68	1.89

tblVehicleEF	LDT2	446.44	402.41
tblVehicleEF	LDT2	92.96	84.91
tblVehicleEF	LDT2	0.18	0.06
tblVehicleEF	LDT2	0.18	0.12
tblVehicleEF	LDT2	0.31	0.21
tblVehicleEF	LDT2	1.6530e-003	1.4850e-003
tblVehicleEF	LDT2	2.7330e-003	2.9040e-003
tblVehicleEF	LDT2	1.5090e-003	1.3700e-003
tblVehicleEF	LDT2	2.5010e-003	2.6830e-003
tblVehicleEF	LDT2	0.16	0.13
tblVehicleEF	LDT2	0.20	0.16
tblVehicleEF	LDT2	0.13	0.11
tblVehicleEF	LDT2	0.04	0.03
tblVehicleEF	LDT2	0.51	0.42
tblVehicleEF	LDT2	0.22	0.15
tblVehicleEF	LDT2	4.9110e-003	4.8790e-003
tblVehicleEF	LDT2	1.0480e-003	1.0360e-003
tblVehicleEF	LDT2	0.16	0.13
tblVehicleEF	LDT2	0.20	0.16
tblVehicleEF	LDT2	0.13	0.11
tblVehicleEF	LDT2	0.06	0.04
tblVehicleEF	LDT2	0.51	0.42
tblVehicleEF	LDT2	0.24	0.16
tblVehicleEF	LDT2	0.02	0.01
tblVehicleEF	LDT2	0.02	0.01
tblVehicleEF	LDT2	1.56	1.10
tblVehicleEF	LDT2	3.41	2.42
tblVehicleEF	LDT2	407.66	367.29
tblVehicleEF	LDT2	92.96	84.91
tblVehicleEF	LDT2	0.18	0.06
tblVehicleEF	LDT2	0.19	0.13
tblVehicleEF	LDT2	0.34	0.23

tblVehicleEF	LDT2	1.6530e-003	1.4850e-003
tblVehicleEF	LDT2	2.7330e-003	2.9040e-003
tblVehicleEF	LDT2	1.5090e-003	1.3700e-003
tblVehicleEF	LDT2	2.5010e-003	2.6830e-003
tblVehicleEF	LDT2	0.09	0.07
tblVehicleEF	LDT2	0.19	0.16
tblVehicleEF	LDT2	0.06	0.06
tblVehicleEF	LDT2	0.04	0.02
tblVehicleEF	LDT2	0.60	0.49
tblVehicleEF	LDT2	0.26	0.17
tblVehicleEF	LDT2	4.4800e-003	4.4490e-003
tblVehicleEF	LDT2	1.0600e-003	1.0450e-003
tblVehicleEF	LDT2	0.09	0.07
tblVehicleEF	LDT2	0.19	0.16
tblVehicleEF	LDT2	0.06	0.06
tblVehicleEF	LDT2	0.06	0.04
tblVehicleEF	LDT2	0.60	0.49
tblVehicleEF	LDT2	0.28	0.19
tblVehicleEF	LHD1	1.1790e-003	1.1690e-003
tblVehicleEF	LHD1	0.01	8.0180e-003
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	0.17	0.17
tblVehicleEF	LHD1	1.07	0.79
tblVehicleEF	LHD1	4.04	3.46
tblVehicleEF	LHD1	8.82	8.51
tblVehicleEF	LHD1	538.23	513.92
tblVehicleEF	LHD1	38.15	37.20
tblVehicleEF	LHD1	0.04	0.00
tblVehicleEF	LHD1	0.07	0.07
tblVehicleEF	LHD1	2.13	1.65
tblVehicleEF	LHD1	1.04	0.98
tblVehicleEF	LHD1	7.4100e-004	7.3100e-004

tblVehicleEF	LHD1	0.05	0.05
tblVehicleEF	LHD1	9.4870e-003	9.4820e-003
tblVehicleEF	LHD1	0.01	8.3380e-003
tblVehicleEF	LHD1	1.1530e-003	8.8500e-004
tblVehicleEF	LHD1	6.8200e-004	6.7300e-004
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	2.3720e-003	2.3700e-003
tblVehicleEF	LHD1	9.2330e-003	7.6730e-003
tblVehicleEF	LHD1	1.0570e-003	8.1300e-004
tblVehicleEF	LHD1	3.0390e-003	2.7620e-003
tblVehicleEF	LHD1	0.08	0.08
tblVehicleEF	LHD1	0.03	0.03
tblVehicleEF	LHD1	1.4530e-003	1.3970e-003
tblVehicleEF	LHD1	0.07	0.06
tblVehicleEF	LHD1	0.58	0.55
tblVehicleEF	LHD1	0.33	0.28
tblVehicleEF	LHD1	5.3840e-003	5.3260e-003
tblVehicleEF	LHD1	4.6000e-004	4.5400e-004
tblVehicleEF	LHD1	3.0390e-003	2.7620e-003
tblVehicleEF	LHD1	0.08	0.08
tblVehicleEF	LHD1	0.03	0.03
tblVehicleEF	LHD1	1.4530e-003	1.3970e-003
tblVehicleEF	LHD1	0.08	0.07
tblVehicleEF	LHD1	0.58	0.55
tblVehicleEF	LHD1	0.35	0.30
tblVehicleEF	LHD1	1.1790e-003	1.1690e-003
tblVehicleEF	LHD1	0.01	8.0180e-003
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	0.17	0.17
tblVehicleEF	LHD1	1.09	0.81
tblVehicleEF	LHD1	3.26	2.79
tblVehicleEF	LHD1	8.82	8.51

tblVehicleEF	LHD1	538.23	513.92
tblVehicleEF	LHD1	38.15	37.20
tblVehicleEF	LHD1	0.04	0.00
tblVehicleEF	LHD1	0.07	0.07
tblVehicleEF	LHD1	2.00	1.54
tblVehicleEF	LHD1	1.00	0.95
tblVehicleEF	LHD1	7.4100e-004	7.3100e-004
tblVehicleEF	LHD1	0.05	0.05
tblVehicleEF	LHD1	9.4870e-003	9.4820e-003
tblVehicleEF	LHD1	0.01	8.3380e-003
tblVehicleEF	LHD1	1.1530e-003	8.8500e-004
tblVehicleEF	LHD1	6.8200e-004	6.7300e-004
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	2.3720e-003	2.3700e-003
tblVehicleEF	LHD1	9.2330e-003	7.6730e-003
tblVehicleEF	LHD1	1.0570e-003	8.1300e-004
tblVehicleEF	LHD1	5.4790e-003	4.9450e-003
tblVehicleEF	LHD1	0.10	0.09
tblVehicleEF	LHD1	0.03	0.03
tblVehicleEF	LHD1	2.9970e-003	2.7860e-003
tblVehicleEF	LHD1	0.07	0.06
tblVehicleEF	LHD1	0.58	0.55
tblVehicleEF	LHD1	0.29	0.25
tblVehicleEF	LHD1	5.3850e-003	5.3260e-003
tblVehicleEF	LHD1	4.4700e-004	4.4200e-004
tblVehicleEF	LHD1	5.4790e-003	4.9450e-003
tblVehicleEF	LHD1	0.10	0.09
tblVehicleEF	LHD1	0.03	0.03
tblVehicleEF	LHD1	2.9970e-003	2.7860e-003
tblVehicleEF	LHD1	0.09	0.07
tblVehicleEF	LHD1	0.58	0.55
tblVehicleEF	LHD1	0.31	0.27

tblVehicleEF	LHD1	1.1790e-003	1.1690e-003
tblVehicleEF	LHD1	0.01	8.0180e-003
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	0.17	0.17
tblVehicleEF	LHD1	1.06	0.79
tblVehicleEF	LHD1	3.76	3.22
tblVehicleEF	LHD1	8.82	8.51
tblVehicleEF	LHD1	538.23	513.92
tblVehicleEF	LHD1	38.15	37.20
tblVehicleEF	LHD1	0.04	0.00
tblVehicleEF	LHD1	0.07	0.07
tblVehicleEF	LHD1	2.10	1.62
tblVehicleEF	LHD1	1.03	0.97
tblVehicleEF	LHD1	7.4100e-004	7.3100e-004
tblVehicleEF	LHD1	0.05	0.05
tblVehicleEF	LHD1	9.4870e-003	9.4820e-003
tblVehicleEF	LHD1	0.01	8.3380e-003
tblVehicleEF	LHD1	1.1530e-003	8.8500e-004
tblVehicleEF	LHD1	6.8200e-004	6.7300e-004
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	2.3720e-003	2.3700e-003
tblVehicleEF	LHD1	9.2330e-003	7.6730e-003
tblVehicleEF	LHD1	1.0570e-003	8.1300e-004
tblVehicleEF	LHD1	3.4840e-003	3.0660e-003
tblVehicleEF	LHD1	0.11	0.10
tblVehicleEF	LHD1	0.03	0.03
tblVehicleEF	LHD1	1.5740e-003	1.4930e-003
tblVehicleEF	LHD1	0.07	0.06
tblVehicleEF	LHD1	0.62	0.59
tblVehicleEF	LHD1	0.32	0.27
tblVehicleEF	LHD1	5.3840e-003	5.3260e-003
tblVehicleEF	LHD1	4.5600e-004	4.5000e-004

tblVehicleEF	LHD1	3.4840e-003	3.0660e-003
tblVehicleEF	LHD1	0.11	0.10
tblVehicleEF	LHD1	0.03	0.03
tblVehicleEF	LHD1	1.5740e-003	1.4930e-003
tblVehicleEF	LHD1	0.08	0.07
tblVehicleEF	LHD1	0.62	0.59
tblVehicleEF	LHD1	0.34	0.29
tblVehicleEF	LHD2	8.0700e-004	8.0000e-004
tblVehicleEF	LHD2	6.6850e-003	5.3800e-003
tblVehicleEF	LHD2	9.5610e-003	7.5190e-003
tblVehicleEF	LHD2	0.12	0.12
tblVehicleEF	LHD2	0.75	0.56
tblVehicleEF	LHD2	1.91	1.55
tblVehicleEF	LHD2	9.92	9.57
tblVehicleEF	LHD2	525.66	504.19
tblVehicleEF	LHD2	20.16	19.40
tblVehicleEF	LHD2	7.5110e-003	0.00
tblVehicleEF	LHD2	0.14	0.14
tblVehicleEF	LHD2	3.41	2.70
tblVehicleEF	LHD2	0.52	0.50
tblVehicleEF	LHD2	1.4300e-003	1.4250e-003
tblVehicleEF	LHD2	0.07	0.07
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	0.02	0.01
tblVehicleEF	LHD2	6.0800e-004	3.9600e-004
tblVehicleEF	LHD2	1.3150e-003	1.3110e-003
tblVehicleEF	LHD2	0.03	0.03
tblVehicleEF	LHD2	2.6940e-003	2.6900e-003
tblVehicleEF	LHD2	0.02	0.01
tblVehicleEF	LHD2	5.4000e-004	3.5900e-004
tblVehicleEF	LHD2	1.4040e-003	1.1880e-003
tblVehicleEF	LHD2	0.04	0.03

tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	6.8900e-004	6.2900e-004
tblVehicleEF	LHD2	0.08	0.07
tblVehicleEF	LHD2	0.25	0.22
tblVehicleEF	LHD2	0.17	0.13
tblVehicleEF	LHD2	5.1750e-003	5.1450e-003
tblVehicleEF	LHD2	2.4000e-004	2.3200e-004
tblVehicleEF	LHD2	1.4040e-003	1.1880e-003
tblVehicleEF	LHD2	0.04	0.03
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	6.8900e-004	6.2900e-004
tblVehicleEF	LHD2	0.10	0.08
tblVehicleEF	LHD2	0.25	0.22
tblVehicleEF	LHD2	0.18	0.14
tblVehicleEF	LHD2	8.0700e-004	8.0000e-004
tblVehicleEF	LHD2	6.6850e-003	5.3800e-003
tblVehicleEF	LHD2	9.5610e-003	7.5190e-003
tblVehicleEF	LHD2	0.12	0.12
tblVehicleEF	LHD2	0.76	0.57
tblVehicleEF	LHD2	1.57	1.26
tblVehicleEF	LHD2	9.92	9.57
tblVehicleEF	LHD2	525.66	504.19
tblVehicleEF	LHD2	20.16	19.40
tblVehicleEF	LHD2	7.5110e-003	0.00
tblVehicleEF	LHD2	0.14	0.14
tblVehicleEF	LHD2	3.22	2.55
tblVehicleEF	LHD2	0.50	0.48
tblVehicleEF	LHD2	1.4300e-003	1.4250e-003
tblVehicleEF	LHD2	0.07	0.07
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	0.02	0.01
tblVehicleEF	LHD2	6.0800e-004	3.9600e-004

tblVehicleEF	LHD2	1.3150e-003	1.3110e-003
tblVehicleEF	LHD2	0.03	0.03
tblVehicleEF	LHD2	2.6940e-003	2.6900e-003
tblVehicleEF	LHD2	0.02	0.01
tblVehicleEF	LHD2	5.4000e-004	3.5900e-004
tblVehicleEF	LHD2	2.5460e-003	2.1330e-003
tblVehicleEF	LHD2	0.05	0.04
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	1.4320e-003	1.2540e-003
tblVehicleEF	LHD2	0.08	0.07
tblVehicleEF	LHD2	0.25	0.22
tblVehicleEF	LHD2	0.15	0.12
tblVehicleEF	LHD2	5.1760e-003	5.1450e-003
tblVehicleEF	LHD2	2.3400e-004	2.2700e-004
tblVehicleEF	LHD2	2.5460e-003	2.1330e-003
tblVehicleEF	LHD2	0.05	0.04
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	1.4320e-003	1.2540e-003
tblVehicleEF	LHD2	0.10	0.08
tblVehicleEF	LHD2	0.25	0.22
tblVehicleEF	LHD2	0.16	0.13
tblVehicleEF	LHD2	8.0700e-004	8.0000e-004
tblVehicleEF	LHD2	6.6850e-003	5.3800e-003
tblVehicleEF	LHD2	9.5610e-003	7.5190e-003
tblVehicleEF	LHD2	0.12	0.12
tblVehicleEF	LHD2	0.75	0.56
tblVehicleEF	LHD2	1.78	1.45
tblVehicleEF	LHD2	9.92	9.57
tblVehicleEF	LHD2	525.66	504.19
tblVehicleEF	LHD2	20.16	19.40
tblVehicleEF	LHD2	7.5110e-003	0.00
tblVehicleEF	LHD2	0.14	0.14

tblVehicleEF	LHD2	3.36	2.66
tblVehicleEF	LHD2	0.52	0.49
tblVehicleEF	LHD2	1.4300e-003	1.4250e-003
tblVehicleEF	LHD2	0.07	0.07
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	0.02	0.01
tblVehicleEF	LHD2	6.0800e-004	3.9600e-004
tblVehicleEF	LHD2	1.3150e-003	1.3110e-003
tblVehicleEF	LHD2	0.03	0.03
tblVehicleEF	LHD2	2.6940e-003	2.6900e-003
tblVehicleEF	LHD2	0.02	0.01
tblVehicleEF	LHD2	5.4000e-004	3.5900e-004
tblVehicleEF	LHD2	1.5920e-003	1.2850e-003
tblVehicleEF	LHD2	0.05	0.04
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	7.4400e-004	6.6500e-004
tblVehicleEF	LHD2	0.08	0.07
tblVehicleEF	LHD2	0.27	0.23
tblVehicleEF	LHD2	0.16	0.13
tblVehicleEF	LHD2	5.1750e-003	5.1450e-003
tblVehicleEF	LHD2	2.3700e-004	2.3100e-004
tblVehicleEF	LHD2	1.5920e-003	1.2850e-003
tblVehicleEF	LHD2	0.05	0.04
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	7.4400e-004	6.6500e-004
tblVehicleEF	LHD2	0.10	0.08
tblVehicleEF	LHD2	0.27	0.23
tblVehicleEF	LHD2	0.17	0.14
tblVehicleEF	MCY	29.62	25.55
tblVehicleEF	MCY	9.82	9.98
tblVehicleEF	MCY	146.18	147.32
tblVehicleEF	MCY	46.13	42.01

tblVehicleEF	MCY	6.3790e-003	6.5000e-003
tblVehicleEF	MCY	1.25	1.22
tblVehicleEF	MCY	0.31	0.31
tblVehicleEF	MCY	0.04	0.04
tblVehicleEF	MCY	6.8400e-004	4.3000e-004
tblVehicleEF	MCY	1.8270e-003	1.1950e-003
tblVehicleEF	MCY	0.02	0.02
tblVehicleEF	MCY	5.5000e-004	3.5400e-004
tblVehicleEF	MCY	1.4460e-003	9.7300e-004
tblVehicleEF	MCY	1.14	1.11
tblVehicleEF	MCY	0.48	0.44
tblVehicleEF	MCY	0.59	0.57
tblVehicleEF	MCY	2.77	2.59
tblVehicleEF	MCY	1.60	1.33
tblVehicleEF	MCY	2.16	2.10
tblVehicleEF	MCY	2.0360e-003	2.0330e-003
tblVehicleEF	MCY	6.9100e-004	6.6500e-004
tblVehicleEF	MCY	1.14	1.11
tblVehicleEF	MCY	0.48	0.44
tblVehicleEF	MCY	0.59	0.57
tblVehicleEF	MCY	3.02	2.84
tblVehicleEF	MCY	1.60	1.33
tblVehicleEF	MCY	2.32	2.25
tblVehicleEF	MCY	29.25	25.25
tblVehicleEF	MCY	8.82	8.83
tblVehicleEF	MCY	146.18	147.32
tblVehicleEF	MCY	46.13	42.01
tblVehicleEF	MCY	6.3790e-003	6.5000e-003
tblVehicleEF	MCY	1.08	1.05
tblVehicleEF	MCY	0.29	0.29
tblVehicleEF	MCY	0.04	0.04
tblVehicleEF	MCY	6.8400e-004	4.3000e-004

tblVehicleEF	MCY	1.8270e-003	1.1950e-003
tblVehicleEF	MCY	0.02	0.02
tblVehicleEF	MCY	5.5000e-004	3.5400e-004
tblVehicleEF	MCY	1.4460e-003	9.7300e-004
tblVehicleEF	MCY	2.21	2.16
tblVehicleEF	MCY	0.69	0.65
tblVehicleEF	MCY	1.44	1.40
tblVehicleEF	MCY	2.69	2.53
tblVehicleEF	MCY	1.57	1.30
tblVehicleEF	MCY	1.88	1.83
tblVehicleEF	MCY	2.0280e-003	2.0270e-003
tblVehicleEF	MCY	6.6600e-004	6.3800e-004
tblVehicleEF	MCY	2.21	2.16
tblVehicleEF	MCY	0.69	0.65
tblVehicleEF	MCY	1.44	1.40
tblVehicleEF	MCY	2.94	2.78
tblVehicleEF	MCY	1.57	1.30
tblVehicleEF	MCY	2.02	1.97
tblVehicleEF	MCY	28.65	24.76
tblVehicleEF	MCY	9.47	9.62
tblVehicleEF	MCY	146.18	147.32
tblVehicleEF	MCY	46.13	42.01
tblVehicleEF	MCY	6.3790e-003	6.5000e-003
tblVehicleEF	MCY	1.21	1.17
tblVehicleEF	MCY	0.30	0.30
tblVehicleEF	MCY	0.04	0.04
tblVehicleEF	MCY	6.8400e-004	4.3000e-004
tblVehicleEF	MCY	1.8270e-003	1.1950e-003
tblVehicleEF	MCY	0.02	0.02
tblVehicleEF	MCY	5.5000e-004	3.5400e-004
tblVehicleEF	MCY	1.4460e-003	9.7300e-004
tblVehicleEF	MCY	1.35	1.32

tblVehicleEF	MCY	0.67	0.61
tblVehicleEF	MCY	0.60	0.58
tblVehicleEF	MCY	2.73	2.57
tblVehicleEF	MCY	1.85	1.56
tblVehicleEF	MCY	2.08	2.03
tblVehicleEF	MCY	6.8300e-004	6.5700e-004
tblVehicleEF	MCY	1.35	1.32
tblVehicleEF	MCY	0.67	0.61
tblVehicleEF	MCY	0.60	0.58
tblVehicleEF	MCY	2.99	2.81
tblVehicleEF	MCY	1.85	1.56
tblVehicleEF	MCY	2.24	2.18
tblVehicleEF	MDV	0.03	0.02
tblVehicleEF	MDV	0.02	0.02
tblVehicleEF	MDV	2.15	1.74
tblVehicleEF	MDV	4.89	3.97
tblVehicleEF	MDV	535.78	490.34
tblVehicleEF	MDV	119.36	110.98
tblVehicleEF	MDV	0.17	0.05
tblVehicleEF	MDV	0.30	0.23
tblVehicleEF	MDV	0.49	0.39
tblVehicleEF	MDV	1.8140e-003	1.7020e-003
tblVehicleEF	MDV	3.0910e-003	3.1950e-003
tblVehicleEF	MDV	1.6670e-003	1.5700e-003
tblVehicleEF	MDV	2.8470e-003	2.9530e-003
tblVehicleEF	MDV	0.09	0.09
tblVehicleEF	MDV	0.18	0.19
tblVehicleEF	MDV	0.07	0.07
tblVehicleEF	MDV	0.05	0.04
tblVehicleEF	MDV	0.56	0.56
tblVehicleEF	MDV	0.43	0.34
tblVehicleEF	MDV	5.7720e-003	5.7530e-003

tblVehicleEF	MDV	1.3510e-003	1.3420e-003
tblVehicleEF	MDV	0.09	0.09
tblVehicleEF	MDV	0.18	0.19
tblVehicleEF	MDV	0.07	0.07
tblVehicleEF	MDV	0.08	0.06
tblVehicleEF	MDV	0.56	0.56
tblVehicleEF	MDV	0.46	0.37
tblVehicleEF	MDV	0.03	0.02
tblVehicleEF	MDV	0.02	0.02
tblVehicleEF	MDV	2.52	2.04
tblVehicleEF	MDV	3.76	3.05
tblVehicleEF	MDV	578.32	529.45
tblVehicleEF	MDV	119.36	110.98
tblVehicleEF	MDV	0.17	0.05
tblVehicleEF	MDV	0.27	0.21
tblVehicleEF	MDV	0.45	0.36
tblVehicleEF	MDV	1.8140e-003	1.7020e-003
tblVehicleEF	MDV	3.0910e-003	3.1950e-003
tblVehicleEF	MDV	1.6670e-003	1.5700e-003
tblVehicleEF	MDV	2.8470e-003	2.9530e-003
tblVehicleEF	MDV	0.17	0.17
tblVehicleEF	MDV	0.21	0.21
tblVehicleEF	MDV	0.14	0.14
tblVehicleEF	MDV	0.06	0.04
tblVehicleEF	MDV	0.55	0.55
tblVehicleEF	MDV	0.36	0.29
tblVehicleEF	MDV	6.2350e-003	6.2170e-003
tblVehicleEF	MDV	1.3310e-003	1.3250e-003
tblVehicleEF	MDV	0.17	0.17
tblVehicleEF	MDV	0.21	0.21
tblVehicleEF	MDV	0.14	0.14
tblVehicleEF	MDV	0.09	0.07

tblVehicleEF	MDV	0.55	0.55
tblVehicleEF	MDV	0.38	0.31
tblVehicleEF	MDV	0.03	0.02
tblVehicleEF	MDV	0.02	0.02
tblVehicleEF	MDV	2.07	1.67
tblVehicleEF	MDV	4.80	3.90
tblVehicleEF	MDV	528.58	483.73
tblVehicleEF	MDV	119.36	110.98
tblVehicleEF	MDV	0.17	0.05
tblVehicleEF	MDV	0.28	0.22
tblVehicleEF	MDV	0.49	0.39
tblVehicleEF	MDV	1.8140e-003	1.7020e-003
tblVehicleEF	MDV	3.0910e-003	3.1950e-003
tblVehicleEF	MDV	1.6670e-003	1.5700e-003
tblVehicleEF	MDV	2.8470e-003	2.9530e-003
tblVehicleEF	MDV	0.09	0.09
tblVehicleEF	MDV	0.21	0.21
tblVehicleEF	MDV	0.07	0.08
tblVehicleEF	MDV	0.05	0.04
tblVehicleEF	MDV	0.65	0.64
tblVehicleEF	MDV	0.42	0.34
tblVehicleEF	MDV	5.6930e-003	5.6740e-003
tblVehicleEF	MDV	1.3490e-003	1.3400e-003
tblVehicleEF	MDV	0.09	0.09
tblVehicleEF	MDV	0.21	0.21
tblVehicleEF	MDV	0.07	0.08
tblVehicleEF	MDV	0.08	0.06
tblVehicleEF	MDV	0.65	0.64
tblVehicleEF	MDV	0.45	0.36
tblVehicleEF	MH	3.88	2.09
tblVehicleEF	MH	8.66	6.72
tblVehicleEF	MH	641.58	610.48

tblVehicleEF	MH	30.89	28.70
tblVehicleEF	MH	3.2450e-003	0.00
tblVehicleEF	MH	1.96	1.59
tblVehicleEF	MH	0.84	0.71
tblVehicleEF	MH	0.05	0.05
tblVehicleEF	MH	8.7310e-003	8.7200e-003
tblVehicleEF	MH	0.04	0.03
tblVehicleEF	MH	1.5190e-003	8.9800e-004
tblVehicleEF	MH	0.02	0.02
tblVehicleEF	MH	2.1830e-003	2.1800e-003
tblVehicleEF	MH	0.03	0.03
tblVehicleEF	MH	1.3260e-003	8.0900e-004
tblVehicleEF	MH	1.46	1.21
tblVehicleEF	MH	0.08	0.07
tblVehicleEF	MH	0.51	0.43
tblVehicleEF	MH	0.10	0.06
tblVehicleEF	MH	1.84	1.69
tblVehicleEF	MH	0.52	0.38
tblVehicleEF	MH	6.4790e-003	6.3630e-003
tblVehicleEF	MH	4.6500e-004	4.1900e-004
tblVehicleEF	MH	1.46	1.21
tblVehicleEF	MH	0.08	0.07
tblVehicleEF	MH	0.51	0.43
tblVehicleEF	MH	0.12	0.08
tblVehicleEF	MH	1.84	1.69
tblVehicleEF	MH	0.56	0.41
tblVehicleEF	MH	3.99	2.15
tblVehicleEF	MH	6.88	5.32
tblVehicleEF	MH	641.58	610.48
tblVehicleEF	MH	30.89	28.70
tblVehicleEF	MH	3.2450e-003	0.00
tblVehicleEF	MH	1.79	1.47

tblVehicleEF	MH	0.81	0.68
tblVehicleEF	MH	0.05	0.05
tblVehicleEF	MH	8.7310e-003	8.7200e-003
tblVehicleEF	MH	0.04	0.03
tblVehicleEF	MH	1.5190e-003	8.9800e-004
tblVehicleEF	MH	0.02	0.02
tblVehicleEF	MH	2.1830e-003	2.1800e-003
tblVehicleEF	MH	0.03	0.03
tblVehicleEF	MH	1.3260e-003	8.0900e-004
tblVehicleEF	MH	2.58	2.12
tblVehicleEF	MH	0.10	0.08
tblVehicleEF	MH	1.04	0.86
tblVehicleEF	MH	0.10	0.06
tblVehicleEF	MH	1.83	1.68
tblVehicleEF	MH	0.44	0.33
tblVehicleEF	MH	6.4800e-003	6.3640e-003
tblVehicleEF	MH	4.3500e-004	3.9500e-004
tblVehicleEF	MH	2.58	2.12
tblVehicleEF	MH	0.10	0.08
tblVehicleEF	MH	1.04	0.86
tblVehicleEF	MH	0.12	0.08
tblVehicleEF	MH	1.83	1.68
tblVehicleEF	MH	0.47	0.35
tblVehicleEF	MH	3.85	2.08
tblVehicleEF	MH	8.06	6.26
tblVehicleEF	MH	641.58	610.48
tblVehicleEF	MH	30.89	28.70
tblVehicleEF	MH	3.2450e-003	0.00
tblVehicleEF	MH	1.91	1.56
tblVehicleEF	MH	0.83	0.71
tblVehicleEF	MH	0.05	0.05
tblVehicleEF	MH	8.7310e-003	8.7200e-003

tblVehicleEF	MH	0.04	0.03
tblVehicleEF	MH	1.5190e-003	8.9800e-004
tblVehicleEF	MH	0.02	0.02
tblVehicleEF	MH	2.1830e-003	2.1800e-003
tblVehicleEF	MH	0.03	0.03
tblVehicleEF	MH	1.3260e-003	8.0900e-004
tblVehicleEF	MH	1.81	1.45
tblVehicleEF	MH	0.11	0.09
tblVehicleEF	MH	0.58	0.48
tblVehicleEF	MH	0.10	0.06
tblVehicleEF	MH	1.94	1.78
tblVehicleEF	MH	0.49	0.36
tblVehicleEF	MH	6.4780e-003	6.3630e-003
tblVehicleEF	MH	4.5500e-004	4.1100e-004
tblVehicleEF	MH	1.81	1.45
tblVehicleEF	MH	0.11	0.09
tblVehicleEF	MH	0.58	0.48
tblVehicleEF	MH	0.12	0.08
tblVehicleEF	MH	1.94	1.78
tblVehicleEF	MH	0.53	0.39
tblVehicleEF	MHD	9.1490e-003	7.3280e-003
tblVehicleEF	MHD	6.8430e-003	4.0920e-003
tblVehicleEF	MHD	1.98	1.82
tblVehicleEF	MHD	1.20	0.76
tblVehicleEF	MHD	21.46	16.24
tblVehicleEF	MHD	606.65	598.70
tblVehicleEF	MHD	983.19	940.03
tblVehicleEF	MHD	63.82	55.58
tblVehicleEF	MHD	0.01	0.00
tblVehicleEF	MHD	7.20	5.92
tblVehicleEF	MHD	4.52	2.71
tblVehicleEF	MHD	1.95	1.61

tblVehicleEF	MHD	0.04	0.02
tblVehicleEF	MHD	0.12	0.12
tblVehicleEF	MHD	0.14	0.08
tblVehicleEF	MHD	5.0040e-003	2.6400e-003
tblVehicleEF	MHD	0.04	0.02
tblVehicleEF	MHD	0.05	0.05
tblVehicleEF	MHD	0.13	0.08
tblVehicleEF	MHD	4.1210e-003	2.2570e-003
tblVehicleEF	MHD	5.5100e-003	3.9430e-003
tblVehicleEF	MHD	0.21	0.14
tblVehicleEF	MHD	0.20	0.16
tblVehicleEF	MHD	2.6470e-003	1.9790e-003
tblVehicleEF	MHD	0.17	0.10
tblVehicleEF	MHD	0.91	0.68
tblVehicleEF	MHD	1.56	1.05
tblVehicleEF	MHD	5.8760e-003	6.0130e-003
tblVehicleEF	MHD	9.5670e-003	9.4790e-003
tblVehicleEF	MHD	1.0330e-003	8.7200e-004
tblVehicleEF	MHD	5.5100e-003	3.9430e-003
tblVehicleEF	MHD	0.21	0.14
tblVehicleEF	MHD	0.22	0.18
tblVehicleEF	MHD	2.6470e-003	1.9790e-003
tblVehicleEF	MHD	0.19	0.11
tblVehicleEF	MHD	0.91	0.68
tblVehicleEF	MHD	1.68	1.12
tblVehicleEF	MHD	8.6220e-003	6.9060e-003
tblVehicleEF	MHD	6.8430e-003	4.0920e-003
tblVehicleEF	MHD	1.44	1.33
tblVehicleEF	MHD	1.21	0.77
tblVehicleEF	MHD	18.00	13.26
tblVehicleEF	MHD	642.69	634.27
tblVehicleEF	MHD	983.19	940.03

tblVehicleEF	MHD	63.82	55.58
tblVehicleEF	MHD	0.01	0.00
tblVehicleEF	MHD	7.43	6.11
tblVehicleEF	MHD	4.26	2.55
tblVehicleEF	MHD	1.87	1.55
tblVehicleEF	MHD	0.04	0.02
tblVehicleEF	MHD	0.12	0.12
tblVehicleEF	MHD	0.14	0.08
tblVehicleEF	MHD	5.0040e-003	2.6400e-003
tblVehicleEF	MHD	0.03	0.02
tblVehicleEF	MHD	0.05	0.05
tblVehicleEF	MHD	0.13	0.08
tblVehicleEF	MHD	4.1210e-003	2.2570e-003
tblVehicleEF	MHD	0.01	7.2010e-003
tblVehicleEF	MHD	0.24	0.16
tblVehicleEF	MHD	0.19	0.15
tblVehicleEF	MHD	5.6750e-003	4.0890e-003
tblVehicleEF	MHD	0.17	0.10
tblVehicleEF	MHD	0.91	0.68
tblVehicleEF	MHD	1.35	0.91
tblVehicleEF	MHD	6.2250e-003	6.3700e-003
tblVehicleEF	MHD	9.5670e-003	9.4790e-003
tblVehicleEF	MHD	9.7200e-004	8.2100e-004
tblVehicleEF	MHD	0.01	7.2010e-003
tblVehicleEF	MHD	0.24	0.16
tblVehicleEF	MHD	0.21	0.17
tblVehicleEF	MHD	5.6750e-003	4.0890e-003
tblVehicleEF	MHD	0.19	0.11
tblVehicleEF	MHD	0.91	0.68
tblVehicleEF	MHD	1.45	0.98
tblVehicleEF	MHD	9.8770e-003	7.9110e-003
tblVehicleEF	MHD	6.8430e-003	4.0920e-003

tblVehicleEF	MHD	2.73	2.51
tblVehicleEF	MHD	1.19	0.76
tblVehicleEF	MHD	20.21	15.25
tblVehicleEF	MHD	556.87	549.58
tblVehicleEF	MHD	983.19	940.03
tblVehicleEF	MHD	63.82	55.58
tblVehicleEF	MHD	0.01	0.00
tblVehicleEF	MHD	6.88	5.65
tblVehicleEF	MHD	4.45	2.67
tblVehicleEF	MHD	1.93	1.60
tblVehicleEF	MHD	0.05	0.02
tblVehicleEF	MHD	0.12	0.12
tblVehicleEF	MHD	0.14	0.08
tblVehicleEF	MHD	5.0040e-003	2.6400e-003
tblVehicleEF	MHD	0.05	0.02
tblVehicleEF	MHD	0.05	0.05
tblVehicleEF	MHD	0.13	0.08
tblVehicleEF	MHD	4.1210e-003	2.2570e-003
tblVehicleEF	MHD	6.5390e-003	4.5130e-003
tblVehicleEF	MHD	0.27	0.17
tblVehicleEF	MHD	0.21	0.17
tblVehicleEF	MHD	2.9760e-003	2.1720e-003
tblVehicleEF	MHD	0.17	0.10
tblVehicleEF	MHD	0.98	0.73
tblVehicleEF	MHD	1.48	1.00
tblVehicleEF	MHD	5.3940e-003	5.5190e-003
tblVehicleEF	MHD	9.5660e-003	9.4790e-003
tblVehicleEF	MHD	1.0110e-003	8.5500e-004
tblVehicleEF	MHD	6.5390e-003	4.5130e-003
tblVehicleEF	MHD	0.27	0.17
tblVehicleEF	MHD	0.24	0.19
tblVehicleEF	MHD	2.9760e-003	2.1720e-003

tblVehicleEF	MHD	0.19	0.11
tblVehicleEF	MHD	0.98	0.73
tblVehicleEF	MHD	1.59	1.08
tblVehicleEF	OBUS	0.02	0.02
tblVehicleEF	OBUS	2.2030e-003	1.8730e-003
tblVehicleEF	OBUS	2.30	2.37
tblVehicleEF	OBUS	2.18	1.56
tblVehicleEF	OBUS	12.87	11.34
tblVehicleEF	OBUS	573.90	563.74
tblVehicleEF	OBUS	933.78	920.98
tblVehicleEF	OBUS	37.90	35.44
tblVehicleEF	OBUS	1.0120e-003	0.00
tblVehicleEF	OBUS	7.28	5.55
tblVehicleEF	OBUS	4.81	3.18
tblVehicleEF	OBUS	1.69	1.54
tblVehicleEF	OBUS	0.06	0.01
tblVehicleEF	OBUS	0.08	0.09
tblVehicleEF	OBUS	9.9180e-003	0.01
tblVehicleEF	OBUS	0.08	0.04
tblVehicleEF	OBUS	1.5340e-003	1.0490e-003
tblVehicleEF	OBUS	0.05	9.6700e-003
tblVehicleEF	OBUS	0.03	0.04
tblVehicleEF	OBUS	2.4800e-003	2.5210e-003
tblVehicleEF	OBUS	0.07	0.04
tblVehicleEF	OBUS	1.3140e-003	9.2500e-004
tblVehicleEF	OBUS	1.2410e-003	1.2110e-003
tblVehicleEF	OBUS	0.03	0.03
tblVehicleEF	OBUS	0.49	0.40
tblVehicleEF	OBUS	5.5100e-004	5.6800e-004
tblVehicleEF	OBUS	0.16	0.10
tblVehicleEF	OBUS	0.27	0.29
tblVehicleEF	OBUS	0.82	0.70

tblVehicleEF	OBUS	5.5590e-003	5.6610e-003
tblVehicleEF	OBUS	9.2020e-003	9.3860e-003
tblVehicleEF	OBUS	6.1200e-004	5.7300e-004
tblVehicleEF	OBUS	1.2410e-003	1.2110e-003
tblVehicleEF	OBUS	0.03	0.03
tblVehicleEF	OBUS	0.56	0.46
tblVehicleEF	OBUS	5.5100e-004	5.6800e-004
tblVehicleEF	OBUS	0.20	0.13
tblVehicleEF	OBUS	0.27	0.29
tblVehicleEF	OBUS	0.88	0.75
tblVehicleEF	OBUS	0.02	0.02
tblVehicleEF	OBUS	2.2030e-003	1.8730e-003
tblVehicleEF	OBUS	1.67	1.72
tblVehicleEF	OBUS	2.22	1.59
tblVehicleEF	OBUS	10.52	9.20
tblVehicleEF	OBUS	607.99	597.23
tblVehicleEF	OBUS	933.78	920.98
tblVehicleEF	OBUS	37.90	35.44
tblVehicleEF	OBUS	1.0120e-003	0.00
tblVehicleEF	OBUS	7.51	5.73
tblVehicleEF	OBUS	4.48	2.96
tblVehicleEF	OBUS	1.62	1.48
tblVehicleEF	OBUS	0.05	8.8610e-003
tblVehicleEF	OBUS	0.08	0.09
tblVehicleEF	OBUS	9.9180e-003	0.01
tblVehicleEF	OBUS	0.08	0.04
tblVehicleEF	OBUS	1.5340e-003	1.0490e-003
tblVehicleEF	OBUS	0.05	8.1520e-003
tblVehicleEF	OBUS	0.03	0.04
tblVehicleEF	OBUS	2.4800e-003	2.5210e-003
tblVehicleEF	OBUS	0.07	0.04
tblVehicleEF	OBUS	1.3140e-003	9.2500e-004

tblVehicleEF	OBUS	2.2230e-003	2.1460e-003
tblVehicleEF	OBUS	0.04	0.04
tblVehicleEF	OBUS	0.46	0.38
tblVehicleEF	OBUS	1.1300e-003	1.1190e-003
tblVehicleEF	OBUS	0.16	0.11
tblVehicleEF	OBUS	0.27	0.29
tblVehicleEF	OBUS	0.72	0.62
tblVehicleEF	OBUS	5.8890e-003	5.9980e-003
tblVehicleEF	OBUS	9.2020e-003	9.3860e-003
tblVehicleEF	OBUS	5.7200e-004	5.3600e-004
tblVehicleEF	OBUS	2.2230e-003	2.1460e-003
tblVehicleEF	OBUS	0.04	0.04
tblVehicleEF	OBUS	0.53	0.43
tblVehicleEF	OBUS	1.1300e-003	1.1190e-003
tblVehicleEF	OBUS	0.20	0.13
tblVehicleEF	OBUS	0.27	0.29
tblVehicleEF	OBUS	0.77	0.66
tblVehicleEF	OBUS	0.02	0.02
tblVehicleEF	OBUS	2.2030e-003	1.8730e-003
tblVehicleEF	OBUS	3.17	3.26
tblVehicleEF	OBUS	2.18	1.56
tblVehicleEF	OBUS	12.11	10.66
tblVehicleEF	OBUS	526.81	517.49
tblVehicleEF	OBUS	933.78	920.98
tblVehicleEF	OBUS	37.90	35.44
tblVehicleEF	OBUS	1.0120e-003	0.00
tblVehicleEF	OBUS	6.96	5.30
tblVehicleEF	OBUS	4.72	3.12
tblVehicleEF	OBUS	1.67	1.52
tblVehicleEF	OBUS	0.07	0.01
tblVehicleEF	OBUS	0.08	0.09
tblVehicleEF	OBUS	9.9180e-003	0.01

tblVehicleEF	OBUS	0.08	0.04
tblVehicleEF	OBUS	1.5340e-003	1.0490e-003
tblVehicleEF	OBUS	0.07	0.01
tblVehicleEF	OBUS	0.03	0.04
tblVehicleEF	OBUS	2.4800e-003	2.5210e-003
tblVehicleEF	OBUS	0.07	0.04
tblVehicleEF	OBUS	1.3140e-003	9.2500e-004
tblVehicleEF	OBUS	1.3870e-003	1.2800e-003
tblVehicleEF	OBUS	0.04	0.04
tblVehicleEF	OBUS	0.53	0.44
tblVehicleEF	OBUS	0.16	0.10
tblVehicleEF	OBUS	0.29	0.31
tblVehicleEF	OBUS	0.79	0.68
tblVehicleEF	OBUS	5.1030e-003	5.1970e-003
tblVehicleEF	OBUS	9.2020e-003	9.3860e-003
tblVehicleEF	OBUS	5.9900e-004	5.6100e-004
tblVehicleEF	OBUS	1.3870e-003	1.2800e-003
tblVehicleEF	OBUS	0.04	0.04
tblVehicleEF	OBUS	0.60	0.50
tblVehicleEF	OBUS	0.20	0.13
tblVehicleEF	OBUS	0.29	0.31
tblVehicleEF	OBUS	0.84	0.72
tblVehicleEF	SBUS	5.3980e-003	5.4440e-003
tblVehicleEF	SBUS	7.2840e-003	7.6850e-003
tblVehicleEF	SBUS	1.04	1.07
tblVehicleEF	SBUS	2.82	2.15
tblVehicleEF	SBUS	20.97	18.54
tblVehicleEF	SBUS	581.72	562.55
tblVehicleEF	SBUS	1,135.42	1,089.38
tblVehicleEF	SBUS	129.31	123.07
tblVehicleEF	SBUS	9.2500e-004	0.00
tblVehicleEF	SBUS	8.19	8.05

tblVehicleEF	SBUS	7.92	7.70
tblVehicleEF	SBUS	1.52	1.42
tblVehicleEF	SBUS	0.03	0.03
tblVehicleEF	SBUS	0.56	0.55
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.08	0.08
tblVehicleEF	SBUS	3.7230e-003	2.5670e-003
tblVehicleEF	SBUS	0.03	0.02
tblVehicleEF	SBUS	0.24	0.24
tblVehicleEF	SBUS	2.7360e-003	2.7280e-003
tblVehicleEF	SBUS	0.08	0.08
tblVehicleEF	SBUS	3.1720e-003	2.2530e-003
tblVehicleEF	SBUS	0.02	0.02
tblVehicleEF	SBUS	0.16	0.14
tblVehicleEF	SBUS	0.12	0.12
tblVehicleEF	SBUS	8.5740e-003	8.3080e-003
tblVehicleEF	SBUS	0.28	0.26
tblVehicleEF	SBUS	1.31	1.27
tblVehicleEF	SBUS	1.44	1.22
tblVehicleEF	SBUS	5.6340e-003	5.6490e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	1.6850e-003	1.6230e-003
tblVehicleEF	SBUS	0.02	0.02
tblVehicleEF	SBUS	0.16	0.14
tblVehicleEF	SBUS	0.13	0.13
tblVehicleEF	SBUS	8.5740e-003	8.3080e-003
tblVehicleEF	SBUS	0.32	0.29
tblVehicleEF	SBUS	1.31	1.27
tblVehicleEF	SBUS	1.54	1.30
tblVehicleEF	SBUS	5.0870e-003	5.1310e-003
tblVehicleEF	SBUS	7.2840e-003	7.6850e-003
tblVehicleEF	SBUS	0.76	0.78

tblVehicleEF	SBUS	2.82	2.17
tblVehicleEF	SBUS	17.82	15.65
tblVehicleEF	SBUS	616.28	595.97
tblVehicleEF	SBUS	1,135.42	1,089.38
tblVehicleEF	SBUS	129.31	123.07
tblVehicleEF	SBUS	9.2500e-004	0.00
tblVehicleEF	SBUS	8.46	8.31
tblVehicleEF	SBUS	7.44	7.24
tblVehicleEF	SBUS	1.41	1.33
tblVehicleEF	SBUS	0.02	0.02
tblVehicleEF	SBUS	0.56	0.55
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.08	0.08
tblVehicleEF	SBUS	3.7230e-003	2.5670e-003
tblVehicleEF	SBUS	0.02	0.02
tblVehicleEF	SBUS	0.24	0.24
tblVehicleEF	SBUS	2.7360e-003	2.7280e-003
tblVehicleEF	SBUS	0.08	0.08
tblVehicleEF	SBUS	3.1720e-003	2.2530e-003
tblVehicleEF	SBUS	0.04	0.04
tblVehicleEF	SBUS	0.18	0.16
tblVehicleEF	SBUS	0.11	0.11
tblVehicleEF	SBUS	0.02	0.02
tblVehicleEF	SBUS	0.28	0.26
tblVehicleEF	SBUS	1.21	1.17
tblVehicleEF	SBUS	1.26	1.08
tblVehicleEF	SBUS	5.9690e-003	5.9850e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	1.6300e-003	1.5730e-003
tblVehicleEF	SBUS	0.04	0.04
tblVehicleEF	SBUS	0.18	0.16
tblVehicleEF	SBUS	0.12	0.13

tblVehicleEF	SBUS	0.02	0.02
tblVehicleEF	SBUS	0.32	0.30
tblVehicleEF	SBUS	1.21	1.17
tblVehicleEF	SBUS	1.35	1.15
tblVehicleEF	SBUS	5.8270e-003	5.8770e-003
tblVehicleEF	SBUS	7.2840e-003	7.6850e-003
tblVehicleEF	SBUS	1.44	1.47
tblVehicleEF	SBUS	2.79	2.14
tblVehicleEF	SBUS	20.75	18.34
tblVehicleEF	SBUS	533.99	516.39
tblVehicleEF	SBUS	1,135.42	1,089.38
tblVehicleEF	SBUS	129.31	123.07
tblVehicleEF	SBUS	9.2500e-004	0.00
tblVehicleEF	SBUS	7.83	7.69
tblVehicleEF	SBUS	7.80	7.59
tblVehicleEF	SBUS	1.52	1.43
tblVehicleEF	SBUS	0.03	0.03
tblVehicleEF	SBUS	0.56	0.55
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.08	0.08
tblVehicleEF	SBUS	3.7230e-003	2.5670e-003
tblVehicleEF	SBUS	0.03	0.03
tblVehicleEF	SBUS	0.24	0.24
tblVehicleEF	SBUS	2.7360e-003	2.7280e-003
tblVehicleEF	SBUS	0.08	0.08
tblVehicleEF	SBUS	3.1720e-003	2.2530e-003
tblVehicleEF	SBUS	0.03	0.02
tblVehicleEF	SBUS	0.21	0.17
tblVehicleEF	SBUS	0.13	0.13
tblVehicleEF	SBUS	0.01	9.3800e-003
tblVehicleEF	SBUS	0.28	0.26
tblVehicleEF	SBUS	1.55	1.50

tblVehicleEF	SBUS	1.43	1.21
tblVehicleEF	SBUS	5.1720e-003	5.1860e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	1.6810e-003	1.6190e-003
tblVehicleEF	SBUS	0.03	0.02
tblVehicleEF	SBUS	0.21	0.17
tblVehicleEF	SBUS	0.14	0.14
tblVehicleEF	SBUS	0.01	9.3800e-003
tblVehicleEF	SBUS	0.32	0.29
tblVehicleEF	SBUS	1.55	1.50
tblVehicleEF	SBUS	1.53	1.30
tblVehicleEF	UBUS	7.66	6.87
tblVehicleEF	UBUS	26.64	25.29
tblVehicleEF	UBUS	1,579.79	1,511.41
tblVehicleEF	UBUS	78.93	75.81
tblVehicleEF	UBUS	1.0750e-003	0.00
tblVehicleEF	UBUS	9.15	8.60
tblVehicleEF	UBUS	3.10	3.03
tblVehicleEF	UBUS	0.12	0.12
tblVehicleEF	UBUS	1.3550e-003	1.1510e-003
tblVehicleEF	UBUS	0.11	0.11
tblVehicleEF	UBUS	1.2350e-003	1.0680e-003
tblVehicleEF	UBUS	0.01	0.01
tblVehicleEF	UBUS	0.19	0.18
tblVehicleEF	UBUS	7.0160e-003	6.9870e-003
tblVehicleEF	UBUS	0.88	0.82
tblVehicleEF	UBUS	1.02	1.11
tblVehicleEF	UBUS	1.86	1.79
tblVehicleEF	UBUS	0.02	0.02
tblVehicleEF	UBUS	1.2770e-003	1.2500e-003
tblVehicleEF	UBUS	0.01	0.01
tblVehicleEF	UBUS	0.19	0.18

tblVehicleEF	UBUS	7.0160e-003	6.9870e-003
tblVehicleEF	UBUS	0.97	0.91
tblVehicleEF	UBUS	1.02	1.11
tblVehicleEF	UBUS	1.99	1.91
tblVehicleEF	UBUS	7.81	7.02
tblVehicleEF	UBUS	22.16	21.00
tblVehicleEF	UBUS	1,579.79	1,511.41
tblVehicleEF	UBUS	78.93	75.81
tblVehicleEF	UBUS	1.0750e-003	0.00
tblVehicleEF	UBUS	8.52	8.01
tblVehicleEF	UBUS	2.95	2.88
tblVehicleEF	UBUS	0.12	0.12
tblVehicleEF	UBUS	1.3550e-003	1.1510e-003
tblVehicleEF	UBUS	0.11	0.11
tblVehicleEF	UBUS	1.2350e-003	1.0680e-003
tblVehicleEF	UBUS	0.02	0.02
tblVehicleEF	UBUS	0.23	0.22
tblVehicleEF	UBUS	0.01	0.01
tblVehicleEF	UBUS	0.90	0.84
tblVehicleEF	UBUS	0.99	1.08
tblVehicleEF	UBUS	1.67	1.60
tblVehicleEF	UBUS	0.02	0.02
tblVehicleEF	UBUS	1.2000e-003	1.1770e-003
tblVehicleEF	UBUS	0.02	0.02
tblVehicleEF	UBUS	0.23	0.22
tblVehicleEF	UBUS	0.01	0.01
tblVehicleEF	UBUS	0.99	0.93
tblVehicleEF	UBUS	0.99	1.08
tblVehicleEF	UBUS	1.78	1.71
tblVehicleEF	UBUS	7.65	6.88
tblVehicleEF	UBUS	25.64	24.33
tblVehicleEF	UBUS	1,579.79	1,511.41

tblVehicleEF	UBUS	78.93	75.81
tblVehicleEF	UBUS	1.0750e-003	0.00
tblVehicleEF	UBUS	8.97	8.43
tblVehicleEF	UBUS	3.08	3.00
tblVehicleEF	UBUS	0.12	0.12
tblVehicleEF	UBUS	1.3550e-003	1.1510e-003
tblVehicleEF	UBUS	0.11	0.11
tblVehicleEF	UBUS	1.2350e-003	1.0680e-003
tblVehicleEF	UBUS	0.02	0.02
tblVehicleEF	UBUS	0.23	0.22
tblVehicleEF	UBUS	7.6760e-003	7.5270e-003
tblVehicleEF	UBUS	0.88	0.82
tblVehicleEF	UBUS	1.20	1.31
tblVehicleEF	UBUS	1.82	1.75
tblVehicleEF	UBUS	0.02	0.02
tblVehicleEF	UBUS	1.2600e-003	1.2340e-003
tblVehicleEF	UBUS	0.02	0.02
tblVehicleEF	UBUS	0.23	0.22
tblVehicleEF	UBUS	7.6760e-003	7.5270e-003
tblVehicleEF	UBUS	0.97	0.91
tblVehicleEF	UBUS	1.20	1.31
tblVehicleEF	UBUS	1.95	1.87

2.0 Emissions Summary

	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

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	lb/day										lb/day					
Area	0.1021	1.0000e-005	8.4000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		1.7300e-003	1.7300e-003	1.0000e-005		1.8400e-003
Energy	0.0322	0.2926	0.2458	1.7600e-003		0.0222	0.0222		0.0222	0.0222		351.1571	351.1571	6.7300e-003	6.4400e-003	353.2942
Mobile	1.4786	1.4076	10.2661	0.0221	1.7620	0.0225	1.7845	0.4675	0.0207	0.4881		1,772.3537	1,772.3537	0.0675		1,773.7711
Total	1.6128	1.7002	10.5127	0.0238	1.7620	0.0447	1.8067	0.4675	0.0429	0.5104		2,123.5125	2,123.5125	0.0742	6.4400e-003	2,127.0672

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	lb/day										lb/day					
Area	0.1021	1.0000e-005	8.4000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		1.7300e-003	1.7300e-003	1.0000e-005		1.8400e-003
Energy	0.0322	0.2926	0.2458	1.7600e-003		0.0222	0.0222		0.0222	0.0222		351.1571	351.1571	6.7300e-003	6.4400e-003	353.2942
Mobile	1.4786	1.4076	10.2661	0.0221	1.7620	0.0225	1.7845	0.4675	0.0207	0.4881		1,772.3537	1,772.3537	0.0675		1,773.7711
Total	1.6128	1.7002	10.5127	0.0238	1.7620	0.0447	1.8067	0.4675	0.0429	0.5104		2,123.5125	2,123.5125	0.0742	6.4400e-003	2,127.0672

	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

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Building Construction	Building Construction	1/1/2017	12/30/2016	5	0	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Building Construction	Cranes	1	7.00	226	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Building Construction	9	2.00	1.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

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	lb/day										lb/day					
Unmitigated	1.4786	1.4076	10.2661	0.0221	1.7620	0.0225	1.7845	0.4675	0.0207	0.4881		1,772.3537	1,772.3537	0.0675		1,773.7711
Mitigated	1.4786	1.4076	10.2661	0.0221	1.7620	0.0225	1.7845	0.4675	0.0207	0.4881		1,772.3537	1,772.3537	0.0675		1,773.7711

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
High Turnover (Sit Down Restaurant)	495.89	617.64	514.18	703,073	703,073
Parking Lot	0.00	0.00	0.00		
Total	495.89	617.64	514.18	703,073	703,073

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
High Turnover (Sit Down	16.60	8.40	6.90	8.50	72.50	19.00	37	20	43
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.782800	0.080300	0.060200	0.050200	0.000000	0.000000	0.000000	0.020100	0.000000	0.000000	0.006500	0.000000	0.000000

5.0 Energy Detail

4.4 Fleet Mix

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	lb/day										lb/day					
NaturalGas Mitigated	0.0322	0.2926	0.2458	1.7600e-003		0.0222	0.0222		0.0222	0.0222		351.1571	351.1571	6.7300e-003	6.4400e-003	353.2942
NaturalGas Unmitigated	0.0322	0.2926	0.2458	1.7600e-003		0.0222	0.0222		0.0222	0.0222		351.1571	351.1571	6.7300e-003	6.4400e-003	353.2942

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	lb/day										lb/day					
High Turnover (Sit Down Restaurant)	2984.84	0.0322	0.2926	0.2458	1.7600e-003		0.0222	0.0222		0.0222	0.0222		351.1571	351.1571	6.7300e-003	6.4400e-003	353.2942
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
Total		0.0322	0.2926	0.2458	1.7600e-003		0.0222	0.0222		0.0222	0.0222		351.1571	351.1571	6.7300e-003	6.4400e-003	353.2942

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	lb/day										lb/day					
High Turnover (Sit Down Restaurant)	2.98484	0.0322	0.2926	0.2458	1.7600e-003		0.0222	0.0222		0.0222	0.0222		351.1571	351.1571	6.7300e-003	6.4400e-003	353.2942
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
Total		0.0322	0.2926	0.2458	1.7600e-003		0.0222	0.0222		0.0222	0.0222		351.1571	351.1571	6.7300e-003	6.4400e-003	353.2942

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	lb/day										lb/day					
Unmitigated	0.1021	1.0000e-005	8.4000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		1.7300e-003	1.7300e-003	1.0000e-005		1.8400e-003
Mitigated	0.1021	1.0000e-005	8.4000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		1.7300e-003	1.7300e-003	1.0000e-005		1.8400e-003

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0248					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0772					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	9.0000e-005	1.0000e-005	8.4000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		1.7300e-003	1.7300e-003	1.0000e-005		1.8400e-003
Total	0.1021	1.0000e-005	8.4000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		1.7300e-003	1.7300e-003	1.0000e-005		1.8400e-003

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	lb/day										lb/day					
Architectural Coating	0.0248					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0772					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	9.0000e-005	1.0000e-005	8.4000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		1.7300e-003	1.7300e-003	1.0000e-005		1.8400e-003
Total	0.1021	1.0000e-005	8.4000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		1.7300e-003	1.7300e-003	1.0000e-005		1.8400e-003

7.0 Water Detail

7.1 Mitigation Measures Water

Install Low Flow Bathroom Faucet
 Install Low Flow Kitchen Faucet
 Install Low Flow Toilet
 Install Low Flow Shower
 Use Water Efficient Irrigation System

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

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

10.0 Vegetation

Peninsula Retail Partners Commercial/Restaurant-Existing
Riverside-South Coast County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Parking Lot	4.00	Acre	4.00	0.00	0
High Turnover (Sit Down Restaurant)	3.90	1000sqft	0.09	3,900.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.4	Precipitation Freq (Days)	28
Climate Zone	10			Operational Year	2014
Utility Company	Riverside Public Utilities				
CO2 Intensity (lb/MW hr)	1325.65	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Estimated existing parking lot size from Google Aerial.

Construction Phase - Existing condition - no construction

Off-road Equipment -

Off-road Equipment - Existing condition - no construction

Trips and VMT - Existing condition - no construction

On-road Fugitive Dust -

Grading - Grading information provided by contractor

Vehicle Trips - Existing Dennys Restaurant

Vehicle Emission Factors - Adjusted fleet mix for a restaurant.

Vehicle Emission Factors - Adjusted fleet mix for a restaurant.

Vehicle Emission Factors - Adjusted fleet mix for a restaurant.

Construction Off-road Equipment Mitigation - Existing condition - no construction

Energy Mitigation -

Water Mitigation -

Energy Use - Existing Denny's Restaurant building is more than 20 years old.

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	230.00	0.00
tblEnergyUse	LightingElect	0.88	0.88
tblLandUse	LandUseSquareFeet	174,240.00	0.00
tblVehicleEF	HHD	0.02	0.02
tblVehicleEF	HHD	0.01	8.8790e-003
tblVehicleEF	HHD	2.78	2.88
tblVehicleEF	HHD	1.70	1.42
tblVehicleEF	HHD	60.65	51.71
tblVehicleEF	HHD	576.70	557.78
tblVehicleEF	HHD	1,629.98	1,560.95
tblVehicleEF	HHD	66.79	55.76
tblVehicleEF	HHD	0.04	0.02
tblVehicleEF	HHD	5.80	4.57
tblVehicleEF	HHD	7.75	5.37
tblVehicleEF	HHD	3.83	3.44
tblVehicleEF	HHD	0.03	0.01
tblVehicleEF	HHD	0.06	0.06
tblVehicleEF	HHD	0.03	0.04
tblVehicleEF	HHD	0.17	0.10
tblVehicleEF	HHD	5.0390e-003	2.0760e-003
tblVehicleEF	HHD	0.03	9.6140e-003
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	8.7490e-003	8.7560e-003
tblVehicleEF	HHD	0.15	0.09
tblVehicleEF	HHD	3.9960e-003	1.7220e-003

tblVehicleEF	HHD	3.7260e-003	2.1340e-003
tblVehicleEF	HHD	0.19	0.09
tblVehicleEF	HHD	0.52	0.51
tblVehicleEF	HHD	1.9840e-003	1.2460e-003
tblVehicleEF	HHD	0.26	0.19
tblVehicleEF	HHD	0.65	0.35
tblVehicleEF	HHD	2.49	1.66
tblVehicleEF	HHD	5.5860e-003	5.6020e-003
tblVehicleEF	HHD	0.02	0.02
tblVehicleEF	HHD	1.7070e-003	1.4500e-003
tblVehicleEF	HHD	3.7260e-003	2.1340e-003
tblVehicleEF	HHD	0.19	0.09
tblVehicleEF	HHD	0.59	0.58
tblVehicleEF	HHD	1.9840e-003	1.2460e-003
tblVehicleEF	HHD	0.30	0.22
tblVehicleEF	HHD	0.65	0.35
tblVehicleEF	HHD	2.67	1.77
tblVehicleEF	HHD	0.02	0.02
tblVehicleEF	HHD	0.01	8.8790e-003
tblVehicleEF	HHD	2.02	2.09
tblVehicleEF	HHD	1.70	1.42
tblVehicleEF	HHD	51.86	42.39
tblVehicleEF	HHD	610.97	590.92
tblVehicleEF	HHD	1,629.98	1,560.95
tblVehicleEF	HHD	66.79	55.76
tblVehicleEF	HHD	0.04	0.02
tblVehicleEF	HHD	5.98	4.71
tblVehicleEF	HHD	7.32	5.07
tblVehicleEF	HHD	3.67	3.30
tblVehicleEF	HHD	0.02	8.8100e-003
tblVehicleEF	HHD	0.06	0.06
tblVehicleEF	HHD	0.03	0.04

tblVehicleEF	HHD	0.17	0.10
tblVehicleEF	HHD	5.0390e-003	2.0760e-003
tblVehicleEF	HHD	0.02	8.1050e-003
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	8.7490e-003	8.7560e-003
tblVehicleEF	HHD	0.15	0.09
tblVehicleEF	HHD	3.9960e-003	1.7220e-003
tblVehicleEF	HHD	7.0560e-003	3.9730e-003
tblVehicleEF	HHD	0.21	0.11
tblVehicleEF	HHD	0.49	0.48
tblVehicleEF	HHD	4.3530e-003	2.6270e-003
tblVehicleEF	HHD	0.26	0.19
tblVehicleEF	HHD	0.65	0.36
tblVehicleEF	HHD	2.15	1.44
tblVehicleEF	HHD	5.9180e-003	5.9340e-003
tblVehicleEF	HHD	0.02	0.02
tblVehicleEF	HHD	1.5590e-003	1.2970e-003
tblVehicleEF	HHD	7.0560e-003	3.9730e-003
tblVehicleEF	HHD	0.21	0.11
tblVehicleEF	HHD	0.56	0.55
tblVehicleEF	HHD	4.3530e-003	2.6270e-003
tblVehicleEF	HHD	0.30	0.22
tblVehicleEF	HHD	0.65	0.36
tblVehicleEF	HHD	2.31	1.54
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	0.01	8.8790e-003
tblVehicleEF	HHD	3.83	3.97
tblVehicleEF	HHD	1.70	1.42
tblVehicleEF	HHD	57.31	48.65
tblVehicleEF	HHD	529.39	512.02
tblVehicleEF	HHD	1,629.98	1,560.95
tblVehicleEF	HHD	66.79	55.76

tblVehicleEF	HHD	0.04	0.02
tblVehicleEF	HHD	5.54	4.36
tblVehicleEF	HHD	7.64	5.29
tblVehicleEF	HHD	3.79	3.40
tblVehicleEF	HHD	0.03	0.01
tblVehicleEF	HHD	0.06	0.06
tblVehicleEF	HHD	0.03	0.04
tblVehicleEF	HHD	0.17	0.10
tblVehicleEF	HHD	5.0390e-003	2.0760e-003
tblVehicleEF	HHD	0.03	0.01
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	8.7490e-003	8.7560e-003
tblVehicleEF	HHD	0.15	0.09
tblVehicleEF	HHD	3.9960e-003	1.7220e-003
tblVehicleEF	HHD	4.3990e-003	2.3610e-003
tblVehicleEF	HHD	0.25	0.12
tblVehicleEF	HHD	0.56	0.55
tblVehicleEF	HHD	2.2590e-003	1.3700e-003
tblVehicleEF	HHD	0.26	0.19
tblVehicleEF	HHD	0.69	0.38
tblVehicleEF	HHD	2.36	1.59
tblVehicleEF	HHD	5.1280e-003	5.1420e-003
tblVehicleEF	HHD	0.02	0.02
tblVehicleEF	HHD	1.6510e-003	1.4000e-003
tblVehicleEF	HHD	4.3990e-003	2.3610e-003
tblVehicleEF	HHD	0.25	0.12
tblVehicleEF	HHD	0.64	0.63
tblVehicleEF	HHD	2.2590e-003	1.3700e-003
tblVehicleEF	HHD	0.30	0.22
tblVehicleEF	HHD	0.69	0.38
tblVehicleEF	HHD	2.53	1.70
tblVehicleEF	LDA	0.01	9.1850e-003

tblVehicleEF	LDA	0.01	7.2120e-003
tblVehicleEF	LDA	1.18	0.83
tblVehicleEF	LDA	2.47	1.71
tblVehicleEF	LDA	293.38	256.87
tblVehicleEF	LDA	66.78	59.48
tblVehicleEF	LDA	0.47	0.78
tblVehicleEF	LDA	0.11	0.08
tblVehicleEF	LDA	0.17	0.11
tblVehicleEF	LDA	1.5970e-003	1.4380e-003
tblVehicleEF	LDA	2.7190e-003	2.8280e-003
tblVehicleEF	LDA	1.4560e-003	1.3260e-003
tblVehicleEF	LDA	2.4750e-003	2.6090e-003
tblVehicleEF	LDA	0.08	0.06
tblVehicleEF	LDA	0.15	0.12
tblVehicleEF	LDA	0.05	0.04
tblVehicleEF	LDA	0.03	0.02
tblVehicleEF	LDA	0.35	0.26
tblVehicleEF	LDA	0.20	0.13
tblVehicleEF	LDA	3.3310e-003	3.3130e-003
tblVehicleEF	LDA	7.7800e-004	7.6500e-004
tblVehicleEF	LDA	0.08	0.06
tblVehicleEF	LDA	0.15	0.12
tblVehicleEF	LDA	0.05	0.04
tblVehicleEF	LDA	0.04	0.03
tblVehicleEF	LDA	0.35	0.26
tblVehicleEF	LDA	0.22	0.14
tblVehicleEF	LDA	0.01	9.1850e-003
tblVehicleEF	LDA	0.01	7.2120e-003
tblVehicleEF	LDA	1.38	0.99
tblVehicleEF	LDA	1.92	1.32
tblVehicleEF	LDA	317.69	278.16
tblVehicleEF	LDA	66.78	59.48

tblVehicleEF	LDA	0.47	0.78
tblVehicleEF	LDA	0.10	0.07
tblVehicleEF	LDA	0.16	0.11
tblVehicleEF	LDA	1.5970e-003	1.4380e-003
tblVehicleEF	LDA	2.7190e-003	2.8280e-003
tblVehicleEF	LDA	1.4560e-003	1.3260e-003
tblVehicleEF	LDA	2.4750e-003	2.6090e-003
tblVehicleEF	LDA	0.15	0.10
tblVehicleEF	LDA	0.18	0.13
tblVehicleEF	LDA	0.11	0.08
tblVehicleEF	LDA	0.03	0.02
tblVehicleEF	LDA	0.34	0.25
tblVehicleEF	LDA	0.17	0.11
tblVehicleEF	LDA	3.6100e-003	3.5920e-003
tblVehicleEF	LDA	7.6800e-004	7.5800e-004
tblVehicleEF	LDA	0.15	0.10
tblVehicleEF	LDA	0.18	0.13
tblVehicleEF	LDA	0.11	0.08
tblVehicleEF	LDA	0.05	0.03
tblVehicleEF	LDA	0.34	0.25
tblVehicleEF	LDA	0.18	0.11
tblVehicleEF	LDA	0.01	9.1850e-003
tblVehicleEF	LDA	0.01	7.2120e-003
tblVehicleEF	LDA	1.13	0.80
tblVehicleEF	LDA	2.43	1.68
tblVehicleEF	LDA	289.27	253.27
tblVehicleEF	LDA	66.78	59.48
tblVehicleEF	LDA	0.47	0.78
tblVehicleEF	LDA	0.10	0.07
tblVehicleEF	LDA	0.17	0.11
tblVehicleEF	LDA	1.5970e-003	1.4380e-003
tblVehicleEF	LDA	2.7190e-003	2.8280e-003

tblVehicleEF	LDA	1.4560e-003	1.3260e-003
tblVehicleEF	LDA	2.4750e-003	2.6090e-003
tblVehicleEF	LDA	0.08	0.06
tblVehicleEF	LDA	0.18	0.13
tblVehicleEF	LDA	0.05	0.04
tblVehicleEF	LDA	0.03	0.02
tblVehicleEF	LDA	0.39	0.29
tblVehicleEF	LDA	0.20	0.12
tblVehicleEF	LDA	3.2830e-003	3.2660e-003
tblVehicleEF	LDA	7.7700e-004	7.6500e-004
tblVehicleEF	LDA	0.08	0.06
tblVehicleEF	LDA	0.18	0.13
tblVehicleEF	LDA	0.05	0.04
tblVehicleEF	LDA	0.04	0.03
tblVehicleEF	LDA	0.39	0.29
tblVehicleEF	LDA	0.21	0.13
tblVehicleEF	LDT1	0.03	0.02
tblVehicleEF	LDT1	0.03	0.02
tblVehicleEF	LDT1	2.86	2.05
tblVehicleEF	LDT1	5.83	4.41
tblVehicleEF	LDT1	341.86	305.42
tblVehicleEF	LDT1	77.04	69.78
tblVehicleEF	LDT1	0.07	0.08
tblVehicleEF	LDT1	0.29	0.21
tblVehicleEF	LDT1	0.34	0.26
tblVehicleEF	LDT1	3.8410e-003	3.0640e-003
tblVehicleEF	LDT1	5.4650e-003	4.8140e-003
tblVehicleEF	LDT1	3.5130e-003	2.8290e-003
tblVehicleEF	LDT1	5.0010e-003	4.4470e-003
tblVehicleEF	LDT1	0.21	0.18
tblVehicleEF	LDT1	0.34	0.29
tblVehicleEF	LDT1	0.13	0.12

tblVehicleEF	LDT1	0.08	0.05
tblVehicleEF	LDT1	1.21	1.01
tblVehicleEF	LDT1	0.47	0.34
tblVehicleEF	LDT1	3.8580e-003	3.8400e-003
tblVehicleEF	LDT1	9.4400e-004	9.2100e-004
tblVehicleEF	LDT1	0.21	0.18
tblVehicleEF	LDT1	0.34	0.29
tblVehicleEF	LDT1	0.13	0.12
tblVehicleEF	LDT1	0.11	0.07
tblVehicleEF	LDT1	1.21	1.01
tblVehicleEF	LDT1	0.50	0.36
tblVehicleEF	LDT1	0.03	0.02
tblVehicleEF	LDT1	0.03	0.02
tblVehicleEF	LDT1	3.28	2.38
tblVehicleEF	LDT1	4.53	3.40
tblVehicleEF	LDT1	368.23	329.19
tblVehicleEF	LDT1	77.04	69.78
tblVehicleEF	LDT1	0.07	0.08
tblVehicleEF	LDT1	0.26	0.19
tblVehicleEF	LDT1	0.32	0.24
tblVehicleEF	LDT1	3.8410e-003	3.0640e-003
tblVehicleEF	LDT1	5.4650e-003	4.8140e-003
tblVehicleEF	LDT1	3.5130e-003	2.8290e-003
tblVehicleEF	LDT1	5.0010e-003	4.4470e-003
tblVehicleEF	LDT1	0.40	0.34
tblVehicleEF	LDT1	0.41	0.35
tblVehicleEF	LDT1	0.27	0.23
tblVehicleEF	LDT1	0.09	0.05
tblVehicleEF	LDT1	1.19	0.99
tblVehicleEF	LDT1	0.39	0.28
tblVehicleEF	LDT1	4.1610e-003	4.1450e-003
tblVehicleEF	LDT1	9.2100e-004	9.0300e-004

tblVehicleEF	LDT1	0.40	0.34
tblVehicleEF	LDT1	0.41	0.35
tblVehicleEF	LDT1	0.27	0.23
tblVehicleEF	LDT1	0.12	0.07
tblVehicleEF	LDT1	1.19	0.99
tblVehicleEF	LDT1	0.42	0.30
tblVehicleEF	LDT1	0.03	0.02
tblVehicleEF	LDT1	0.03	0.02
tblVehicleEF	LDT1	2.76	1.98
tblVehicleEF	LDT1	5.72	4.33
tblVehicleEF	LDT1	337.41	301.40
tblVehicleEF	LDT1	77.04	69.78
tblVehicleEF	LDT1	0.07	0.08
tblVehicleEF	LDT1	0.28	0.20
tblVehicleEF	LDT1	0.34	0.26
tblVehicleEF	LDT1	3.8410e-003	3.0640e-003
tblVehicleEF	LDT1	5.4650e-003	4.8140e-003
tblVehicleEF	LDT1	3.5130e-003	2.8290e-003
tblVehicleEF	LDT1	5.0010e-003	4.4470e-003
tblVehicleEF	LDT1	0.23	0.19
tblVehicleEF	LDT1	0.41	0.34
tblVehicleEF	LDT1	0.13	0.12
tblVehicleEF	LDT1	0.08	0.05
tblVehicleEF	LDT1	1.41	1.18
tblVehicleEF	LDT1	0.46	0.33
tblVehicleEF	LDT1	3.8060e-003	3.7880e-003
tblVehicleEF	LDT1	9.4200e-004	9.1900e-004
tblVehicleEF	LDT1	0.23	0.19
tblVehicleEF	LDT1	0.41	0.34
tblVehicleEF	LDT1	0.13	0.12
tblVehicleEF	LDT1	0.11	0.07
tblVehicleEF	LDT1	1.41	1.18

tblVehicleEF	LDT1	0.49	0.36
tblVehicleEF	LDT2	0.02	0.01
tblVehicleEF	LDT2	0.02	0.01
tblVehicleEF	LDT2	1.62	1.15
tblVehicleEF	LDT2	3.47	2.47
tblVehicleEF	LDT2	413.27	372.37
tblVehicleEF	LDT2	92.96	84.91
tblVehicleEF	LDT2	0.18	0.06
tblVehicleEF	LDT2	0.20	0.13
tblVehicleEF	LDT2	0.34	0.23
tblVehicleEF	LDT2	1.6530e-003	1.4850e-003
tblVehicleEF	LDT2	2.7330e-003	2.9040e-003
tblVehicleEF	LDT2	1.5090e-003	1.3700e-003
tblVehicleEF	LDT2	2.5010e-003	2.6830e-003
tblVehicleEF	LDT2	0.09	0.07
tblVehicleEF	LDT2	0.17	0.14
tblVehicleEF	LDT2	0.06	0.06
tblVehicleEF	LDT2	0.04	0.02
tblVehicleEF	LDT2	0.52	0.43
tblVehicleEF	LDT2	0.26	0.18
tblVehicleEF	LDT2	4.5420e-003	4.5120e-003
tblVehicleEF	LDT2	1.0610e-003	1.0460e-003
tblVehicleEF	LDT2	0.09	0.07
tblVehicleEF	LDT2	0.17	0.14
tblVehicleEF	LDT2	0.06	0.06
tblVehicleEF	LDT2	0.06	0.04
tblVehicleEF	LDT2	0.52	0.43
tblVehicleEF	LDT2	0.28	0.19
tblVehicleEF	LDT2	0.02	0.01
tblVehicleEF	LDT2	0.02	0.01
tblVehicleEF	LDT2	1.89	1.35
tblVehicleEF	LDT2	2.68	1.89

tblVehicleEF	LDT2	446.44	402.41
tblVehicleEF	LDT2	92.96	84.91
tblVehicleEF	LDT2	0.18	0.06
tblVehicleEF	LDT2	0.18	0.12
tblVehicleEF	LDT2	0.31	0.21
tblVehicleEF	LDT2	1.6530e-003	1.4850e-003
tblVehicleEF	LDT2	2.7330e-003	2.9040e-003
tblVehicleEF	LDT2	1.5090e-003	1.3700e-003
tblVehicleEF	LDT2	2.5010e-003	2.6830e-003
tblVehicleEF	LDT2	0.16	0.13
tblVehicleEF	LDT2	0.20	0.16
tblVehicleEF	LDT2	0.13	0.11
tblVehicleEF	LDT2	0.04	0.03
tblVehicleEF	LDT2	0.51	0.42
tblVehicleEF	LDT2	0.22	0.15
tblVehicleEF	LDT2	4.9110e-003	4.8790e-003
tblVehicleEF	LDT2	1.0480e-003	1.0360e-003
tblVehicleEF	LDT2	0.16	0.13
tblVehicleEF	LDT2	0.20	0.16
tblVehicleEF	LDT2	0.13	0.11
tblVehicleEF	LDT2	0.06	0.04
tblVehicleEF	LDT2	0.51	0.42
tblVehicleEF	LDT2	0.24	0.16
tblVehicleEF	LDT2	0.02	0.01
tblVehicleEF	LDT2	0.02	0.01
tblVehicleEF	LDT2	1.56	1.10
tblVehicleEF	LDT2	3.41	2.42
tblVehicleEF	LDT2	407.66	367.29
tblVehicleEF	LDT2	92.96	84.91
tblVehicleEF	LDT2	0.18	0.06
tblVehicleEF	LDT2	0.19	0.13
tblVehicleEF	LDT2	0.34	0.23

tblVehicleEF	LDT2	1.6530e-003	1.4850e-003
tblVehicleEF	LDT2	2.7330e-003	2.9040e-003
tblVehicleEF	LDT2	1.5090e-003	1.3700e-003
tblVehicleEF	LDT2	2.5010e-003	2.6830e-003
tblVehicleEF	LDT2	0.09	0.07
tblVehicleEF	LDT2	0.19	0.16
tblVehicleEF	LDT2	0.06	0.06
tblVehicleEF	LDT2	0.04	0.02
tblVehicleEF	LDT2	0.60	0.49
tblVehicleEF	LDT2	0.26	0.17
tblVehicleEF	LDT2	4.4800e-003	4.4490e-003
tblVehicleEF	LDT2	1.0600e-003	1.0450e-003
tblVehicleEF	LDT2	0.09	0.07
tblVehicleEF	LDT2	0.19	0.16
tblVehicleEF	LDT2	0.06	0.06
tblVehicleEF	LDT2	0.06	0.04
tblVehicleEF	LDT2	0.60	0.49
tblVehicleEF	LDT2	0.28	0.19
tblVehicleEF	LHD1	1.1790e-003	1.1690e-003
tblVehicleEF	LHD1	0.01	8.0180e-003
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	0.17	0.17
tblVehicleEF	LHD1	1.07	0.79
tblVehicleEF	LHD1	4.04	3.46
tblVehicleEF	LHD1	8.82	8.51
tblVehicleEF	LHD1	538.23	513.92
tblVehicleEF	LHD1	38.15	37.20
tblVehicleEF	LHD1	0.04	0.00
tblVehicleEF	LHD1	0.07	0.07
tblVehicleEF	LHD1	2.13	1.65
tblVehicleEF	LHD1	1.04	0.98
tblVehicleEF	LHD1	7.4100e-004	7.3100e-004

tblVehicleEF	LHD1	0.05	0.05
tblVehicleEF	LHD1	9.4870e-003	9.4820e-003
tblVehicleEF	LHD1	0.01	8.3380e-003
tblVehicleEF	LHD1	1.1530e-003	8.8500e-004
tblVehicleEF	LHD1	6.8200e-004	6.7300e-004
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	2.3720e-003	2.3700e-003
tblVehicleEF	LHD1	9.2330e-003	7.6730e-003
tblVehicleEF	LHD1	1.0570e-003	8.1300e-004
tblVehicleEF	LHD1	3.0390e-003	2.7620e-003
tblVehicleEF	LHD1	0.08	0.08
tblVehicleEF	LHD1	0.03	0.03
tblVehicleEF	LHD1	1.4530e-003	1.3970e-003
tblVehicleEF	LHD1	0.07	0.06
tblVehicleEF	LHD1	0.58	0.55
tblVehicleEF	LHD1	0.33	0.28
tblVehicleEF	LHD1	5.3840e-003	5.3260e-003
tblVehicleEF	LHD1	4.6000e-004	4.5400e-004
tblVehicleEF	LHD1	3.0390e-003	2.7620e-003
tblVehicleEF	LHD1	0.08	0.08
tblVehicleEF	LHD1	0.03	0.03
tblVehicleEF	LHD1	1.4530e-003	1.3970e-003
tblVehicleEF	LHD1	0.08	0.07
tblVehicleEF	LHD1	0.58	0.55
tblVehicleEF	LHD1	0.35	0.30
tblVehicleEF	LHD1	1.1790e-003	1.1690e-003
tblVehicleEF	LHD1	0.01	8.0180e-003
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	0.17	0.17
tblVehicleEF	LHD1	1.09	0.81
tblVehicleEF	LHD1	3.26	2.79
tblVehicleEF	LHD1	8.82	8.51

tblVehicleEF	LHD1	538.23	513.92
tblVehicleEF	LHD1	38.15	37.20
tblVehicleEF	LHD1	0.04	0.00
tblVehicleEF	LHD1	0.07	0.07
tblVehicleEF	LHD1	2.00	1.54
tblVehicleEF	LHD1	1.00	0.95
tblVehicleEF	LHD1	7.4100e-004	7.3100e-004
tblVehicleEF	LHD1	0.05	0.05
tblVehicleEF	LHD1	9.4870e-003	9.4820e-003
tblVehicleEF	LHD1	0.01	8.3380e-003
tblVehicleEF	LHD1	1.1530e-003	8.8500e-004
tblVehicleEF	LHD1	6.8200e-004	6.7300e-004
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	2.3720e-003	2.3700e-003
tblVehicleEF	LHD1	9.2330e-003	7.6730e-003
tblVehicleEF	LHD1	1.0570e-003	8.1300e-004
tblVehicleEF	LHD1	5.4790e-003	4.9450e-003
tblVehicleEF	LHD1	0.10	0.09
tblVehicleEF	LHD1	0.03	0.03
tblVehicleEF	LHD1	2.9970e-003	2.7860e-003
tblVehicleEF	LHD1	0.07	0.06
tblVehicleEF	LHD1	0.58	0.55
tblVehicleEF	LHD1	0.29	0.25
tblVehicleEF	LHD1	5.3850e-003	5.3260e-003
tblVehicleEF	LHD1	4.4700e-004	4.4200e-004
tblVehicleEF	LHD1	5.4790e-003	4.9450e-003
tblVehicleEF	LHD1	0.10	0.09
tblVehicleEF	LHD1	0.03	0.03
tblVehicleEF	LHD1	2.9970e-003	2.7860e-003
tblVehicleEF	LHD1	0.09	0.07
tblVehicleEF	LHD1	0.58	0.55
tblVehicleEF	LHD1	0.31	0.27

tblVehicleEF	LHD1	1.1790e-003	1.1690e-003
tblVehicleEF	LHD1	0.01	8.0180e-003
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	0.17	0.17
tblVehicleEF	LHD1	1.06	0.79
tblVehicleEF	LHD1	3.76	3.22
tblVehicleEF	LHD1	8.82	8.51
tblVehicleEF	LHD1	538.23	513.92
tblVehicleEF	LHD1	38.15	37.20
tblVehicleEF	LHD1	0.04	0.00
tblVehicleEF	LHD1	0.07	0.07
tblVehicleEF	LHD1	2.10	1.62
tblVehicleEF	LHD1	1.03	0.97
tblVehicleEF	LHD1	7.4100e-004	7.3100e-004
tblVehicleEF	LHD1	0.05	0.05
tblVehicleEF	LHD1	9.4870e-003	9.4820e-003
tblVehicleEF	LHD1	0.01	8.3380e-003
tblVehicleEF	LHD1	1.1530e-003	8.8500e-004
tblVehicleEF	LHD1	6.8200e-004	6.7300e-004
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	2.3720e-003	2.3700e-003
tblVehicleEF	LHD1	9.2330e-003	7.6730e-003
tblVehicleEF	LHD1	1.0570e-003	8.1300e-004
tblVehicleEF	LHD1	3.4840e-003	3.0660e-003
tblVehicleEF	LHD1	0.11	0.10
tblVehicleEF	LHD1	0.03	0.03
tblVehicleEF	LHD1	1.5740e-003	1.4930e-003
tblVehicleEF	LHD1	0.07	0.06
tblVehicleEF	LHD1	0.62	0.59
tblVehicleEF	LHD1	0.32	0.27
tblVehicleEF	LHD1	5.3840e-003	5.3260e-003
tblVehicleEF	LHD1	4.5600e-004	4.5000e-004

tblVehicleEF	LHD1	3.4840e-003	3.0660e-003
tblVehicleEF	LHD1	0.11	0.10
tblVehicleEF	LHD1	0.03	0.03
tblVehicleEF	LHD1	1.5740e-003	1.4930e-003
tblVehicleEF	LHD1	0.08	0.07
tblVehicleEF	LHD1	0.62	0.59
tblVehicleEF	LHD1	0.34	0.29
tblVehicleEF	LHD2	8.0700e-004	8.0000e-004
tblVehicleEF	LHD2	6.6850e-003	5.3800e-003
tblVehicleEF	LHD2	9.5610e-003	7.5190e-003
tblVehicleEF	LHD2	0.12	0.12
tblVehicleEF	LHD2	0.75	0.56
tblVehicleEF	LHD2	1.91	1.55
tblVehicleEF	LHD2	9.92	9.57
tblVehicleEF	LHD2	525.66	504.19
tblVehicleEF	LHD2	20.16	19.40
tblVehicleEF	LHD2	7.5110e-003	0.00
tblVehicleEF	LHD2	0.14	0.14
tblVehicleEF	LHD2	3.41	2.70
tblVehicleEF	LHD2	0.52	0.50
tblVehicleEF	LHD2	1.4300e-003	1.4250e-003
tblVehicleEF	LHD2	0.07	0.07
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	0.02	0.01
tblVehicleEF	LHD2	6.0800e-004	3.9600e-004
tblVehicleEF	LHD2	1.3150e-003	1.3110e-003
tblVehicleEF	LHD2	0.03	0.03
tblVehicleEF	LHD2	2.6940e-003	2.6900e-003
tblVehicleEF	LHD2	0.02	0.01
tblVehicleEF	LHD2	5.4000e-004	3.5900e-004
tblVehicleEF	LHD2	1.4040e-003	1.1880e-003
tblVehicleEF	LHD2	0.04	0.03

tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	6.8900e-004	6.2900e-004
tblVehicleEF	LHD2	0.08	0.07
tblVehicleEF	LHD2	0.25	0.22
tblVehicleEF	LHD2	0.17	0.13
tblVehicleEF	LHD2	5.1750e-003	5.1450e-003
tblVehicleEF	LHD2	2.4000e-004	2.3200e-004
tblVehicleEF	LHD2	1.4040e-003	1.1880e-003
tblVehicleEF	LHD2	0.04	0.03
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	6.8900e-004	6.2900e-004
tblVehicleEF	LHD2	0.10	0.08
tblVehicleEF	LHD2	0.25	0.22
tblVehicleEF	LHD2	0.18	0.14
tblVehicleEF	LHD2	8.0700e-004	8.0000e-004
tblVehicleEF	LHD2	6.6850e-003	5.3800e-003
tblVehicleEF	LHD2	9.5610e-003	7.5190e-003
tblVehicleEF	LHD2	0.12	0.12
tblVehicleEF	LHD2	0.76	0.57
tblVehicleEF	LHD2	1.57	1.26
tblVehicleEF	LHD2	9.92	9.57
tblVehicleEF	LHD2	525.66	504.19
tblVehicleEF	LHD2	20.16	19.40
tblVehicleEF	LHD2	7.5110e-003	0.00
tblVehicleEF	LHD2	0.14	0.14
tblVehicleEF	LHD2	3.22	2.55
tblVehicleEF	LHD2	0.50	0.48
tblVehicleEF	LHD2	1.4300e-003	1.4250e-003
tblVehicleEF	LHD2	0.07	0.07
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	0.02	0.01
tblVehicleEF	LHD2	6.0800e-004	3.9600e-004

tblVehicleEF	LHD2	1.3150e-003	1.3110e-003
tblVehicleEF	LHD2	0.03	0.03
tblVehicleEF	LHD2	2.6940e-003	2.6900e-003
tblVehicleEF	LHD2	0.02	0.01
tblVehicleEF	LHD2	5.4000e-004	3.5900e-004
tblVehicleEF	LHD2	2.5460e-003	2.1330e-003
tblVehicleEF	LHD2	0.05	0.04
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	1.4320e-003	1.2540e-003
tblVehicleEF	LHD2	0.08	0.07
tblVehicleEF	LHD2	0.25	0.22
tblVehicleEF	LHD2	0.15	0.12
tblVehicleEF	LHD2	5.1760e-003	5.1450e-003
tblVehicleEF	LHD2	2.3400e-004	2.2700e-004
tblVehicleEF	LHD2	2.5460e-003	2.1330e-003
tblVehicleEF	LHD2	0.05	0.04
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	1.4320e-003	1.2540e-003
tblVehicleEF	LHD2	0.10	0.08
tblVehicleEF	LHD2	0.25	0.22
tblVehicleEF	LHD2	0.16	0.13
tblVehicleEF	LHD2	8.0700e-004	8.0000e-004
tblVehicleEF	LHD2	6.6850e-003	5.3800e-003
tblVehicleEF	LHD2	9.5610e-003	7.5190e-003
tblVehicleEF	LHD2	0.12	0.12
tblVehicleEF	LHD2	0.75	0.56
tblVehicleEF	LHD2	1.78	1.45
tblVehicleEF	LHD2	9.92	9.57
tblVehicleEF	LHD2	525.66	504.19
tblVehicleEF	LHD2	20.16	19.40
tblVehicleEF	LHD2	7.5110e-003	0.00
tblVehicleEF	LHD2	0.14	0.14

tblVehicleEF	LHD2	3.36	2.66
tblVehicleEF	LHD2	0.52	0.49
tblVehicleEF	LHD2	1.4300e-003	1.4250e-003
tblVehicleEF	LHD2	0.07	0.07
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	0.02	0.01
tblVehicleEF	LHD2	6.0800e-004	3.9600e-004
tblVehicleEF	LHD2	1.3150e-003	1.3110e-003
tblVehicleEF	LHD2	0.03	0.03
tblVehicleEF	LHD2	2.6940e-003	2.6900e-003
tblVehicleEF	LHD2	0.02	0.01
tblVehicleEF	LHD2	5.4000e-004	3.5900e-004
tblVehicleEF	LHD2	1.5920e-003	1.2850e-003
tblVehicleEF	LHD2	0.05	0.04
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	7.4400e-004	6.6500e-004
tblVehicleEF	LHD2	0.08	0.07
tblVehicleEF	LHD2	0.27	0.23
tblVehicleEF	LHD2	0.16	0.13
tblVehicleEF	LHD2	5.1750e-003	5.1450e-003
tblVehicleEF	LHD2	2.3700e-004	2.3100e-004
tblVehicleEF	LHD2	1.5920e-003	1.2850e-003
tblVehicleEF	LHD2	0.05	0.04
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	7.4400e-004	6.6500e-004
tblVehicleEF	LHD2	0.10	0.08
tblVehicleEF	LHD2	0.27	0.23
tblVehicleEF	LHD2	0.17	0.14
tblVehicleEF	MCY	29.62	25.55
tblVehicleEF	MCY	9.82	9.98
tblVehicleEF	MCY	146.18	147.32
tblVehicleEF	MCY	46.13	42.01

tblVehicleEF	MCY	6.3790e-003	6.5000e-003
tblVehicleEF	MCY	1.25	1.22
tblVehicleEF	MCY	0.31	0.31
tblVehicleEF	MCY	0.04	0.04
tblVehicleEF	MCY	6.8400e-004	4.3000e-004
tblVehicleEF	MCY	1.8270e-003	1.1950e-003
tblVehicleEF	MCY	0.02	0.02
tblVehicleEF	MCY	5.5000e-004	3.5400e-004
tblVehicleEF	MCY	1.4460e-003	9.7300e-004
tblVehicleEF	MCY	1.14	1.11
tblVehicleEF	MCY	0.48	0.44
tblVehicleEF	MCY	0.59	0.57
tblVehicleEF	MCY	2.77	2.59
tblVehicleEF	MCY	1.60	1.33
tblVehicleEF	MCY	2.16	2.10
tblVehicleEF	MCY	2.0360e-003	2.0330e-003
tblVehicleEF	MCY	6.9100e-004	6.6500e-004
tblVehicleEF	MCY	1.14	1.11
tblVehicleEF	MCY	0.48	0.44
tblVehicleEF	MCY	0.59	0.57
tblVehicleEF	MCY	3.02	2.84
tblVehicleEF	MCY	1.60	1.33
tblVehicleEF	MCY	2.32	2.25
tblVehicleEF	MCY	29.25	25.25
tblVehicleEF	MCY	8.82	8.83
tblVehicleEF	MCY	146.18	147.32
tblVehicleEF	MCY	46.13	42.01
tblVehicleEF	MCY	6.3790e-003	6.5000e-003
tblVehicleEF	MCY	1.08	1.05
tblVehicleEF	MCY	0.29	0.29
tblVehicleEF	MCY	0.04	0.04
tblVehicleEF	MCY	6.8400e-004	4.3000e-004

tblVehicleEF	MCY	1.8270e-003	1.1950e-003
tblVehicleEF	MCY	0.02	0.02
tblVehicleEF	MCY	5.5000e-004	3.5400e-004
tblVehicleEF	MCY	1.4460e-003	9.7300e-004
tblVehicleEF	MCY	2.21	2.16
tblVehicleEF	MCY	0.69	0.65
tblVehicleEF	MCY	1.44	1.40
tblVehicleEF	MCY	2.69	2.53
tblVehicleEF	MCY	1.57	1.30
tblVehicleEF	MCY	1.88	1.83
tblVehicleEF	MCY	2.0280e-003	2.0270e-003
tblVehicleEF	MCY	6.6600e-004	6.3800e-004
tblVehicleEF	MCY	2.21	2.16
tblVehicleEF	MCY	0.69	0.65
tblVehicleEF	MCY	1.44	1.40
tblVehicleEF	MCY	2.94	2.78
tblVehicleEF	MCY	1.57	1.30
tblVehicleEF	MCY	2.02	1.97
tblVehicleEF	MCY	28.65	24.76
tblVehicleEF	MCY	9.47	9.62
tblVehicleEF	MCY	146.18	147.32
tblVehicleEF	MCY	46.13	42.01
tblVehicleEF	MCY	6.3790e-003	6.5000e-003
tblVehicleEF	MCY	1.21	1.17
tblVehicleEF	MCY	0.30	0.30
tblVehicleEF	MCY	0.04	0.04
tblVehicleEF	MCY	6.8400e-004	4.3000e-004
tblVehicleEF	MCY	1.8270e-003	1.1950e-003
tblVehicleEF	MCY	0.02	0.02
tblVehicleEF	MCY	5.5000e-004	3.5400e-004
tblVehicleEF	MCY	1.4460e-003	9.7300e-004
tblVehicleEF	MCY	1.35	1.32

tblVehicleEF	MCY	0.67	0.61
tblVehicleEF	MCY	0.60	0.58
tblVehicleEF	MCY	2.73	2.57
tblVehicleEF	MCY	1.85	1.56
tblVehicleEF	MCY	2.08	2.03
tblVehicleEF	MCY	6.8300e-004	6.5700e-004
tblVehicleEF	MCY	1.35	1.32
tblVehicleEF	MCY	0.67	0.61
tblVehicleEF	MCY	0.60	0.58
tblVehicleEF	MCY	2.99	2.81
tblVehicleEF	MCY	1.85	1.56
tblVehicleEF	MCY	2.24	2.18
tblVehicleEF	MDV	0.03	0.02
tblVehicleEF	MDV	0.02	0.02
tblVehicleEF	MDV	2.15	1.74
tblVehicleEF	MDV	4.89	3.97
tblVehicleEF	MDV	535.78	490.34
tblVehicleEF	MDV	119.36	110.98
tblVehicleEF	MDV	0.17	0.05
tblVehicleEF	MDV	0.30	0.23
tblVehicleEF	MDV	0.49	0.39
tblVehicleEF	MDV	1.8140e-003	1.7020e-003
tblVehicleEF	MDV	3.0910e-003	3.1950e-003
tblVehicleEF	MDV	1.6670e-003	1.5700e-003
tblVehicleEF	MDV	2.8470e-003	2.9530e-003
tblVehicleEF	MDV	0.09	0.09
tblVehicleEF	MDV	0.18	0.19
tblVehicleEF	MDV	0.07	0.07
tblVehicleEF	MDV	0.05	0.04
tblVehicleEF	MDV	0.56	0.56
tblVehicleEF	MDV	0.43	0.34
tblVehicleEF	MDV	5.7720e-003	5.7530e-003

tblVehicleEF	MDV	1.3510e-003	1.3420e-003
tblVehicleEF	MDV	0.09	0.09
tblVehicleEF	MDV	0.18	0.19
tblVehicleEF	MDV	0.07	0.07
tblVehicleEF	MDV	0.08	0.06
tblVehicleEF	MDV	0.56	0.56
tblVehicleEF	MDV	0.46	0.37
tblVehicleEF	MDV	0.03	0.02
tblVehicleEF	MDV	0.02	0.02
tblVehicleEF	MDV	2.52	2.04
tblVehicleEF	MDV	3.76	3.05
tblVehicleEF	MDV	578.32	529.45
tblVehicleEF	MDV	119.36	110.98
tblVehicleEF	MDV	0.17	0.05
tblVehicleEF	MDV	0.27	0.21
tblVehicleEF	MDV	0.45	0.36
tblVehicleEF	MDV	1.8140e-003	1.7020e-003
tblVehicleEF	MDV	3.0910e-003	3.1950e-003
tblVehicleEF	MDV	1.6670e-003	1.5700e-003
tblVehicleEF	MDV	2.8470e-003	2.9530e-003
tblVehicleEF	MDV	0.17	0.17
tblVehicleEF	MDV	0.21	0.21
tblVehicleEF	MDV	0.14	0.14
tblVehicleEF	MDV	0.06	0.04
tblVehicleEF	MDV	0.55	0.55
tblVehicleEF	MDV	0.36	0.29
tblVehicleEF	MDV	6.2350e-003	6.2170e-003
tblVehicleEF	MDV	1.3310e-003	1.3250e-003
tblVehicleEF	MDV	0.17	0.17
tblVehicleEF	MDV	0.21	0.21
tblVehicleEF	MDV	0.14	0.14
tblVehicleEF	MDV	0.09	0.07

tblVehicleEF	MDV	0.55	0.55
tblVehicleEF	MDV	0.38	0.31
tblVehicleEF	MDV	0.03	0.02
tblVehicleEF	MDV	0.02	0.02
tblVehicleEF	MDV	2.07	1.67
tblVehicleEF	MDV	4.80	3.90
tblVehicleEF	MDV	528.58	483.73
tblVehicleEF	MDV	119.36	110.98
tblVehicleEF	MDV	0.17	0.05
tblVehicleEF	MDV	0.28	0.22
tblVehicleEF	MDV	0.49	0.39
tblVehicleEF	MDV	1.8140e-003	1.7020e-003
tblVehicleEF	MDV	3.0910e-003	3.1950e-003
tblVehicleEF	MDV	1.6670e-003	1.5700e-003
tblVehicleEF	MDV	2.8470e-003	2.9530e-003
tblVehicleEF	MDV	0.09	0.09
tblVehicleEF	MDV	0.21	0.21
tblVehicleEF	MDV	0.07	0.08
tblVehicleEF	MDV	0.05	0.04
tblVehicleEF	MDV	0.65	0.64
tblVehicleEF	MDV	0.42	0.34
tblVehicleEF	MDV	5.6930e-003	5.6740e-003
tblVehicleEF	MDV	1.3490e-003	1.3400e-003
tblVehicleEF	MDV	0.09	0.09
tblVehicleEF	MDV	0.21	0.21
tblVehicleEF	MDV	0.07	0.08
tblVehicleEF	MDV	0.08	0.06
tblVehicleEF	MDV	0.65	0.64
tblVehicleEF	MDV	0.45	0.36
tblVehicleEF	MH	3.88	2.09
tblVehicleEF	MH	8.66	6.72
tblVehicleEF	MH	641.58	610.48

tblVehicleEF	MH	30.89	28.70
tblVehicleEF	MH	3.2450e-003	0.00
tblVehicleEF	MH	1.96	1.59
tblVehicleEF	MH	0.84	0.71
tblVehicleEF	MH	0.05	0.05
tblVehicleEF	MH	8.7310e-003	8.7200e-003
tblVehicleEF	MH	0.04	0.03
tblVehicleEF	MH	1.5190e-003	8.9800e-004
tblVehicleEF	MH	0.02	0.02
tblVehicleEF	MH	2.1830e-003	2.1800e-003
tblVehicleEF	MH	0.03	0.03
tblVehicleEF	MH	1.3260e-003	8.0900e-004
tblVehicleEF	MH	1.46	1.21
tblVehicleEF	MH	0.08	0.07
tblVehicleEF	MH	0.51	0.43
tblVehicleEF	MH	0.10	0.06
tblVehicleEF	MH	1.84	1.69
tblVehicleEF	MH	0.52	0.38
tblVehicleEF	MH	6.4790e-003	6.3630e-003
tblVehicleEF	MH	4.6500e-004	4.1900e-004
tblVehicleEF	MH	1.46	1.21
tblVehicleEF	MH	0.08	0.07
tblVehicleEF	MH	0.51	0.43
tblVehicleEF	MH	0.12	0.08
tblVehicleEF	MH	1.84	1.69
tblVehicleEF	MH	0.56	0.41
tblVehicleEF	MH	3.99	2.15
tblVehicleEF	MH	6.88	5.32
tblVehicleEF	MH	641.58	610.48
tblVehicleEF	MH	30.89	28.70
tblVehicleEF	MH	3.2450e-003	0.00
tblVehicleEF	MH	1.79	1.47

tblVehicleEF	MH	0.81	0.68
tblVehicleEF	MH	0.05	0.05
tblVehicleEF	MH	8.7310e-003	8.7200e-003
tblVehicleEF	MH	0.04	0.03
tblVehicleEF	MH	1.5190e-003	8.9800e-004
tblVehicleEF	MH	0.02	0.02
tblVehicleEF	MH	2.1830e-003	2.1800e-003
tblVehicleEF	MH	0.03	0.03
tblVehicleEF	MH	1.3260e-003	8.0900e-004
tblVehicleEF	MH	2.58	2.12
tblVehicleEF	MH	0.10	0.08
tblVehicleEF	MH	1.04	0.86
tblVehicleEF	MH	0.10	0.06
tblVehicleEF	MH	1.83	1.68
tblVehicleEF	MH	0.44	0.33
tblVehicleEF	MH	6.4800e-003	6.3640e-003
tblVehicleEF	MH	4.3500e-004	3.9500e-004
tblVehicleEF	MH	2.58	2.12
tblVehicleEF	MH	0.10	0.08
tblVehicleEF	MH	1.04	0.86
tblVehicleEF	MH	0.12	0.08
tblVehicleEF	MH	1.83	1.68
tblVehicleEF	MH	0.47	0.35
tblVehicleEF	MH	3.85	2.08
tblVehicleEF	MH	8.06	6.26
tblVehicleEF	MH	641.58	610.48
tblVehicleEF	MH	30.89	28.70
tblVehicleEF	MH	3.2450e-003	0.00
tblVehicleEF	MH	1.91	1.56
tblVehicleEF	MH	0.83	0.71
tblVehicleEF	MH	0.05	0.05
tblVehicleEF	MH	8.7310e-003	8.7200e-003

tblVehicleEF	MH	0.04	0.03
tblVehicleEF	MH	1.5190e-003	8.9800e-004
tblVehicleEF	MH	0.02	0.02
tblVehicleEF	MH	2.1830e-003	2.1800e-003
tblVehicleEF	MH	0.03	0.03
tblVehicleEF	MH	1.3260e-003	8.0900e-004
tblVehicleEF	MH	1.81	1.45
tblVehicleEF	MH	0.11	0.09
tblVehicleEF	MH	0.58	0.48
tblVehicleEF	MH	0.10	0.06
tblVehicleEF	MH	1.94	1.78
tblVehicleEF	MH	0.49	0.36
tblVehicleEF	MH	6.4780e-003	6.3630e-003
tblVehicleEF	MH	4.5500e-004	4.1100e-004
tblVehicleEF	MH	1.81	1.45
tblVehicleEF	MH	0.11	0.09
tblVehicleEF	MH	0.58	0.48
tblVehicleEF	MH	0.12	0.08
tblVehicleEF	MH	1.94	1.78
tblVehicleEF	MH	0.53	0.39
tblVehicleEF	MHD	9.1490e-003	7.3280e-003
tblVehicleEF	MHD	6.8430e-003	4.0920e-003
tblVehicleEF	MHD	1.98	1.82
tblVehicleEF	MHD	1.20	0.76
tblVehicleEF	MHD	21.46	16.24
tblVehicleEF	MHD	606.65	598.70
tblVehicleEF	MHD	983.19	940.03
tblVehicleEF	MHD	63.82	55.58
tblVehicleEF	MHD	0.01	0.00
tblVehicleEF	MHD	7.20	5.92
tblVehicleEF	MHD	4.52	2.71
tblVehicleEF	MHD	1.95	1.61

tblVehicleEF	MHD	0.04	0.02
tblVehicleEF	MHD	0.12	0.12
tblVehicleEF	MHD	0.14	0.08
tblVehicleEF	MHD	5.0040e-003	2.6400e-003
tblVehicleEF	MHD	0.04	0.02
tblVehicleEF	MHD	0.05	0.05
tblVehicleEF	MHD	0.13	0.08
tblVehicleEF	MHD	4.1210e-003	2.2570e-003
tblVehicleEF	MHD	5.5100e-003	3.9430e-003
tblVehicleEF	MHD	0.21	0.14
tblVehicleEF	MHD	0.20	0.16
tblVehicleEF	MHD	2.6470e-003	1.9790e-003
tblVehicleEF	MHD	0.17	0.10
tblVehicleEF	MHD	0.91	0.68
tblVehicleEF	MHD	1.56	1.05
tblVehicleEF	MHD	5.8760e-003	6.0130e-003
tblVehicleEF	MHD	9.5670e-003	9.4790e-003
tblVehicleEF	MHD	1.0330e-003	8.7200e-004
tblVehicleEF	MHD	5.5100e-003	3.9430e-003
tblVehicleEF	MHD	0.21	0.14
tblVehicleEF	MHD	0.22	0.18
tblVehicleEF	MHD	2.6470e-003	1.9790e-003
tblVehicleEF	MHD	0.19	0.11
tblVehicleEF	MHD	0.91	0.68
tblVehicleEF	MHD	1.68	1.12
tblVehicleEF	MHD	8.6220e-003	6.9060e-003
tblVehicleEF	MHD	6.8430e-003	4.0920e-003
tblVehicleEF	MHD	1.44	1.33
tblVehicleEF	MHD	1.21	0.77
tblVehicleEF	MHD	18.00	13.26
tblVehicleEF	MHD	642.69	634.27
tblVehicleEF	MHD	983.19	940.03

tblVehicleEF	MHD	63.82	55.58
tblVehicleEF	MHD	0.01	0.00
tblVehicleEF	MHD	7.43	6.11
tblVehicleEF	MHD	4.26	2.55
tblVehicleEF	MHD	1.87	1.55
tblVehicleEF	MHD	0.04	0.02
tblVehicleEF	MHD	0.12	0.12
tblVehicleEF	MHD	0.14	0.08
tblVehicleEF	MHD	5.0040e-003	2.6400e-003
tblVehicleEF	MHD	0.03	0.02
tblVehicleEF	MHD	0.05	0.05
tblVehicleEF	MHD	0.13	0.08
tblVehicleEF	MHD	4.1210e-003	2.2570e-003
tblVehicleEF	MHD	0.01	7.2010e-003
tblVehicleEF	MHD	0.24	0.16
tblVehicleEF	MHD	0.19	0.15
tblVehicleEF	MHD	5.6750e-003	4.0890e-003
tblVehicleEF	MHD	0.17	0.10
tblVehicleEF	MHD	0.91	0.68
tblVehicleEF	MHD	1.35	0.91
tblVehicleEF	MHD	6.2250e-003	6.3700e-003
tblVehicleEF	MHD	9.5670e-003	9.4790e-003
tblVehicleEF	MHD	9.7200e-004	8.2100e-004
tblVehicleEF	MHD	0.01	7.2010e-003
tblVehicleEF	MHD	0.24	0.16
tblVehicleEF	MHD	0.21	0.17
tblVehicleEF	MHD	5.6750e-003	4.0890e-003
tblVehicleEF	MHD	0.19	0.11
tblVehicleEF	MHD	0.91	0.68
tblVehicleEF	MHD	1.45	0.98
tblVehicleEF	MHD	9.8770e-003	7.9110e-003
tblVehicleEF	MHD	6.8430e-003	4.0920e-003

tblVehicleEF	MHD	2.73	2.51
tblVehicleEF	MHD	1.19	0.76
tblVehicleEF	MHD	20.21	15.25
tblVehicleEF	MHD	556.87	549.58
tblVehicleEF	MHD	983.19	940.03
tblVehicleEF	MHD	63.82	55.58
tblVehicleEF	MHD	0.01	0.00
tblVehicleEF	MHD	6.88	5.65
tblVehicleEF	MHD	4.45	2.67
tblVehicleEF	MHD	1.93	1.60
tblVehicleEF	MHD	0.05	0.02
tblVehicleEF	MHD	0.12	0.12
tblVehicleEF	MHD	0.14	0.08
tblVehicleEF	MHD	5.0040e-003	2.6400e-003
tblVehicleEF	MHD	0.05	0.02
tblVehicleEF	MHD	0.05	0.05
tblVehicleEF	MHD	0.13	0.08
tblVehicleEF	MHD	4.1210e-003	2.2570e-003
tblVehicleEF	MHD	6.5390e-003	4.5130e-003
tblVehicleEF	MHD	0.27	0.17
tblVehicleEF	MHD	0.21	0.17
tblVehicleEF	MHD	2.9760e-003	2.1720e-003
tblVehicleEF	MHD	0.17	0.10
tblVehicleEF	MHD	0.98	0.73
tblVehicleEF	MHD	1.48	1.00
tblVehicleEF	MHD	5.3940e-003	5.5190e-003
tblVehicleEF	MHD	9.5660e-003	9.4790e-003
tblVehicleEF	MHD	1.0110e-003	8.5500e-004
tblVehicleEF	MHD	6.5390e-003	4.5130e-003
tblVehicleEF	MHD	0.27	0.17
tblVehicleEF	MHD	0.24	0.19
tblVehicleEF	MHD	2.9760e-003	2.1720e-003

tblVehicleEF	MHD	0.19	0.11
tblVehicleEF	MHD	0.98	0.73
tblVehicleEF	MHD	1.59	1.08
tblVehicleEF	OBUS	0.02	0.02
tblVehicleEF	OBUS	2.2030e-003	1.8730e-003
tblVehicleEF	OBUS	2.30	2.37
tblVehicleEF	OBUS	2.18	1.56
tblVehicleEF	OBUS	12.87	11.34
tblVehicleEF	OBUS	573.90	563.74
tblVehicleEF	OBUS	933.78	920.98
tblVehicleEF	OBUS	37.90	35.44
tblVehicleEF	OBUS	1.0120e-003	0.00
tblVehicleEF	OBUS	7.28	5.55
tblVehicleEF	OBUS	4.81	3.18
tblVehicleEF	OBUS	1.69	1.54
tblVehicleEF	OBUS	0.06	0.01
tblVehicleEF	OBUS	0.08	0.09
tblVehicleEF	OBUS	9.9180e-003	0.01
tblVehicleEF	OBUS	0.08	0.04
tblVehicleEF	OBUS	1.5340e-003	1.0490e-003
tblVehicleEF	OBUS	0.05	9.6700e-003
tblVehicleEF	OBUS	0.03	0.04
tblVehicleEF	OBUS	2.4800e-003	2.5210e-003
tblVehicleEF	OBUS	0.07	0.04
tblVehicleEF	OBUS	1.3140e-003	9.2500e-004
tblVehicleEF	OBUS	1.2410e-003	1.2110e-003
tblVehicleEF	OBUS	0.03	0.03
tblVehicleEF	OBUS	0.49	0.40
tblVehicleEF	OBUS	5.5100e-004	5.6800e-004
tblVehicleEF	OBUS	0.16	0.10
tblVehicleEF	OBUS	0.27	0.29
tblVehicleEF	OBUS	0.82	0.70

tblVehicleEF	OBUS	5.5590e-003	5.6610e-003
tblVehicleEF	OBUS	9.2020e-003	9.3860e-003
tblVehicleEF	OBUS	6.1200e-004	5.7300e-004
tblVehicleEF	OBUS	1.2410e-003	1.2110e-003
tblVehicleEF	OBUS	0.03	0.03
tblVehicleEF	OBUS	0.56	0.46
tblVehicleEF	OBUS	5.5100e-004	5.6800e-004
tblVehicleEF	OBUS	0.20	0.13
tblVehicleEF	OBUS	0.27	0.29
tblVehicleEF	OBUS	0.88	0.75
tblVehicleEF	OBUS	0.02	0.02
tblVehicleEF	OBUS	2.2030e-003	1.8730e-003
tblVehicleEF	OBUS	1.67	1.72
tblVehicleEF	OBUS	2.22	1.59
tblVehicleEF	OBUS	10.52	9.20
tblVehicleEF	OBUS	607.99	597.23
tblVehicleEF	OBUS	933.78	920.98
tblVehicleEF	OBUS	37.90	35.44
tblVehicleEF	OBUS	1.0120e-003	0.00
tblVehicleEF	OBUS	7.51	5.73
tblVehicleEF	OBUS	4.48	2.96
tblVehicleEF	OBUS	1.62	1.48
tblVehicleEF	OBUS	0.05	8.8610e-003
tblVehicleEF	OBUS	0.08	0.09
tblVehicleEF	OBUS	9.9180e-003	0.01
tblVehicleEF	OBUS	0.08	0.04
tblVehicleEF	OBUS	1.5340e-003	1.0490e-003
tblVehicleEF	OBUS	0.05	8.1520e-003
tblVehicleEF	OBUS	0.03	0.04
tblVehicleEF	OBUS	2.4800e-003	2.5210e-003
tblVehicleEF	OBUS	0.07	0.04
tblVehicleEF	OBUS	1.3140e-003	9.2500e-004

tblVehicleEF	OBUS	2.2230e-003	2.1460e-003
tblVehicleEF	OBUS	0.04	0.04
tblVehicleEF	OBUS	0.46	0.38
tblVehicleEF	OBUS	1.1300e-003	1.1190e-003
tblVehicleEF	OBUS	0.16	0.11
tblVehicleEF	OBUS	0.27	0.29
tblVehicleEF	OBUS	0.72	0.62
tblVehicleEF	OBUS	5.8890e-003	5.9980e-003
tblVehicleEF	OBUS	9.2020e-003	9.3860e-003
tblVehicleEF	OBUS	5.7200e-004	5.3600e-004
tblVehicleEF	OBUS	2.2230e-003	2.1460e-003
tblVehicleEF	OBUS	0.04	0.04
tblVehicleEF	OBUS	0.53	0.43
tblVehicleEF	OBUS	1.1300e-003	1.1190e-003
tblVehicleEF	OBUS	0.20	0.13
tblVehicleEF	OBUS	0.27	0.29
tblVehicleEF	OBUS	0.77	0.66
tblVehicleEF	OBUS	0.02	0.02
tblVehicleEF	OBUS	2.2030e-003	1.8730e-003
tblVehicleEF	OBUS	3.17	3.26
tblVehicleEF	OBUS	2.18	1.56
tblVehicleEF	OBUS	12.11	10.66
tblVehicleEF	OBUS	526.81	517.49
tblVehicleEF	OBUS	933.78	920.98
tblVehicleEF	OBUS	37.90	35.44
tblVehicleEF	OBUS	1.0120e-003	0.00
tblVehicleEF	OBUS	6.96	5.30
tblVehicleEF	OBUS	4.72	3.12
tblVehicleEF	OBUS	1.67	1.52
tblVehicleEF	OBUS	0.07	0.01
tblVehicleEF	OBUS	0.08	0.09
tblVehicleEF	OBUS	9.9180e-003	0.01

tblVehicleEF	OBUS	0.08	0.04
tblVehicleEF	OBUS	1.5340e-003	1.0490e-003
tblVehicleEF	OBUS	0.07	0.01
tblVehicleEF	OBUS	0.03	0.04
tblVehicleEF	OBUS	2.4800e-003	2.5210e-003
tblVehicleEF	OBUS	0.07	0.04
tblVehicleEF	OBUS	1.3140e-003	9.2500e-004
tblVehicleEF	OBUS	1.3870e-003	1.2800e-003
tblVehicleEF	OBUS	0.04	0.04
tblVehicleEF	OBUS	0.53	0.44
tblVehicleEF	OBUS	0.16	0.10
tblVehicleEF	OBUS	0.29	0.31
tblVehicleEF	OBUS	0.79	0.68
tblVehicleEF	OBUS	5.1030e-003	5.1970e-003
tblVehicleEF	OBUS	9.2020e-003	9.3860e-003
tblVehicleEF	OBUS	5.9900e-004	5.6100e-004
tblVehicleEF	OBUS	1.3870e-003	1.2800e-003
tblVehicleEF	OBUS	0.04	0.04
tblVehicleEF	OBUS	0.60	0.50
tblVehicleEF	OBUS	0.20	0.13
tblVehicleEF	OBUS	0.29	0.31
tblVehicleEF	OBUS	0.84	0.72
tblVehicleEF	SBUS	5.3980e-003	5.4440e-003
tblVehicleEF	SBUS	7.2840e-003	7.6850e-003
tblVehicleEF	SBUS	1.04	1.07
tblVehicleEF	SBUS	2.82	2.15
tblVehicleEF	SBUS	20.97	18.54
tblVehicleEF	SBUS	581.72	562.55
tblVehicleEF	SBUS	1,135.42	1,089.38
tblVehicleEF	SBUS	129.31	123.07
tblVehicleEF	SBUS	9.2500e-004	0.00
tblVehicleEF	SBUS	8.19	8.05

tblVehicleEF	SBUS	7.92	7.70
tblVehicleEF	SBUS	1.52	1.42
tblVehicleEF	SBUS	0.03	0.03
tblVehicleEF	SBUS	0.56	0.55
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.08	0.08
tblVehicleEF	SBUS	3.7230e-003	2.5670e-003
tblVehicleEF	SBUS	0.03	0.02
tblVehicleEF	SBUS	0.24	0.24
tblVehicleEF	SBUS	2.7360e-003	2.7280e-003
tblVehicleEF	SBUS	0.08	0.08
tblVehicleEF	SBUS	3.1720e-003	2.2530e-003
tblVehicleEF	SBUS	0.02	0.02
tblVehicleEF	SBUS	0.16	0.14
tblVehicleEF	SBUS	0.12	0.12
tblVehicleEF	SBUS	8.5740e-003	8.3080e-003
tblVehicleEF	SBUS	0.28	0.26
tblVehicleEF	SBUS	1.31	1.27
tblVehicleEF	SBUS	1.44	1.22
tblVehicleEF	SBUS	5.6340e-003	5.6490e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	1.6850e-003	1.6230e-003
tblVehicleEF	SBUS	0.02	0.02
tblVehicleEF	SBUS	0.16	0.14
tblVehicleEF	SBUS	0.13	0.13
tblVehicleEF	SBUS	8.5740e-003	8.3080e-003
tblVehicleEF	SBUS	0.32	0.29
tblVehicleEF	SBUS	1.31	1.27
tblVehicleEF	SBUS	1.54	1.30
tblVehicleEF	SBUS	5.0870e-003	5.1310e-003
tblVehicleEF	SBUS	7.2840e-003	7.6850e-003
tblVehicleEF	SBUS	0.76	0.78

tblVehicleEF	SBUS	2.82	2.17
tblVehicleEF	SBUS	17.82	15.65
tblVehicleEF	SBUS	616.28	595.97
tblVehicleEF	SBUS	1,135.42	1,089.38
tblVehicleEF	SBUS	129.31	123.07
tblVehicleEF	SBUS	9.2500e-004	0.00
tblVehicleEF	SBUS	8.46	8.31
tblVehicleEF	SBUS	7.44	7.24
tblVehicleEF	SBUS	1.41	1.33
tblVehicleEF	SBUS	0.02	0.02
tblVehicleEF	SBUS	0.56	0.55
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.08	0.08
tblVehicleEF	SBUS	3.7230e-003	2.5670e-003
tblVehicleEF	SBUS	0.02	0.02
tblVehicleEF	SBUS	0.24	0.24
tblVehicleEF	SBUS	2.7360e-003	2.7280e-003
tblVehicleEF	SBUS	0.08	0.08
tblVehicleEF	SBUS	3.1720e-003	2.2530e-003
tblVehicleEF	SBUS	0.04	0.04
tblVehicleEF	SBUS	0.18	0.16
tblVehicleEF	SBUS	0.11	0.11
tblVehicleEF	SBUS	0.02	0.02
tblVehicleEF	SBUS	0.28	0.26
tblVehicleEF	SBUS	1.21	1.17
tblVehicleEF	SBUS	1.26	1.08
tblVehicleEF	SBUS	5.9690e-003	5.9850e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	1.6300e-003	1.5730e-003
tblVehicleEF	SBUS	0.04	0.04
tblVehicleEF	SBUS	0.18	0.16
tblVehicleEF	SBUS	0.12	0.13

tblVehicleEF	SBUS	0.02	0.02
tblVehicleEF	SBUS	0.32	0.30
tblVehicleEF	SBUS	1.21	1.17
tblVehicleEF	SBUS	1.35	1.15
tblVehicleEF	SBUS	5.8270e-003	5.8770e-003
tblVehicleEF	SBUS	7.2840e-003	7.6850e-003
tblVehicleEF	SBUS	1.44	1.47
tblVehicleEF	SBUS	2.79	2.14
tblVehicleEF	SBUS	20.75	18.34
tblVehicleEF	SBUS	533.99	516.39
tblVehicleEF	SBUS	1,135.42	1,089.38
tblVehicleEF	SBUS	129.31	123.07
tblVehicleEF	SBUS	9.2500e-004	0.00
tblVehicleEF	SBUS	7.83	7.69
tblVehicleEF	SBUS	7.80	7.59
tblVehicleEF	SBUS	1.52	1.43
tblVehicleEF	SBUS	0.03	0.03
tblVehicleEF	SBUS	0.56	0.55
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.08	0.08
tblVehicleEF	SBUS	3.7230e-003	2.5670e-003
tblVehicleEF	SBUS	0.03	0.03
tblVehicleEF	SBUS	0.24	0.24
tblVehicleEF	SBUS	2.7360e-003	2.7280e-003
tblVehicleEF	SBUS	0.08	0.08
tblVehicleEF	SBUS	3.1720e-003	2.2530e-003
tblVehicleEF	SBUS	0.03	0.02
tblVehicleEF	SBUS	0.21	0.17
tblVehicleEF	SBUS	0.13	0.13
tblVehicleEF	SBUS	0.01	9.3800e-003
tblVehicleEF	SBUS	0.28	0.26
tblVehicleEF	SBUS	1.55	1.50

tblVehicleEF	SBUS	1.43	1.21
tblVehicleEF	SBUS	5.1720e-003	5.1860e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	1.6810e-003	1.6190e-003
tblVehicleEF	SBUS	0.03	0.02
tblVehicleEF	SBUS	0.21	0.17
tblVehicleEF	SBUS	0.14	0.14
tblVehicleEF	SBUS	0.01	9.3800e-003
tblVehicleEF	SBUS	0.32	0.29
tblVehicleEF	SBUS	1.55	1.50
tblVehicleEF	SBUS	1.53	1.30
tblVehicleEF	UBUS	7.66	6.87
tblVehicleEF	UBUS	26.64	25.29
tblVehicleEF	UBUS	1,579.79	1,511.41
tblVehicleEF	UBUS	78.93	75.81
tblVehicleEF	UBUS	1.0750e-003	0.00
tblVehicleEF	UBUS	9.15	8.60
tblVehicleEF	UBUS	3.10	3.03
tblVehicleEF	UBUS	0.12	0.12
tblVehicleEF	UBUS	1.3550e-003	1.1510e-003
tblVehicleEF	UBUS	0.11	0.11
tblVehicleEF	UBUS	1.2350e-003	1.0680e-003
tblVehicleEF	UBUS	0.01	0.01
tblVehicleEF	UBUS	0.19	0.18
tblVehicleEF	UBUS	7.0160e-003	6.9870e-003
tblVehicleEF	UBUS	0.88	0.82
tblVehicleEF	UBUS	1.02	1.11
tblVehicleEF	UBUS	1.86	1.79
tblVehicleEF	UBUS	0.02	0.02
tblVehicleEF	UBUS	1.2770e-003	1.2500e-003
tblVehicleEF	UBUS	0.01	0.01
tblVehicleEF	UBUS	0.19	0.18

tblVehicleEF	UBUS	7.0160e-003	6.9870e-003
tblVehicleEF	UBUS	0.97	0.91
tblVehicleEF	UBUS	1.02	1.11
tblVehicleEF	UBUS	1.99	1.91
tblVehicleEF	UBUS	7.81	7.02
tblVehicleEF	UBUS	22.16	21.00
tblVehicleEF	UBUS	1,579.79	1,511.41
tblVehicleEF	UBUS	78.93	75.81
tblVehicleEF	UBUS	1.0750e-003	0.00
tblVehicleEF	UBUS	8.52	8.01
tblVehicleEF	UBUS	2.95	2.88
tblVehicleEF	UBUS	0.12	0.12
tblVehicleEF	UBUS	1.3550e-003	1.1510e-003
tblVehicleEF	UBUS	0.11	0.11
tblVehicleEF	UBUS	1.2350e-003	1.0680e-003
tblVehicleEF	UBUS	0.02	0.02
tblVehicleEF	UBUS	0.23	0.22
tblVehicleEF	UBUS	0.01	0.01
tblVehicleEF	UBUS	0.90	0.84
tblVehicleEF	UBUS	0.99	1.08
tblVehicleEF	UBUS	1.67	1.60
tblVehicleEF	UBUS	0.02	0.02
tblVehicleEF	UBUS	1.2000e-003	1.1770e-003
tblVehicleEF	UBUS	0.02	0.02
tblVehicleEF	UBUS	0.23	0.22
tblVehicleEF	UBUS	0.01	0.01
tblVehicleEF	UBUS	0.99	0.93
tblVehicleEF	UBUS	0.99	1.08
tblVehicleEF	UBUS	1.78	1.71
tblVehicleEF	UBUS	7.65	6.88
tblVehicleEF	UBUS	25.64	24.33
tblVehicleEF	UBUS	1,579.79	1,511.41

tblVehicleEF	UBUS	78.93	75.81
tblVehicleEF	UBUS	1.0750e-003	0.00
tblVehicleEF	UBUS	8.97	8.43
tblVehicleEF	UBUS	3.08	3.00
tblVehicleEF	UBUS	0.12	0.12
tblVehicleEF	UBUS	1.3550e-003	1.1510e-003
tblVehicleEF	UBUS	0.11	0.11
tblVehicleEF	UBUS	1.2350e-003	1.0680e-003
tblVehicleEF	UBUS	0.02	0.02
tblVehicleEF	UBUS	0.23	0.22
tblVehicleEF	UBUS	7.6760e-003	7.5270e-003
tblVehicleEF	UBUS	0.88	0.82
tblVehicleEF	UBUS	1.20	1.31
tblVehicleEF	UBUS	1.82	1.75
tblVehicleEF	UBUS	0.02	0.02
tblVehicleEF	UBUS	1.2600e-003	1.2340e-003
tblVehicleEF	UBUS	0.02	0.02
tblVehicleEF	UBUS	0.23	0.22
tblVehicleEF	UBUS	7.6760e-003	7.5270e-003
tblVehicleEF	UBUS	0.97	0.91
tblVehicleEF	UBUS	1.20	1.31
tblVehicleEF	UBUS	1.95	1.87

2.0 Emissions Summary

	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

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	lb/day										lb/day					
Area	0.1021	1.0000e-005	8.4000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		1.7300e-003	1.7300e-003	1.0000e-005		1.8400e-003
Energy	0.0322	0.2926	0.2458	1.7600e-003		0.0222	0.0222		0.0222	0.0222		351.1571	351.1571	6.7300e-003	6.4400e-003	353.2942
Mobile	1.4214	1.4684	9.9864	0.0204	1.7620	0.0226	1.7846	0.4675	0.0208	0.4882		1,636.9919	1,636.9919	0.0676		1,638.4113
Total	1.5556	1.7610	10.2331	0.0221	1.7620	0.0448	1.8068	0.4675	0.0430	0.5105		1,988.1508	1,988.1508	0.0743	6.4400e-003	1,991.7073

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	lb/day										lb/day					
Area	0.1021	1.0000e-005	8.4000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		1.7300e-003	1.7300e-003	1.0000e-005		1.8400e-003
Energy	0.0322	0.2926	0.2458	1.7600e-003		0.0222	0.0222		0.0222	0.0222		351.1571	351.1571	6.7300e-003	6.4400e-003	353.2942
Mobile	1.4214	1.4684	9.9864	0.0204	1.7620	0.0226	1.7846	0.4675	0.0208	0.4882		1,636.9919	1,636.9919	0.0676		1,638.4113
Total	1.5556	1.7610	10.2331	0.0221	1.7620	0.0448	1.8068	0.4675	0.0430	0.5105		1,988.1508	1,988.1508	0.0743	6.4400e-003	1,991.7073

	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

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Building Construction	Building Construction	1/1/2017	12/30/2016	5	0	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Building Construction	Cranes	1	7.00	226	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Building Construction	9	2.00	1.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

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	lb/day										lb/day					
Unmitigated	1.4214	1.4684	9.9864	0.0204	1.7620	0.0226	1.7846	0.4675	0.0208	0.4882		1,636.9919	1,636.9919	0.0676		1,638.4113
Mitigated	1.4214	1.4684	9.9864	0.0204	1.7620	0.0226	1.7846	0.4675	0.0208	0.4882		1,636.9919	1,636.9919	0.0676		1,638.4113

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
High Turnover (Sit Down Restaurant)	495.89	617.64	514.18	703,073	703,073
Parking Lot	0.00	0.00	0.00		
Total	495.89	617.64	514.18	703,073	703,073

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
High Turnover (Sit Down	16.60	8.40	6.90	8.50	72.50	19.00	37	20	43
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.782800	0.080300	0.060200	0.050200	0.000000	0.000000	0.000000	0.020100	0.000000	0.000000	0.006500	0.000000	0.000000

5.0 Energy Detail

4.4 Fleet Mix

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	lb/day										lb/day					
NaturalGas Mitigated	0.0322	0.2926	0.2458	1.7600e-003		0.0222	0.0222		0.0222	0.0222		351.1571	351.1571	6.7300e-003	6.4400e-003	353.2942
NaturalGas Unmitigated	0.0322	0.2926	0.2458	1.7600e-003		0.0222	0.0222		0.0222	0.0222		351.1571	351.1571	6.7300e-003	6.4400e-003	353.2942

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	lb/day										lb/day					
High Turnover (Sit Down Restaurant)	2984.84	0.0322	0.2926	0.2458	1.7600e-003		0.0222	0.0222		0.0222	0.0222		351.1571	351.1571	6.7300e-003	6.4400e-003	353.2942
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
Total		0.0322	0.2926	0.2458	1.7600e-003		0.0222	0.0222		0.0222	0.0222		351.1571	351.1571	6.7300e-003	6.4400e-003	353.2942

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	lb/day										lb/day					
High Turnover (Sit Down Restaurant)	2.98484	0.0322	0.2926	0.2458	1.7600e-003		0.0222	0.0222		0.0222	0.0222		351.1571	351.1571	6.7300e-003	6.4400e-003	353.2942
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
Total		0.0322	0.2926	0.2458	1.7600e-003		0.0222	0.0222		0.0222	0.0222		351.1571	351.1571	6.7300e-003	6.4400e-003	353.2942

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	lb/day										lb/day					
Unmitigated	0.1021	1.0000e-005	8.4000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		1.7300e-003	1.7300e-003	1.0000e-005		1.8400e-003
Mitigated	0.1021	1.0000e-005	8.4000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		1.7300e-003	1.7300e-003	1.0000e-005		1.8400e-003

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0248					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0772					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	9.0000e-005	1.0000e-005	8.4000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		1.7300e-003	1.7300e-003	1.0000e-005		1.8400e-003
Total	0.1021	1.0000e-005	8.4000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		1.7300e-003	1.7300e-003	1.0000e-005		1.8400e-003

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	lb/day										lb/day					
Architectural Coating	0.0248					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0772					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	9.0000e-005	1.0000e-005	8.4000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		1.7300e-003	1.7300e-003	1.0000e-005		1.8400e-003
Total	0.1021	1.0000e-005	8.4000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		1.7300e-003	1.7300e-003	1.0000e-005		1.8400e-003

7.0 Water Detail

7.1 Mitigation Measures Water

Install Low Flow Bathroom Faucet
 Install Low Flow Kitchen Faucet
 Install Low Flow Toilet
 Install Low Flow Shower
 Use Water Efficient Irrigation System

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

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

10.0 Vegetation

Peninsula Retail Partners Commercial/Restaurant-Existing
Riverside-South Coast County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Parking Lot	4.00	Acre	4.00	0.00	0
High Turnover (Sit Down Restaurant)	3.90	1000sqft	0.09	3,900.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.4	Precipitation Freq (Days)	28
Climate Zone	10			Operational Year	2014
Utility Company	Riverside Public Utilities				
CO2 Intensity (lb/MW hr)	1325.65	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Estimated existing parking lot size from Google Aerial.

Construction Phase - Existing condition - no construction

Off-road Equipment -

Off-road Equipment - Existing condition - no construction

Trips and VMT - Existing condition - no construction

On-road Fugitive Dust -

Grading - Grading information provided by contractor

Vehicle Trips - Existing Dennys Restaurant

Vehicle Emission Factors - Adjusted fleet mix for a restaurant.

Vehicle Emission Factors - Adjusted fleet mix for a restaurant.

Vehicle Emission Factors - Adjusted fleet mix for a restaurant.

Construction Off-road Equipment Mitigation - Existing condition - no construction

Energy Mitigation -

Water Mitigation -

Energy Use - Existing Denny's Restaurant building is more than 20 years old.

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	230.00	0.00
tblEnergyUse	LightingElect	0.88	0.88
tblLandUse	LandUseSquareFeet	174,240.00	0.00
tblVehicleEF	HHD	0.02	0.02
tblVehicleEF	HHD	0.01	8.8790e-003
tblVehicleEF	HHD	2.78	2.88
tblVehicleEF	HHD	1.70	1.42
tblVehicleEF	HHD	60.65	51.71
tblVehicleEF	HHD	576.70	557.78
tblVehicleEF	HHD	1,629.98	1,560.95
tblVehicleEF	HHD	66.79	55.76
tblVehicleEF	HHD	0.04	0.02
tblVehicleEF	HHD	5.80	4.57
tblVehicleEF	HHD	7.75	5.37
tblVehicleEF	HHD	3.83	3.44
tblVehicleEF	HHD	0.03	0.01
tblVehicleEF	HHD	0.06	0.06
tblVehicleEF	HHD	0.03	0.04
tblVehicleEF	HHD	0.17	0.10
tblVehicleEF	HHD	5.0390e-003	2.0760e-003
tblVehicleEF	HHD	0.03	9.6140e-003
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	8.7490e-003	8.7560e-003
tblVehicleEF	HHD	0.15	0.09
tblVehicleEF	HHD	3.9960e-003	1.7220e-003

tblVehicleEF	HHD	3.7260e-003	2.1340e-003
tblVehicleEF	HHD	0.19	0.09
tblVehicleEF	HHD	0.52	0.51
tblVehicleEF	HHD	1.9840e-003	1.2460e-003
tblVehicleEF	HHD	0.26	0.19
tblVehicleEF	HHD	0.65	0.35
tblVehicleEF	HHD	2.49	1.66
tblVehicleEF	HHD	5.5860e-003	5.6020e-003
tblVehicleEF	HHD	0.02	0.02
tblVehicleEF	HHD	1.7070e-003	1.4500e-003
tblVehicleEF	HHD	3.7260e-003	2.1340e-003
tblVehicleEF	HHD	0.19	0.09
tblVehicleEF	HHD	0.59	0.58
tblVehicleEF	HHD	1.9840e-003	1.2460e-003
tblVehicleEF	HHD	0.30	0.22
tblVehicleEF	HHD	0.65	0.35
tblVehicleEF	HHD	2.67	1.77
tblVehicleEF	HHD	0.02	0.02
tblVehicleEF	HHD	0.01	8.8790e-003
tblVehicleEF	HHD	2.02	2.09
tblVehicleEF	HHD	1.70	1.42
tblVehicleEF	HHD	51.86	42.39
tblVehicleEF	HHD	610.97	590.92
tblVehicleEF	HHD	1,629.98	1,560.95
tblVehicleEF	HHD	66.79	55.76
tblVehicleEF	HHD	0.04	0.02
tblVehicleEF	HHD	5.98	4.71
tblVehicleEF	HHD	7.32	5.07
tblVehicleEF	HHD	3.67	3.30
tblVehicleEF	HHD	0.02	8.8100e-003
tblVehicleEF	HHD	0.06	0.06
tblVehicleEF	HHD	0.03	0.04

tblVehicleEF	HHD	0.17	0.10
tblVehicleEF	HHD	5.0390e-003	2.0760e-003
tblVehicleEF	HHD	0.02	8.1050e-003
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	8.7490e-003	8.7560e-003
tblVehicleEF	HHD	0.15	0.09
tblVehicleEF	HHD	3.9960e-003	1.7220e-003
tblVehicleEF	HHD	7.0560e-003	3.9730e-003
tblVehicleEF	HHD	0.21	0.11
tblVehicleEF	HHD	0.49	0.48
tblVehicleEF	HHD	4.3530e-003	2.6270e-003
tblVehicleEF	HHD	0.26	0.19
tblVehicleEF	HHD	0.65	0.36
tblVehicleEF	HHD	2.15	1.44
tblVehicleEF	HHD	5.9180e-003	5.9340e-003
tblVehicleEF	HHD	0.02	0.02
tblVehicleEF	HHD	1.5590e-003	1.2970e-003
tblVehicleEF	HHD	7.0560e-003	3.9730e-003
tblVehicleEF	HHD	0.21	0.11
tblVehicleEF	HHD	0.56	0.55
tblVehicleEF	HHD	4.3530e-003	2.6270e-003
tblVehicleEF	HHD	0.30	0.22
tblVehicleEF	HHD	0.65	0.36
tblVehicleEF	HHD	2.31	1.54
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	0.01	8.8790e-003
tblVehicleEF	HHD	3.83	3.97
tblVehicleEF	HHD	1.70	1.42
tblVehicleEF	HHD	57.31	48.65
tblVehicleEF	HHD	529.39	512.02
tblVehicleEF	HHD	1,629.98	1,560.95
tblVehicleEF	HHD	66.79	55.76

tblVehicleEF	HHD	0.04	0.02
tblVehicleEF	HHD	5.54	4.36
tblVehicleEF	HHD	7.64	5.29
tblVehicleEF	HHD	3.79	3.40
tblVehicleEF	HHD	0.03	0.01
tblVehicleEF	HHD	0.06	0.06
tblVehicleEF	HHD	0.03	0.04
tblVehicleEF	HHD	0.17	0.10
tblVehicleEF	HHD	5.0390e-003	2.0760e-003
tblVehicleEF	HHD	0.03	0.01
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	8.7490e-003	8.7560e-003
tblVehicleEF	HHD	0.15	0.09
tblVehicleEF	HHD	3.9960e-003	1.7220e-003
tblVehicleEF	HHD	4.3990e-003	2.3610e-003
tblVehicleEF	HHD	0.25	0.12
tblVehicleEF	HHD	0.56	0.55
tblVehicleEF	HHD	2.2590e-003	1.3700e-003
tblVehicleEF	HHD	0.26	0.19
tblVehicleEF	HHD	0.69	0.38
tblVehicleEF	HHD	2.36	1.59
tblVehicleEF	HHD	5.1280e-003	5.1420e-003
tblVehicleEF	HHD	0.02	0.02
tblVehicleEF	HHD	1.6510e-003	1.4000e-003
tblVehicleEF	HHD	4.3990e-003	2.3610e-003
tblVehicleEF	HHD	0.25	0.12
tblVehicleEF	HHD	0.64	0.63
tblVehicleEF	HHD	2.2590e-003	1.3700e-003
tblVehicleEF	HHD	0.30	0.22
tblVehicleEF	HHD	0.69	0.38
tblVehicleEF	HHD	2.53	1.70
tblVehicleEF	LDA	0.01	9.1850e-003

tblVehicleEF	LDA	0.01	7.2120e-003
tblVehicleEF	LDA	1.18	0.83
tblVehicleEF	LDA	2.47	1.71
tblVehicleEF	LDA	293.38	256.87
tblVehicleEF	LDA	66.78	59.48
tblVehicleEF	LDA	0.47	0.78
tblVehicleEF	LDA	0.11	0.08
tblVehicleEF	LDA	0.17	0.11
tblVehicleEF	LDA	1.5970e-003	1.4380e-003
tblVehicleEF	LDA	2.7190e-003	2.8280e-003
tblVehicleEF	LDA	1.4560e-003	1.3260e-003
tblVehicleEF	LDA	2.4750e-003	2.6090e-003
tblVehicleEF	LDA	0.08	0.06
tblVehicleEF	LDA	0.15	0.12
tblVehicleEF	LDA	0.05	0.04
tblVehicleEF	LDA	0.03	0.02
tblVehicleEF	LDA	0.35	0.26
tblVehicleEF	LDA	0.20	0.13
tblVehicleEF	LDA	3.3310e-003	3.3130e-003
tblVehicleEF	LDA	7.7800e-004	7.6500e-004
tblVehicleEF	LDA	0.08	0.06
tblVehicleEF	LDA	0.15	0.12
tblVehicleEF	LDA	0.05	0.04
tblVehicleEF	LDA	0.04	0.03
tblVehicleEF	LDA	0.35	0.26
tblVehicleEF	LDA	0.22	0.14
tblVehicleEF	LDA	0.01	9.1850e-003
tblVehicleEF	LDA	0.01	7.2120e-003
tblVehicleEF	LDA	1.38	0.99
tblVehicleEF	LDA	1.92	1.32
tblVehicleEF	LDA	317.69	278.16
tblVehicleEF	LDA	66.78	59.48

tblVehicleEF	LDA	0.47	0.78
tblVehicleEF	LDA	0.10	0.07
tblVehicleEF	LDA	0.16	0.11
tblVehicleEF	LDA	1.5970e-003	1.4380e-003
tblVehicleEF	LDA	2.7190e-003	2.8280e-003
tblVehicleEF	LDA	1.4560e-003	1.3260e-003
tblVehicleEF	LDA	2.4750e-003	2.6090e-003
tblVehicleEF	LDA	0.15	0.10
tblVehicleEF	LDA	0.18	0.13
tblVehicleEF	LDA	0.11	0.08
tblVehicleEF	LDA	0.03	0.02
tblVehicleEF	LDA	0.34	0.25
tblVehicleEF	LDA	0.17	0.11
tblVehicleEF	LDA	3.6100e-003	3.5920e-003
tblVehicleEF	LDA	7.6800e-004	7.5800e-004
tblVehicleEF	LDA	0.15	0.10
tblVehicleEF	LDA	0.18	0.13
tblVehicleEF	LDA	0.11	0.08
tblVehicleEF	LDA	0.05	0.03
tblVehicleEF	LDA	0.34	0.25
tblVehicleEF	LDA	0.18	0.11
tblVehicleEF	LDA	0.01	9.1850e-003
tblVehicleEF	LDA	0.01	7.2120e-003
tblVehicleEF	LDA	1.13	0.80
tblVehicleEF	LDA	2.43	1.68
tblVehicleEF	LDA	289.27	253.27
tblVehicleEF	LDA	66.78	59.48
tblVehicleEF	LDA	0.47	0.78
tblVehicleEF	LDA	0.10	0.07
tblVehicleEF	LDA	0.17	0.11
tblVehicleEF	LDA	1.5970e-003	1.4380e-003
tblVehicleEF	LDA	2.7190e-003	2.8280e-003

tblVehicleEF	LDA	1.4560e-003	1.3260e-003
tblVehicleEF	LDA	2.4750e-003	2.6090e-003
tblVehicleEF	LDA	0.08	0.06
tblVehicleEF	LDA	0.18	0.13
tblVehicleEF	LDA	0.05	0.04
tblVehicleEF	LDA	0.03	0.02
tblVehicleEF	LDA	0.39	0.29
tblVehicleEF	LDA	0.20	0.12
tblVehicleEF	LDA	3.2830e-003	3.2660e-003
tblVehicleEF	LDA	7.7700e-004	7.6500e-004
tblVehicleEF	LDA	0.08	0.06
tblVehicleEF	LDA	0.18	0.13
tblVehicleEF	LDA	0.05	0.04
tblVehicleEF	LDA	0.04	0.03
tblVehicleEF	LDA	0.39	0.29
tblVehicleEF	LDA	0.21	0.13
tblVehicleEF	LDT1	0.03	0.02
tblVehicleEF	LDT1	0.03	0.02
tblVehicleEF	LDT1	2.86	2.05
tblVehicleEF	LDT1	5.83	4.41
tblVehicleEF	LDT1	341.86	305.42
tblVehicleEF	LDT1	77.04	69.78
tblVehicleEF	LDT1	0.07	0.08
tblVehicleEF	LDT1	0.29	0.21
tblVehicleEF	LDT1	0.34	0.26
tblVehicleEF	LDT1	3.8410e-003	3.0640e-003
tblVehicleEF	LDT1	5.4650e-003	4.8140e-003
tblVehicleEF	LDT1	3.5130e-003	2.8290e-003
tblVehicleEF	LDT1	5.0010e-003	4.4470e-003
tblVehicleEF	LDT1	0.21	0.18
tblVehicleEF	LDT1	0.34	0.29
tblVehicleEF	LDT1	0.13	0.12

tblVehicleEF	LDT1	0.08	0.05
tblVehicleEF	LDT1	1.21	1.01
tblVehicleEF	LDT1	0.47	0.34
tblVehicleEF	LDT1	3.8580e-003	3.8400e-003
tblVehicleEF	LDT1	9.4400e-004	9.2100e-004
tblVehicleEF	LDT1	0.21	0.18
tblVehicleEF	LDT1	0.34	0.29
tblVehicleEF	LDT1	0.13	0.12
tblVehicleEF	LDT1	0.11	0.07
tblVehicleEF	LDT1	1.21	1.01
tblVehicleEF	LDT1	0.50	0.36
tblVehicleEF	LDT1	0.03	0.02
tblVehicleEF	LDT1	0.03	0.02
tblVehicleEF	LDT1	3.28	2.38
tblVehicleEF	LDT1	4.53	3.40
tblVehicleEF	LDT1	368.23	329.19
tblVehicleEF	LDT1	77.04	69.78
tblVehicleEF	LDT1	0.07	0.08
tblVehicleEF	LDT1	0.26	0.19
tblVehicleEF	LDT1	0.32	0.24
tblVehicleEF	LDT1	3.8410e-003	3.0640e-003
tblVehicleEF	LDT1	5.4650e-003	4.8140e-003
tblVehicleEF	LDT1	3.5130e-003	2.8290e-003
tblVehicleEF	LDT1	5.0010e-003	4.4470e-003
tblVehicleEF	LDT1	0.40	0.34
tblVehicleEF	LDT1	0.41	0.35
tblVehicleEF	LDT1	0.27	0.23
tblVehicleEF	LDT1	0.09	0.05
tblVehicleEF	LDT1	1.19	0.99
tblVehicleEF	LDT1	0.39	0.28
tblVehicleEF	LDT1	4.1610e-003	4.1450e-003
tblVehicleEF	LDT1	9.2100e-004	9.0300e-004

tblVehicleEF	LDT1	0.40	0.34
tblVehicleEF	LDT1	0.41	0.35
tblVehicleEF	LDT1	0.27	0.23
tblVehicleEF	LDT1	0.12	0.07
tblVehicleEF	LDT1	1.19	0.99
tblVehicleEF	LDT1	0.42	0.30
tblVehicleEF	LDT1	0.03	0.02
tblVehicleEF	LDT1	0.03	0.02
tblVehicleEF	LDT1	2.76	1.98
tblVehicleEF	LDT1	5.72	4.33
tblVehicleEF	LDT1	337.41	301.40
tblVehicleEF	LDT1	77.04	69.78
tblVehicleEF	LDT1	0.07	0.08
tblVehicleEF	LDT1	0.28	0.20
tblVehicleEF	LDT1	0.34	0.26
tblVehicleEF	LDT1	3.8410e-003	3.0640e-003
tblVehicleEF	LDT1	5.4650e-003	4.8140e-003
tblVehicleEF	LDT1	3.5130e-003	2.8290e-003
tblVehicleEF	LDT1	5.0010e-003	4.4470e-003
tblVehicleEF	LDT1	0.23	0.19
tblVehicleEF	LDT1	0.41	0.34
tblVehicleEF	LDT1	0.13	0.12
tblVehicleEF	LDT1	0.08	0.05
tblVehicleEF	LDT1	1.41	1.18
tblVehicleEF	LDT1	0.46	0.33
tblVehicleEF	LDT1	3.8060e-003	3.7880e-003
tblVehicleEF	LDT1	9.4200e-004	9.1900e-004
tblVehicleEF	LDT1	0.23	0.19
tblVehicleEF	LDT1	0.41	0.34
tblVehicleEF	LDT1	0.13	0.12
tblVehicleEF	LDT1	0.11	0.07
tblVehicleEF	LDT1	1.41	1.18

tblVehicleEF	LDT1	0.49	0.36
tblVehicleEF	LDT2	0.02	0.01
tblVehicleEF	LDT2	0.02	0.01
tblVehicleEF	LDT2	1.62	1.15
tblVehicleEF	LDT2	3.47	2.47
tblVehicleEF	LDT2	413.27	372.37
tblVehicleEF	LDT2	92.96	84.91
tblVehicleEF	LDT2	0.18	0.06
tblVehicleEF	LDT2	0.20	0.13
tblVehicleEF	LDT2	0.34	0.23
tblVehicleEF	LDT2	1.6530e-003	1.4850e-003
tblVehicleEF	LDT2	2.7330e-003	2.9040e-003
tblVehicleEF	LDT2	1.5090e-003	1.3700e-003
tblVehicleEF	LDT2	2.5010e-003	2.6830e-003
tblVehicleEF	LDT2	0.09	0.07
tblVehicleEF	LDT2	0.17	0.14
tblVehicleEF	LDT2	0.06	0.06
tblVehicleEF	LDT2	0.04	0.02
tblVehicleEF	LDT2	0.52	0.43
tblVehicleEF	LDT2	0.26	0.18
tblVehicleEF	LDT2	4.5420e-003	4.5120e-003
tblVehicleEF	LDT2	1.0610e-003	1.0460e-003
tblVehicleEF	LDT2	0.09	0.07
tblVehicleEF	LDT2	0.17	0.14
tblVehicleEF	LDT2	0.06	0.06
tblVehicleEF	LDT2	0.06	0.04
tblVehicleEF	LDT2	0.52	0.43
tblVehicleEF	LDT2	0.28	0.19
tblVehicleEF	LDT2	0.02	0.01
tblVehicleEF	LDT2	0.02	0.01
tblVehicleEF	LDT2	1.89	1.35
tblVehicleEF	LDT2	2.68	1.89

tblVehicleEF	LDT2	446.44	402.41
tblVehicleEF	LDT2	92.96	84.91
tblVehicleEF	LDT2	0.18	0.06
tblVehicleEF	LDT2	0.18	0.12
tblVehicleEF	LDT2	0.31	0.21
tblVehicleEF	LDT2	1.6530e-003	1.4850e-003
tblVehicleEF	LDT2	2.7330e-003	2.9040e-003
tblVehicleEF	LDT2	1.5090e-003	1.3700e-003
tblVehicleEF	LDT2	2.5010e-003	2.6830e-003
tblVehicleEF	LDT2	0.16	0.13
tblVehicleEF	LDT2	0.20	0.16
tblVehicleEF	LDT2	0.13	0.11
tblVehicleEF	LDT2	0.04	0.03
tblVehicleEF	LDT2	0.51	0.42
tblVehicleEF	LDT2	0.22	0.15
tblVehicleEF	LDT2	4.9110e-003	4.8790e-003
tblVehicleEF	LDT2	1.0480e-003	1.0360e-003
tblVehicleEF	LDT2	0.16	0.13
tblVehicleEF	LDT2	0.20	0.16
tblVehicleEF	LDT2	0.13	0.11
tblVehicleEF	LDT2	0.06	0.04
tblVehicleEF	LDT2	0.51	0.42
tblVehicleEF	LDT2	0.24	0.16
tblVehicleEF	LDT2	0.02	0.01
tblVehicleEF	LDT2	0.02	0.01
tblVehicleEF	LDT2	1.56	1.10
tblVehicleEF	LDT2	3.41	2.42
tblVehicleEF	LDT2	407.66	367.29
tblVehicleEF	LDT2	92.96	84.91
tblVehicleEF	LDT2	0.18	0.06
tblVehicleEF	LDT2	0.19	0.13
tblVehicleEF	LDT2	0.34	0.23

tblVehicleEF	LDT2	1.6530e-003	1.4850e-003
tblVehicleEF	LDT2	2.7330e-003	2.9040e-003
tblVehicleEF	LDT2	1.5090e-003	1.3700e-003
tblVehicleEF	LDT2	2.5010e-003	2.6830e-003
tblVehicleEF	LDT2	0.09	0.07
tblVehicleEF	LDT2	0.19	0.16
tblVehicleEF	LDT2	0.06	0.06
tblVehicleEF	LDT2	0.04	0.02
tblVehicleEF	LDT2	0.60	0.49
tblVehicleEF	LDT2	0.26	0.17
tblVehicleEF	LDT2	4.4800e-003	4.4490e-003
tblVehicleEF	LDT2	1.0600e-003	1.0450e-003
tblVehicleEF	LDT2	0.09	0.07
tblVehicleEF	LDT2	0.19	0.16
tblVehicleEF	LDT2	0.06	0.06
tblVehicleEF	LDT2	0.06	0.04
tblVehicleEF	LDT2	0.60	0.49
tblVehicleEF	LDT2	0.28	0.19
tblVehicleEF	LHD1	1.1790e-003	1.1690e-003
tblVehicleEF	LHD1	0.01	8.0180e-003
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	0.17	0.17
tblVehicleEF	LHD1	1.07	0.79
tblVehicleEF	LHD1	4.04	3.46
tblVehicleEF	LHD1	8.82	8.51
tblVehicleEF	LHD1	538.23	513.92
tblVehicleEF	LHD1	38.15	37.20
tblVehicleEF	LHD1	0.04	0.00
tblVehicleEF	LHD1	0.07	0.07
tblVehicleEF	LHD1	2.13	1.65
tblVehicleEF	LHD1	1.04	0.98
tblVehicleEF	LHD1	7.4100e-004	7.3100e-004

tblVehicleEF	LHD1	0.05	0.05
tblVehicleEF	LHD1	9.4870e-003	9.4820e-003
tblVehicleEF	LHD1	0.01	8.3380e-003
tblVehicleEF	LHD1	1.1530e-003	8.8500e-004
tblVehicleEF	LHD1	6.8200e-004	6.7300e-004
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	2.3720e-003	2.3700e-003
tblVehicleEF	LHD1	9.2330e-003	7.6730e-003
tblVehicleEF	LHD1	1.0570e-003	8.1300e-004
tblVehicleEF	LHD1	3.0390e-003	2.7620e-003
tblVehicleEF	LHD1	0.08	0.08
tblVehicleEF	LHD1	0.03	0.03
tblVehicleEF	LHD1	1.4530e-003	1.3970e-003
tblVehicleEF	LHD1	0.07	0.06
tblVehicleEF	LHD1	0.58	0.55
tblVehicleEF	LHD1	0.33	0.28
tblVehicleEF	LHD1	5.3840e-003	5.3260e-003
tblVehicleEF	LHD1	4.6000e-004	4.5400e-004
tblVehicleEF	LHD1	3.0390e-003	2.7620e-003
tblVehicleEF	LHD1	0.08	0.08
tblVehicleEF	LHD1	0.03	0.03
tblVehicleEF	LHD1	1.4530e-003	1.3970e-003
tblVehicleEF	LHD1	0.08	0.07
tblVehicleEF	LHD1	0.58	0.55
tblVehicleEF	LHD1	0.35	0.30
tblVehicleEF	LHD1	1.1790e-003	1.1690e-003
tblVehicleEF	LHD1	0.01	8.0180e-003
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	0.17	0.17
tblVehicleEF	LHD1	1.09	0.81
tblVehicleEF	LHD1	3.26	2.79
tblVehicleEF	LHD1	8.82	8.51

tblVehicleEF	LHD1	538.23	513.92
tblVehicleEF	LHD1	38.15	37.20
tblVehicleEF	LHD1	0.04	0.00
tblVehicleEF	LHD1	0.07	0.07
tblVehicleEF	LHD1	2.00	1.54
tblVehicleEF	LHD1	1.00	0.95
tblVehicleEF	LHD1	7.4100e-004	7.3100e-004
tblVehicleEF	LHD1	0.05	0.05
tblVehicleEF	LHD1	9.4870e-003	9.4820e-003
tblVehicleEF	LHD1	0.01	8.3380e-003
tblVehicleEF	LHD1	1.1530e-003	8.8500e-004
tblVehicleEF	LHD1	6.8200e-004	6.7300e-004
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	2.3720e-003	2.3700e-003
tblVehicleEF	LHD1	9.2330e-003	7.6730e-003
tblVehicleEF	LHD1	1.0570e-003	8.1300e-004
tblVehicleEF	LHD1	5.4790e-003	4.9450e-003
tblVehicleEF	LHD1	0.10	0.09
tblVehicleEF	LHD1	0.03	0.03
tblVehicleEF	LHD1	2.9970e-003	2.7860e-003
tblVehicleEF	LHD1	0.07	0.06
tblVehicleEF	LHD1	0.58	0.55
tblVehicleEF	LHD1	0.29	0.25
tblVehicleEF	LHD1	5.3850e-003	5.3260e-003
tblVehicleEF	LHD1	4.4700e-004	4.4200e-004
tblVehicleEF	LHD1	5.4790e-003	4.9450e-003
tblVehicleEF	LHD1	0.10	0.09
tblVehicleEF	LHD1	0.03	0.03
tblVehicleEF	LHD1	2.9970e-003	2.7860e-003
tblVehicleEF	LHD1	0.09	0.07
tblVehicleEF	LHD1	0.58	0.55
tblVehicleEF	LHD1	0.31	0.27

tblVehicleEF	LHD1	1.1790e-003	1.1690e-003
tblVehicleEF	LHD1	0.01	8.0180e-003
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	0.17	0.17
tblVehicleEF	LHD1	1.06	0.79
tblVehicleEF	LHD1	3.76	3.22
tblVehicleEF	LHD1	8.82	8.51
tblVehicleEF	LHD1	538.23	513.92
tblVehicleEF	LHD1	38.15	37.20
tblVehicleEF	LHD1	0.04	0.00
tblVehicleEF	LHD1	0.07	0.07
tblVehicleEF	LHD1	2.10	1.62
tblVehicleEF	LHD1	1.03	0.97
tblVehicleEF	LHD1	7.4100e-004	7.3100e-004
tblVehicleEF	LHD1	0.05	0.05
tblVehicleEF	LHD1	9.4870e-003	9.4820e-003
tblVehicleEF	LHD1	0.01	8.3380e-003
tblVehicleEF	LHD1	1.1530e-003	8.8500e-004
tblVehicleEF	LHD1	6.8200e-004	6.7300e-004
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	2.3720e-003	2.3700e-003
tblVehicleEF	LHD1	9.2330e-003	7.6730e-003
tblVehicleEF	LHD1	1.0570e-003	8.1300e-004
tblVehicleEF	LHD1	3.4840e-003	3.0660e-003
tblVehicleEF	LHD1	0.11	0.10
tblVehicleEF	LHD1	0.03	0.03
tblVehicleEF	LHD1	1.5740e-003	1.4930e-003
tblVehicleEF	LHD1	0.07	0.06
tblVehicleEF	LHD1	0.62	0.59
tblVehicleEF	LHD1	0.32	0.27
tblVehicleEF	LHD1	5.3840e-003	5.3260e-003
tblVehicleEF	LHD1	4.5600e-004	4.5000e-004

tblVehicleEF	LHD1	3.4840e-003	3.0660e-003
tblVehicleEF	LHD1	0.11	0.10
tblVehicleEF	LHD1	0.03	0.03
tblVehicleEF	LHD1	1.5740e-003	1.4930e-003
tblVehicleEF	LHD1	0.08	0.07
tblVehicleEF	LHD1	0.62	0.59
tblVehicleEF	LHD1	0.34	0.29
tblVehicleEF	LHD2	8.0700e-004	8.0000e-004
tblVehicleEF	LHD2	6.6850e-003	5.3800e-003
tblVehicleEF	LHD2	9.5610e-003	7.5190e-003
tblVehicleEF	LHD2	0.12	0.12
tblVehicleEF	LHD2	0.75	0.56
tblVehicleEF	LHD2	1.91	1.55
tblVehicleEF	LHD2	9.92	9.57
tblVehicleEF	LHD2	525.66	504.19
tblVehicleEF	LHD2	20.16	19.40
tblVehicleEF	LHD2	7.5110e-003	0.00
tblVehicleEF	LHD2	0.14	0.14
tblVehicleEF	LHD2	3.41	2.70
tblVehicleEF	LHD2	0.52	0.50
tblVehicleEF	LHD2	1.4300e-003	1.4250e-003
tblVehicleEF	LHD2	0.07	0.07
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	0.02	0.01
tblVehicleEF	LHD2	6.0800e-004	3.9600e-004
tblVehicleEF	LHD2	1.3150e-003	1.3110e-003
tblVehicleEF	LHD2	0.03	0.03
tblVehicleEF	LHD2	2.6940e-003	2.6900e-003
tblVehicleEF	LHD2	0.02	0.01
tblVehicleEF	LHD2	5.4000e-004	3.5900e-004
tblVehicleEF	LHD2	1.4040e-003	1.1880e-003
tblVehicleEF	LHD2	0.04	0.03

tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	6.8900e-004	6.2900e-004
tblVehicleEF	LHD2	0.08	0.07
tblVehicleEF	LHD2	0.25	0.22
tblVehicleEF	LHD2	0.17	0.13
tblVehicleEF	LHD2	5.1750e-003	5.1450e-003
tblVehicleEF	LHD2	2.4000e-004	2.3200e-004
tblVehicleEF	LHD2	1.4040e-003	1.1880e-003
tblVehicleEF	LHD2	0.04	0.03
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	6.8900e-004	6.2900e-004
tblVehicleEF	LHD2	0.10	0.08
tblVehicleEF	LHD2	0.25	0.22
tblVehicleEF	LHD2	0.18	0.14
tblVehicleEF	LHD2	8.0700e-004	8.0000e-004
tblVehicleEF	LHD2	6.6850e-003	5.3800e-003
tblVehicleEF	LHD2	9.5610e-003	7.5190e-003
tblVehicleEF	LHD2	0.12	0.12
tblVehicleEF	LHD2	0.76	0.57
tblVehicleEF	LHD2	1.57	1.26
tblVehicleEF	LHD2	9.92	9.57
tblVehicleEF	LHD2	525.66	504.19
tblVehicleEF	LHD2	20.16	19.40
tblVehicleEF	LHD2	7.5110e-003	0.00
tblVehicleEF	LHD2	0.14	0.14
tblVehicleEF	LHD2	3.22	2.55
tblVehicleEF	LHD2	0.50	0.48
tblVehicleEF	LHD2	1.4300e-003	1.4250e-003
tblVehicleEF	LHD2	0.07	0.07
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	0.02	0.01
tblVehicleEF	LHD2	6.0800e-004	3.9600e-004

tblVehicleEF	LHD2	1.3150e-003	1.3110e-003
tblVehicleEF	LHD2	0.03	0.03
tblVehicleEF	LHD2	2.6940e-003	2.6900e-003
tblVehicleEF	LHD2	0.02	0.01
tblVehicleEF	LHD2	5.4000e-004	3.5900e-004
tblVehicleEF	LHD2	2.5460e-003	2.1330e-003
tblVehicleEF	LHD2	0.05	0.04
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	1.4320e-003	1.2540e-003
tblVehicleEF	LHD2	0.08	0.07
tblVehicleEF	LHD2	0.25	0.22
tblVehicleEF	LHD2	0.15	0.12
tblVehicleEF	LHD2	5.1760e-003	5.1450e-003
tblVehicleEF	LHD2	2.3400e-004	2.2700e-004
tblVehicleEF	LHD2	2.5460e-003	2.1330e-003
tblVehicleEF	LHD2	0.05	0.04
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	1.4320e-003	1.2540e-003
tblVehicleEF	LHD2	0.10	0.08
tblVehicleEF	LHD2	0.25	0.22
tblVehicleEF	LHD2	0.16	0.13
tblVehicleEF	LHD2	8.0700e-004	8.0000e-004
tblVehicleEF	LHD2	6.6850e-003	5.3800e-003
tblVehicleEF	LHD2	9.5610e-003	7.5190e-003
tblVehicleEF	LHD2	0.12	0.12
tblVehicleEF	LHD2	0.75	0.56
tblVehicleEF	LHD2	1.78	1.45
tblVehicleEF	LHD2	9.92	9.57
tblVehicleEF	LHD2	525.66	504.19
tblVehicleEF	LHD2	20.16	19.40
tblVehicleEF	LHD2	7.5110e-003	0.00
tblVehicleEF	LHD2	0.14	0.14

tblVehicleEF	LHD2	3.36	2.66
tblVehicleEF	LHD2	0.52	0.49
tblVehicleEF	LHD2	1.4300e-003	1.4250e-003
tblVehicleEF	LHD2	0.07	0.07
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	0.02	0.01
tblVehicleEF	LHD2	6.0800e-004	3.9600e-004
tblVehicleEF	LHD2	1.3150e-003	1.3110e-003
tblVehicleEF	LHD2	0.03	0.03
tblVehicleEF	LHD2	2.6940e-003	2.6900e-003
tblVehicleEF	LHD2	0.02	0.01
tblVehicleEF	LHD2	5.4000e-004	3.5900e-004
tblVehicleEF	LHD2	1.5920e-003	1.2850e-003
tblVehicleEF	LHD2	0.05	0.04
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	7.4400e-004	6.6500e-004
tblVehicleEF	LHD2	0.08	0.07
tblVehicleEF	LHD2	0.27	0.23
tblVehicleEF	LHD2	0.16	0.13
tblVehicleEF	LHD2	5.1750e-003	5.1450e-003
tblVehicleEF	LHD2	2.3700e-004	2.3100e-004
tblVehicleEF	LHD2	1.5920e-003	1.2850e-003
tblVehicleEF	LHD2	0.05	0.04
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	7.4400e-004	6.6500e-004
tblVehicleEF	LHD2	0.10	0.08
tblVehicleEF	LHD2	0.27	0.23
tblVehicleEF	LHD2	0.17	0.14
tblVehicleEF	MCY	29.62	25.55
tblVehicleEF	MCY	9.82	9.98
tblVehicleEF	MCY	146.18	147.32
tblVehicleEF	MCY	46.13	42.01

tblVehicleEF	MCY	6.3790e-003	6.5000e-003
tblVehicleEF	MCY	1.25	1.22
tblVehicleEF	MCY	0.31	0.31
tblVehicleEF	MCY	0.04	0.04
tblVehicleEF	MCY	6.8400e-004	4.3000e-004
tblVehicleEF	MCY	1.8270e-003	1.1950e-003
tblVehicleEF	MCY	0.02	0.02
tblVehicleEF	MCY	5.5000e-004	3.5400e-004
tblVehicleEF	MCY	1.4460e-003	9.7300e-004
tblVehicleEF	MCY	1.14	1.11
tblVehicleEF	MCY	0.48	0.44
tblVehicleEF	MCY	0.59	0.57
tblVehicleEF	MCY	2.77	2.59
tblVehicleEF	MCY	1.60	1.33
tblVehicleEF	MCY	2.16	2.10
tblVehicleEF	MCY	2.0360e-003	2.0330e-003
tblVehicleEF	MCY	6.9100e-004	6.6500e-004
tblVehicleEF	MCY	1.14	1.11
tblVehicleEF	MCY	0.48	0.44
tblVehicleEF	MCY	0.59	0.57
tblVehicleEF	MCY	3.02	2.84
tblVehicleEF	MCY	1.60	1.33
tblVehicleEF	MCY	2.32	2.25
tblVehicleEF	MCY	29.25	25.25
tblVehicleEF	MCY	8.82	8.83
tblVehicleEF	MCY	146.18	147.32
tblVehicleEF	MCY	46.13	42.01
tblVehicleEF	MCY	6.3790e-003	6.5000e-003
tblVehicleEF	MCY	1.08	1.05
tblVehicleEF	MCY	0.29	0.29
tblVehicleEF	MCY	0.04	0.04
tblVehicleEF	MCY	6.8400e-004	4.3000e-004

tblVehicleEF	MCY	1.8270e-003	1.1950e-003
tblVehicleEF	MCY	0.02	0.02
tblVehicleEF	MCY	5.5000e-004	3.5400e-004
tblVehicleEF	MCY	1.4460e-003	9.7300e-004
tblVehicleEF	MCY	2.21	2.16
tblVehicleEF	MCY	0.69	0.65
tblVehicleEF	MCY	1.44	1.40
tblVehicleEF	MCY	2.69	2.53
tblVehicleEF	MCY	1.57	1.30
tblVehicleEF	MCY	1.88	1.83
tblVehicleEF	MCY	2.0280e-003	2.0270e-003
tblVehicleEF	MCY	6.6600e-004	6.3800e-004
tblVehicleEF	MCY	2.21	2.16
tblVehicleEF	MCY	0.69	0.65
tblVehicleEF	MCY	1.44	1.40
tblVehicleEF	MCY	2.94	2.78
tblVehicleEF	MCY	1.57	1.30
tblVehicleEF	MCY	2.02	1.97
tblVehicleEF	MCY	28.65	24.76
tblVehicleEF	MCY	9.47	9.62
tblVehicleEF	MCY	146.18	147.32
tblVehicleEF	MCY	46.13	42.01
tblVehicleEF	MCY	6.3790e-003	6.5000e-003
tblVehicleEF	MCY	1.21	1.17
tblVehicleEF	MCY	0.30	0.30
tblVehicleEF	MCY	0.04	0.04
tblVehicleEF	MCY	6.8400e-004	4.3000e-004
tblVehicleEF	MCY	1.8270e-003	1.1950e-003
tblVehicleEF	MCY	0.02	0.02
tblVehicleEF	MCY	5.5000e-004	3.5400e-004
tblVehicleEF	MCY	1.4460e-003	9.7300e-004
tblVehicleEF	MCY	1.35	1.32

tblVehicleEF	MCY	0.67	0.61
tblVehicleEF	MCY	0.60	0.58
tblVehicleEF	MCY	2.73	2.57
tblVehicleEF	MCY	1.85	1.56
tblVehicleEF	MCY	2.08	2.03
tblVehicleEF	MCY	6.8300e-004	6.5700e-004
tblVehicleEF	MCY	1.35	1.32
tblVehicleEF	MCY	0.67	0.61
tblVehicleEF	MCY	0.60	0.58
tblVehicleEF	MCY	2.99	2.81
tblVehicleEF	MCY	1.85	1.56
tblVehicleEF	MCY	2.24	2.18
tblVehicleEF	MDV	0.03	0.02
tblVehicleEF	MDV	0.02	0.02
tblVehicleEF	MDV	2.15	1.74
tblVehicleEF	MDV	4.89	3.97
tblVehicleEF	MDV	535.78	490.34
tblVehicleEF	MDV	119.36	110.98
tblVehicleEF	MDV	0.17	0.05
tblVehicleEF	MDV	0.30	0.23
tblVehicleEF	MDV	0.49	0.39
tblVehicleEF	MDV	1.8140e-003	1.7020e-003
tblVehicleEF	MDV	3.0910e-003	3.1950e-003
tblVehicleEF	MDV	1.6670e-003	1.5700e-003
tblVehicleEF	MDV	2.8470e-003	2.9530e-003
tblVehicleEF	MDV	0.09	0.09
tblVehicleEF	MDV	0.18	0.19
tblVehicleEF	MDV	0.07	0.07
tblVehicleEF	MDV	0.05	0.04
tblVehicleEF	MDV	0.56	0.56
tblVehicleEF	MDV	0.43	0.34
tblVehicleEF	MDV	5.7720e-003	5.7530e-003

tblVehicleEF	MDV	1.3510e-003	1.3420e-003
tblVehicleEF	MDV	0.09	0.09
tblVehicleEF	MDV	0.18	0.19
tblVehicleEF	MDV	0.07	0.07
tblVehicleEF	MDV	0.08	0.06
tblVehicleEF	MDV	0.56	0.56
tblVehicleEF	MDV	0.46	0.37
tblVehicleEF	MDV	0.03	0.02
tblVehicleEF	MDV	0.02	0.02
tblVehicleEF	MDV	2.52	2.04
tblVehicleEF	MDV	3.76	3.05
tblVehicleEF	MDV	578.32	529.45
tblVehicleEF	MDV	119.36	110.98
tblVehicleEF	MDV	0.17	0.05
tblVehicleEF	MDV	0.27	0.21
tblVehicleEF	MDV	0.45	0.36
tblVehicleEF	MDV	1.8140e-003	1.7020e-003
tblVehicleEF	MDV	3.0910e-003	3.1950e-003
tblVehicleEF	MDV	1.6670e-003	1.5700e-003
tblVehicleEF	MDV	2.8470e-003	2.9530e-003
tblVehicleEF	MDV	0.17	0.17
tblVehicleEF	MDV	0.21	0.21
tblVehicleEF	MDV	0.14	0.14
tblVehicleEF	MDV	0.06	0.04
tblVehicleEF	MDV	0.55	0.55
tblVehicleEF	MDV	0.36	0.29
tblVehicleEF	MDV	6.2350e-003	6.2170e-003
tblVehicleEF	MDV	1.3310e-003	1.3250e-003
tblVehicleEF	MDV	0.17	0.17
tblVehicleEF	MDV	0.21	0.21
tblVehicleEF	MDV	0.14	0.14
tblVehicleEF	MDV	0.09	0.07

tblVehicleEF	MDV	0.55	0.55
tblVehicleEF	MDV	0.38	0.31
tblVehicleEF	MDV	0.03	0.02
tblVehicleEF	MDV	0.02	0.02
tblVehicleEF	MDV	2.07	1.67
tblVehicleEF	MDV	4.80	3.90
tblVehicleEF	MDV	528.58	483.73
tblVehicleEF	MDV	119.36	110.98
tblVehicleEF	MDV	0.17	0.05
tblVehicleEF	MDV	0.28	0.22
tblVehicleEF	MDV	0.49	0.39
tblVehicleEF	MDV	1.8140e-003	1.7020e-003
tblVehicleEF	MDV	3.0910e-003	3.1950e-003
tblVehicleEF	MDV	1.6670e-003	1.5700e-003
tblVehicleEF	MDV	2.8470e-003	2.9530e-003
tblVehicleEF	MDV	0.09	0.09
tblVehicleEF	MDV	0.21	0.21
tblVehicleEF	MDV	0.07	0.08
tblVehicleEF	MDV	0.05	0.04
tblVehicleEF	MDV	0.65	0.64
tblVehicleEF	MDV	0.42	0.34
tblVehicleEF	MDV	5.6930e-003	5.6740e-003
tblVehicleEF	MDV	1.3490e-003	1.3400e-003
tblVehicleEF	MDV	0.09	0.09
tblVehicleEF	MDV	0.21	0.21
tblVehicleEF	MDV	0.07	0.08
tblVehicleEF	MDV	0.08	0.06
tblVehicleEF	MDV	0.65	0.64
tblVehicleEF	MDV	0.45	0.36
tblVehicleEF	MH	3.88	2.09
tblVehicleEF	MH	8.66	6.72
tblVehicleEF	MH	641.58	610.48

tblVehicleEF	MH	30.89	28.70
tblVehicleEF	MH	3.2450e-003	0.00
tblVehicleEF	MH	1.96	1.59
tblVehicleEF	MH	0.84	0.71
tblVehicleEF	MH	0.05	0.05
tblVehicleEF	MH	8.7310e-003	8.7200e-003
tblVehicleEF	MH	0.04	0.03
tblVehicleEF	MH	1.5190e-003	8.9800e-004
tblVehicleEF	MH	0.02	0.02
tblVehicleEF	MH	2.1830e-003	2.1800e-003
tblVehicleEF	MH	0.03	0.03
tblVehicleEF	MH	1.3260e-003	8.0900e-004
tblVehicleEF	MH	1.46	1.21
tblVehicleEF	MH	0.08	0.07
tblVehicleEF	MH	0.51	0.43
tblVehicleEF	MH	0.10	0.06
tblVehicleEF	MH	1.84	1.69
tblVehicleEF	MH	0.52	0.38
tblVehicleEF	MH	6.4790e-003	6.3630e-003
tblVehicleEF	MH	4.6500e-004	4.1900e-004
tblVehicleEF	MH	1.46	1.21
tblVehicleEF	MH	0.08	0.07
tblVehicleEF	MH	0.51	0.43
tblVehicleEF	MH	0.12	0.08
tblVehicleEF	MH	1.84	1.69
tblVehicleEF	MH	0.56	0.41
tblVehicleEF	MH	3.99	2.15
tblVehicleEF	MH	6.88	5.32
tblVehicleEF	MH	641.58	610.48
tblVehicleEF	MH	30.89	28.70
tblVehicleEF	MH	3.2450e-003	0.00
tblVehicleEF	MH	1.79	1.47

tblVehicleEF	MH	0.81	0.68
tblVehicleEF	MH	0.05	0.05
tblVehicleEF	MH	8.7310e-003	8.7200e-003
tblVehicleEF	MH	0.04	0.03
tblVehicleEF	MH	1.5190e-003	8.9800e-004
tblVehicleEF	MH	0.02	0.02
tblVehicleEF	MH	2.1830e-003	2.1800e-003
tblVehicleEF	MH	0.03	0.03
tblVehicleEF	MH	1.3260e-003	8.0900e-004
tblVehicleEF	MH	2.58	2.12
tblVehicleEF	MH	0.10	0.08
tblVehicleEF	MH	1.04	0.86
tblVehicleEF	MH	0.10	0.06
tblVehicleEF	MH	1.83	1.68
tblVehicleEF	MH	0.44	0.33
tblVehicleEF	MH	6.4800e-003	6.3640e-003
tblVehicleEF	MH	4.3500e-004	3.9500e-004
tblVehicleEF	MH	2.58	2.12
tblVehicleEF	MH	0.10	0.08
tblVehicleEF	MH	1.04	0.86
tblVehicleEF	MH	0.12	0.08
tblVehicleEF	MH	1.83	1.68
tblVehicleEF	MH	0.47	0.35
tblVehicleEF	MH	3.85	2.08
tblVehicleEF	MH	8.06	6.26
tblVehicleEF	MH	641.58	610.48
tblVehicleEF	MH	30.89	28.70
tblVehicleEF	MH	3.2450e-003	0.00
tblVehicleEF	MH	1.91	1.56
tblVehicleEF	MH	0.83	0.71
tblVehicleEF	MH	0.05	0.05
tblVehicleEF	MH	8.7310e-003	8.7200e-003

tblVehicleEF	MH	0.04	0.03
tblVehicleEF	MH	1.5190e-003	8.9800e-004
tblVehicleEF	MH	0.02	0.02
tblVehicleEF	MH	2.1830e-003	2.1800e-003
tblVehicleEF	MH	0.03	0.03
tblVehicleEF	MH	1.3260e-003	8.0900e-004
tblVehicleEF	MH	1.81	1.45
tblVehicleEF	MH	0.11	0.09
tblVehicleEF	MH	0.58	0.48
tblVehicleEF	MH	0.10	0.06
tblVehicleEF	MH	1.94	1.78
tblVehicleEF	MH	0.49	0.36
tblVehicleEF	MH	6.4780e-003	6.3630e-003
tblVehicleEF	MH	4.5500e-004	4.1100e-004
tblVehicleEF	MH	1.81	1.45
tblVehicleEF	MH	0.11	0.09
tblVehicleEF	MH	0.58	0.48
tblVehicleEF	MH	0.12	0.08
tblVehicleEF	MH	1.94	1.78
tblVehicleEF	MH	0.53	0.39
tblVehicleEF	MHD	9.1490e-003	7.3280e-003
tblVehicleEF	MHD	6.8430e-003	4.0920e-003
tblVehicleEF	MHD	1.98	1.82
tblVehicleEF	MHD	1.20	0.76
tblVehicleEF	MHD	21.46	16.24
tblVehicleEF	MHD	606.65	598.70
tblVehicleEF	MHD	983.19	940.03
tblVehicleEF	MHD	63.82	55.58
tblVehicleEF	MHD	0.01	0.00
tblVehicleEF	MHD	7.20	5.92
tblVehicleEF	MHD	4.52	2.71
tblVehicleEF	MHD	1.95	1.61

tblVehicleEF	MHD	0.04	0.02
tblVehicleEF	MHD	0.12	0.12
tblVehicleEF	MHD	0.14	0.08
tblVehicleEF	MHD	5.0040e-003	2.6400e-003
tblVehicleEF	MHD	0.04	0.02
tblVehicleEF	MHD	0.05	0.05
tblVehicleEF	MHD	0.13	0.08
tblVehicleEF	MHD	4.1210e-003	2.2570e-003
tblVehicleEF	MHD	5.5100e-003	3.9430e-003
tblVehicleEF	MHD	0.21	0.14
tblVehicleEF	MHD	0.20	0.16
tblVehicleEF	MHD	2.6470e-003	1.9790e-003
tblVehicleEF	MHD	0.17	0.10
tblVehicleEF	MHD	0.91	0.68
tblVehicleEF	MHD	1.56	1.05
tblVehicleEF	MHD	5.8760e-003	6.0130e-003
tblVehicleEF	MHD	9.5670e-003	9.4790e-003
tblVehicleEF	MHD	1.0330e-003	8.7200e-004
tblVehicleEF	MHD	5.5100e-003	3.9430e-003
tblVehicleEF	MHD	0.21	0.14
tblVehicleEF	MHD	0.22	0.18
tblVehicleEF	MHD	2.6470e-003	1.9790e-003
tblVehicleEF	MHD	0.19	0.11
tblVehicleEF	MHD	0.91	0.68
tblVehicleEF	MHD	1.68	1.12
tblVehicleEF	MHD	8.6220e-003	6.9060e-003
tblVehicleEF	MHD	6.8430e-003	4.0920e-003
tblVehicleEF	MHD	1.44	1.33
tblVehicleEF	MHD	1.21	0.77
tblVehicleEF	MHD	18.00	13.26
tblVehicleEF	MHD	642.69	634.27
tblVehicleEF	MHD	983.19	940.03

tblVehicleEF	MHD	63.82	55.58
tblVehicleEF	MHD	0.01	0.00
tblVehicleEF	MHD	7.43	6.11
tblVehicleEF	MHD	4.26	2.55
tblVehicleEF	MHD	1.87	1.55
tblVehicleEF	MHD	0.04	0.02
tblVehicleEF	MHD	0.12	0.12
tblVehicleEF	MHD	0.14	0.08
tblVehicleEF	MHD	5.0040e-003	2.6400e-003
tblVehicleEF	MHD	0.03	0.02
tblVehicleEF	MHD	0.05	0.05
tblVehicleEF	MHD	0.13	0.08
tblVehicleEF	MHD	4.1210e-003	2.2570e-003
tblVehicleEF	MHD	0.01	7.2010e-003
tblVehicleEF	MHD	0.24	0.16
tblVehicleEF	MHD	0.19	0.15
tblVehicleEF	MHD	5.6750e-003	4.0890e-003
tblVehicleEF	MHD	0.17	0.10
tblVehicleEF	MHD	0.91	0.68
tblVehicleEF	MHD	1.35	0.91
tblVehicleEF	MHD	6.2250e-003	6.3700e-003
tblVehicleEF	MHD	9.5670e-003	9.4790e-003
tblVehicleEF	MHD	9.7200e-004	8.2100e-004
tblVehicleEF	MHD	0.01	7.2010e-003
tblVehicleEF	MHD	0.24	0.16
tblVehicleEF	MHD	0.21	0.17
tblVehicleEF	MHD	5.6750e-003	4.0890e-003
tblVehicleEF	MHD	0.19	0.11
tblVehicleEF	MHD	0.91	0.68
tblVehicleEF	MHD	1.45	0.98
tblVehicleEF	MHD	9.8770e-003	7.9110e-003
tblVehicleEF	MHD	6.8430e-003	4.0920e-003

tblVehicleEF	MHD	2.73	2.51
tblVehicleEF	MHD	1.19	0.76
tblVehicleEF	MHD	20.21	15.25
tblVehicleEF	MHD	556.87	549.58
tblVehicleEF	MHD	983.19	940.03
tblVehicleEF	MHD	63.82	55.58
tblVehicleEF	MHD	0.01	0.00
tblVehicleEF	MHD	6.88	5.65
tblVehicleEF	MHD	4.45	2.67
tblVehicleEF	MHD	1.93	1.60
tblVehicleEF	MHD	0.05	0.02
tblVehicleEF	MHD	0.12	0.12
tblVehicleEF	MHD	0.14	0.08
tblVehicleEF	MHD	5.0040e-003	2.6400e-003
tblVehicleEF	MHD	0.05	0.02
tblVehicleEF	MHD	0.05	0.05
tblVehicleEF	MHD	0.13	0.08
tblVehicleEF	MHD	4.1210e-003	2.2570e-003
tblVehicleEF	MHD	6.5390e-003	4.5130e-003
tblVehicleEF	MHD	0.27	0.17
tblVehicleEF	MHD	0.21	0.17
tblVehicleEF	MHD	2.9760e-003	2.1720e-003
tblVehicleEF	MHD	0.17	0.10
tblVehicleEF	MHD	0.98	0.73
tblVehicleEF	MHD	1.48	1.00
tblVehicleEF	MHD	5.3940e-003	5.5190e-003
tblVehicleEF	MHD	9.5660e-003	9.4790e-003
tblVehicleEF	MHD	1.0110e-003	8.5500e-004
tblVehicleEF	MHD	6.5390e-003	4.5130e-003
tblVehicleEF	MHD	0.27	0.17
tblVehicleEF	MHD	0.24	0.19
tblVehicleEF	MHD	2.9760e-003	2.1720e-003

tblVehicleEF	MHD	0.19	0.11
tblVehicleEF	MHD	0.98	0.73
tblVehicleEF	MHD	1.59	1.08
tblVehicleEF	OBUS	0.02	0.02
tblVehicleEF	OBUS	2.2030e-003	1.8730e-003
tblVehicleEF	OBUS	2.30	2.37
tblVehicleEF	OBUS	2.18	1.56
tblVehicleEF	OBUS	12.87	11.34
tblVehicleEF	OBUS	573.90	563.74
tblVehicleEF	OBUS	933.78	920.98
tblVehicleEF	OBUS	37.90	35.44
tblVehicleEF	OBUS	1.0120e-003	0.00
tblVehicleEF	OBUS	7.28	5.55
tblVehicleEF	OBUS	4.81	3.18
tblVehicleEF	OBUS	1.69	1.54
tblVehicleEF	OBUS	0.06	0.01
tblVehicleEF	OBUS	0.08	0.09
tblVehicleEF	OBUS	9.9180e-003	0.01
tblVehicleEF	OBUS	0.08	0.04
tblVehicleEF	OBUS	1.5340e-003	1.0490e-003
tblVehicleEF	OBUS	0.05	9.6700e-003
tblVehicleEF	OBUS	0.03	0.04
tblVehicleEF	OBUS	2.4800e-003	2.5210e-003
tblVehicleEF	OBUS	0.07	0.04
tblVehicleEF	OBUS	1.3140e-003	9.2500e-004
tblVehicleEF	OBUS	1.2410e-003	1.2110e-003
tblVehicleEF	OBUS	0.03	0.03
tblVehicleEF	OBUS	0.49	0.40
tblVehicleEF	OBUS	5.5100e-004	5.6800e-004
tblVehicleEF	OBUS	0.16	0.10
tblVehicleEF	OBUS	0.27	0.29
tblVehicleEF	OBUS	0.82	0.70

tblVehicleEF	OBUS	5.5590e-003	5.6610e-003
tblVehicleEF	OBUS	9.2020e-003	9.3860e-003
tblVehicleEF	OBUS	6.1200e-004	5.7300e-004
tblVehicleEF	OBUS	1.2410e-003	1.2110e-003
tblVehicleEF	OBUS	0.03	0.03
tblVehicleEF	OBUS	0.56	0.46
tblVehicleEF	OBUS	5.5100e-004	5.6800e-004
tblVehicleEF	OBUS	0.20	0.13
tblVehicleEF	OBUS	0.27	0.29
tblVehicleEF	OBUS	0.88	0.75
tblVehicleEF	OBUS	0.02	0.02
tblVehicleEF	OBUS	2.2030e-003	1.8730e-003
tblVehicleEF	OBUS	1.67	1.72
tblVehicleEF	OBUS	2.22	1.59
tblVehicleEF	OBUS	10.52	9.20
tblVehicleEF	OBUS	607.99	597.23
tblVehicleEF	OBUS	933.78	920.98
tblVehicleEF	OBUS	37.90	35.44
tblVehicleEF	OBUS	1.0120e-003	0.00
tblVehicleEF	OBUS	7.51	5.73
tblVehicleEF	OBUS	4.48	2.96
tblVehicleEF	OBUS	1.62	1.48
tblVehicleEF	OBUS	0.05	8.8610e-003
tblVehicleEF	OBUS	0.08	0.09
tblVehicleEF	OBUS	9.9180e-003	0.01
tblVehicleEF	OBUS	0.08	0.04
tblVehicleEF	OBUS	1.5340e-003	1.0490e-003
tblVehicleEF	OBUS	0.05	8.1520e-003
tblVehicleEF	OBUS	0.03	0.04
tblVehicleEF	OBUS	2.4800e-003	2.5210e-003
tblVehicleEF	OBUS	0.07	0.04
tblVehicleEF	OBUS	1.3140e-003	9.2500e-004

tblVehicleEF	OBUS	2.2230e-003	2.1460e-003
tblVehicleEF	OBUS	0.04	0.04
tblVehicleEF	OBUS	0.46	0.38
tblVehicleEF	OBUS	1.1300e-003	1.1190e-003
tblVehicleEF	OBUS	0.16	0.11
tblVehicleEF	OBUS	0.27	0.29
tblVehicleEF	OBUS	0.72	0.62
tblVehicleEF	OBUS	5.8890e-003	5.9980e-003
tblVehicleEF	OBUS	9.2020e-003	9.3860e-003
tblVehicleEF	OBUS	5.7200e-004	5.3600e-004
tblVehicleEF	OBUS	2.2230e-003	2.1460e-003
tblVehicleEF	OBUS	0.04	0.04
tblVehicleEF	OBUS	0.53	0.43
tblVehicleEF	OBUS	1.1300e-003	1.1190e-003
tblVehicleEF	OBUS	0.20	0.13
tblVehicleEF	OBUS	0.27	0.29
tblVehicleEF	OBUS	0.77	0.66
tblVehicleEF	OBUS	0.02	0.02
tblVehicleEF	OBUS	2.2030e-003	1.8730e-003
tblVehicleEF	OBUS	3.17	3.26
tblVehicleEF	OBUS	2.18	1.56
tblVehicleEF	OBUS	12.11	10.66
tblVehicleEF	OBUS	526.81	517.49
tblVehicleEF	OBUS	933.78	920.98
tblVehicleEF	OBUS	37.90	35.44
tblVehicleEF	OBUS	1.0120e-003	0.00
tblVehicleEF	OBUS	6.96	5.30
tblVehicleEF	OBUS	4.72	3.12
tblVehicleEF	OBUS	1.67	1.52
tblVehicleEF	OBUS	0.07	0.01
tblVehicleEF	OBUS	0.08	0.09
tblVehicleEF	OBUS	9.9180e-003	0.01

tblVehicleEF	OBUS	0.08	0.04
tblVehicleEF	OBUS	1.5340e-003	1.0490e-003
tblVehicleEF	OBUS	0.07	0.01
tblVehicleEF	OBUS	0.03	0.04
tblVehicleEF	OBUS	2.4800e-003	2.5210e-003
tblVehicleEF	OBUS	0.07	0.04
tblVehicleEF	OBUS	1.3140e-003	9.2500e-004
tblVehicleEF	OBUS	1.3870e-003	1.2800e-003
tblVehicleEF	OBUS	0.04	0.04
tblVehicleEF	OBUS	0.53	0.44
tblVehicleEF	OBUS	0.16	0.10
tblVehicleEF	OBUS	0.29	0.31
tblVehicleEF	OBUS	0.79	0.68
tblVehicleEF	OBUS	5.1030e-003	5.1970e-003
tblVehicleEF	OBUS	9.2020e-003	9.3860e-003
tblVehicleEF	OBUS	5.9900e-004	5.6100e-004
tblVehicleEF	OBUS	1.3870e-003	1.2800e-003
tblVehicleEF	OBUS	0.04	0.04
tblVehicleEF	OBUS	0.60	0.50
tblVehicleEF	OBUS	0.20	0.13
tblVehicleEF	OBUS	0.29	0.31
tblVehicleEF	OBUS	0.84	0.72
tblVehicleEF	SBUS	5.3980e-003	5.4440e-003
tblVehicleEF	SBUS	7.2840e-003	7.6850e-003
tblVehicleEF	SBUS	1.04	1.07
tblVehicleEF	SBUS	2.82	2.15
tblVehicleEF	SBUS	20.97	18.54
tblVehicleEF	SBUS	581.72	562.55
tblVehicleEF	SBUS	1,135.42	1,089.38
tblVehicleEF	SBUS	129.31	123.07
tblVehicleEF	SBUS	9.2500e-004	0.00
tblVehicleEF	SBUS	8.19	8.05

tblVehicleEF	SBUS	7.92	7.70
tblVehicleEF	SBUS	1.52	1.42
tblVehicleEF	SBUS	0.03	0.03
tblVehicleEF	SBUS	0.56	0.55
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.08	0.08
tblVehicleEF	SBUS	3.7230e-003	2.5670e-003
tblVehicleEF	SBUS	0.03	0.02
tblVehicleEF	SBUS	0.24	0.24
tblVehicleEF	SBUS	2.7360e-003	2.7280e-003
tblVehicleEF	SBUS	0.08	0.08
tblVehicleEF	SBUS	3.1720e-003	2.2530e-003
tblVehicleEF	SBUS	0.02	0.02
tblVehicleEF	SBUS	0.16	0.14
tblVehicleEF	SBUS	0.12	0.12
tblVehicleEF	SBUS	8.5740e-003	8.3080e-003
tblVehicleEF	SBUS	0.28	0.26
tblVehicleEF	SBUS	1.31	1.27
tblVehicleEF	SBUS	1.44	1.22
tblVehicleEF	SBUS	5.6340e-003	5.6490e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	1.6850e-003	1.6230e-003
tblVehicleEF	SBUS	0.02	0.02
tblVehicleEF	SBUS	0.16	0.14
tblVehicleEF	SBUS	0.13	0.13
tblVehicleEF	SBUS	8.5740e-003	8.3080e-003
tblVehicleEF	SBUS	0.32	0.29
tblVehicleEF	SBUS	1.31	1.27
tblVehicleEF	SBUS	1.54	1.30
tblVehicleEF	SBUS	5.0870e-003	5.1310e-003
tblVehicleEF	SBUS	7.2840e-003	7.6850e-003
tblVehicleEF	SBUS	0.76	0.78

tblVehicleEF	SBUS	2.82	2.17
tblVehicleEF	SBUS	17.82	15.65
tblVehicleEF	SBUS	616.28	595.97
tblVehicleEF	SBUS	1,135.42	1,089.38
tblVehicleEF	SBUS	129.31	123.07
tblVehicleEF	SBUS	9.2500e-004	0.00
tblVehicleEF	SBUS	8.46	8.31
tblVehicleEF	SBUS	7.44	7.24
tblVehicleEF	SBUS	1.41	1.33
tblVehicleEF	SBUS	0.02	0.02
tblVehicleEF	SBUS	0.56	0.55
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.08	0.08
tblVehicleEF	SBUS	3.7230e-003	2.5670e-003
tblVehicleEF	SBUS	0.02	0.02
tblVehicleEF	SBUS	0.24	0.24
tblVehicleEF	SBUS	2.7360e-003	2.7280e-003
tblVehicleEF	SBUS	0.08	0.08
tblVehicleEF	SBUS	3.1720e-003	2.2530e-003
tblVehicleEF	SBUS	0.04	0.04
tblVehicleEF	SBUS	0.18	0.16
tblVehicleEF	SBUS	0.11	0.11
tblVehicleEF	SBUS	0.02	0.02
tblVehicleEF	SBUS	0.28	0.26
tblVehicleEF	SBUS	1.21	1.17
tblVehicleEF	SBUS	1.26	1.08
tblVehicleEF	SBUS	5.9690e-003	5.9850e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	1.6300e-003	1.5730e-003
tblVehicleEF	SBUS	0.04	0.04
tblVehicleEF	SBUS	0.18	0.16
tblVehicleEF	SBUS	0.12	0.13

tblVehicleEF	SBUS	0.02	0.02
tblVehicleEF	SBUS	0.32	0.30
tblVehicleEF	SBUS	1.21	1.17
tblVehicleEF	SBUS	1.35	1.15
tblVehicleEF	SBUS	5.8270e-003	5.8770e-003
tblVehicleEF	SBUS	7.2840e-003	7.6850e-003
tblVehicleEF	SBUS	1.44	1.47
tblVehicleEF	SBUS	2.79	2.14
tblVehicleEF	SBUS	20.75	18.34
tblVehicleEF	SBUS	533.99	516.39
tblVehicleEF	SBUS	1,135.42	1,089.38
tblVehicleEF	SBUS	129.31	123.07
tblVehicleEF	SBUS	9.2500e-004	0.00
tblVehicleEF	SBUS	7.83	7.69
tblVehicleEF	SBUS	7.80	7.59
tblVehicleEF	SBUS	1.52	1.43
tblVehicleEF	SBUS	0.03	0.03
tblVehicleEF	SBUS	0.56	0.55
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.08	0.08
tblVehicleEF	SBUS	3.7230e-003	2.5670e-003
tblVehicleEF	SBUS	0.03	0.03
tblVehicleEF	SBUS	0.24	0.24
tblVehicleEF	SBUS	2.7360e-003	2.7280e-003
tblVehicleEF	SBUS	0.08	0.08
tblVehicleEF	SBUS	3.1720e-003	2.2530e-003
tblVehicleEF	SBUS	0.03	0.02
tblVehicleEF	SBUS	0.21	0.17
tblVehicleEF	SBUS	0.13	0.13
tblVehicleEF	SBUS	0.01	9.3800e-003
tblVehicleEF	SBUS	0.28	0.26
tblVehicleEF	SBUS	1.55	1.50

tblVehicleEF	SBUS	1.43	1.21
tblVehicleEF	SBUS	5.1720e-003	5.1860e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	1.6810e-003	1.6190e-003
tblVehicleEF	SBUS	0.03	0.02
tblVehicleEF	SBUS	0.21	0.17
tblVehicleEF	SBUS	0.14	0.14
tblVehicleEF	SBUS	0.01	9.3800e-003
tblVehicleEF	SBUS	0.32	0.29
tblVehicleEF	SBUS	1.55	1.50
tblVehicleEF	SBUS	1.53	1.30
tblVehicleEF	UBUS	7.66	6.87
tblVehicleEF	UBUS	26.64	25.29
tblVehicleEF	UBUS	1,579.79	1,511.41
tblVehicleEF	UBUS	78.93	75.81
tblVehicleEF	UBUS	1.0750e-003	0.00
tblVehicleEF	UBUS	9.15	8.60
tblVehicleEF	UBUS	3.10	3.03
tblVehicleEF	UBUS	0.12	0.12
tblVehicleEF	UBUS	1.3550e-003	1.1510e-003
tblVehicleEF	UBUS	0.11	0.11
tblVehicleEF	UBUS	1.2350e-003	1.0680e-003
tblVehicleEF	UBUS	0.01	0.01
tblVehicleEF	UBUS	0.19	0.18
tblVehicleEF	UBUS	7.0160e-003	6.9870e-003
tblVehicleEF	UBUS	0.88	0.82
tblVehicleEF	UBUS	1.02	1.11
tblVehicleEF	UBUS	1.86	1.79
tblVehicleEF	UBUS	0.02	0.02
tblVehicleEF	UBUS	1.2770e-003	1.2500e-003
tblVehicleEF	UBUS	0.01	0.01
tblVehicleEF	UBUS	0.19	0.18

tblVehicleEF	UBUS	7.0160e-003	6.9870e-003
tblVehicleEF	UBUS	0.97	0.91
tblVehicleEF	UBUS	1.02	1.11
tblVehicleEF	UBUS	1.99	1.91
tblVehicleEF	UBUS	7.81	7.02
tblVehicleEF	UBUS	22.16	21.00
tblVehicleEF	UBUS	1,579.79	1,511.41
tblVehicleEF	UBUS	78.93	75.81
tblVehicleEF	UBUS	1.0750e-003	0.00
tblVehicleEF	UBUS	8.52	8.01
tblVehicleEF	UBUS	2.95	2.88
tblVehicleEF	UBUS	0.12	0.12
tblVehicleEF	UBUS	1.3550e-003	1.1510e-003
tblVehicleEF	UBUS	0.11	0.11
tblVehicleEF	UBUS	1.2350e-003	1.0680e-003
tblVehicleEF	UBUS	0.02	0.02
tblVehicleEF	UBUS	0.23	0.22
tblVehicleEF	UBUS	0.01	0.01
tblVehicleEF	UBUS	0.90	0.84
tblVehicleEF	UBUS	0.99	1.08
tblVehicleEF	UBUS	1.67	1.60
tblVehicleEF	UBUS	0.02	0.02
tblVehicleEF	UBUS	1.2000e-003	1.1770e-003
tblVehicleEF	UBUS	0.02	0.02
tblVehicleEF	UBUS	0.23	0.22
tblVehicleEF	UBUS	0.01	0.01
tblVehicleEF	UBUS	0.99	0.93
tblVehicleEF	UBUS	0.99	1.08
tblVehicleEF	UBUS	1.78	1.71
tblVehicleEF	UBUS	7.65	6.88
tblVehicleEF	UBUS	25.64	24.33
tblVehicleEF	UBUS	1,579.79	1,511.41

tblVehicleEF	UBUS	78.93	75.81
tblVehicleEF	UBUS	1.0750e-003	0.00
tblVehicleEF	UBUS	8.97	8.43
tblVehicleEF	UBUS	3.08	3.00
tblVehicleEF	UBUS	0.12	0.12
tblVehicleEF	UBUS	1.3550e-003	1.1510e-003
tblVehicleEF	UBUS	0.11	0.11
tblVehicleEF	UBUS	1.2350e-003	1.0680e-003
tblVehicleEF	UBUS	0.02	0.02
tblVehicleEF	UBUS	0.23	0.22
tblVehicleEF	UBUS	7.6760e-003	7.5270e-003
tblVehicleEF	UBUS	0.88	0.82
tblVehicleEF	UBUS	1.20	1.31
tblVehicleEF	UBUS	1.82	1.75
tblVehicleEF	UBUS	0.02	0.02
tblVehicleEF	UBUS	1.2600e-003	1.2340e-003
tblVehicleEF	UBUS	0.02	0.02
tblVehicleEF	UBUS	0.23	0.22
tblVehicleEF	UBUS	7.6760e-003	7.5270e-003
tblVehicleEF	UBUS	0.97	0.91
tblVehicleEF	UBUS	1.20	1.31
tblVehicleEF	UBUS	1.95	1.87

2.0 Emissions Summary

	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

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	0.0186	0.0000	1.1000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.0000e-004	2.0000e-004	0.0000	0.0000	2.1000e-004
Energy	5.8700e-003	0.0534	0.0449	3.2000e-004		4.0600e-003	4.0600e-003		4.0600e-003	4.0600e-003	0.0000	185.0542	185.0542	3.8900e-003	1.6400e-003	185.6444
Mobile	0.2029	0.2289	1.5657	3.1300e-003	0.2634	3.4200e-003	0.2668	0.0700	3.1500e-003	0.0731	0.0000	228.3113	228.3113	9.3000e-003	0.0000	228.5067
Waste						0.0000	0.0000		0.0000	0.0000	9.4208	0.0000	9.4208	0.5568	0.0000	21.1126
Water						0.0000	0.0000		0.0000	0.0000	0.3756	9.7733	10.1489	0.0388	9.6000e-004	11.2595
Total	0.2274	0.2823	1.6106	3.4500e-003	0.2634	7.4800e-003	0.2709	0.0700	7.2100e-003	0.0772	9.7964	423.1390	432.9354	0.6087	2.6000e-003	446.5233

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	0.0186	0.0000	1.1000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.0000e-004	2.0000e-004	0.0000	0.0000	2.1000e-004
Energy	5.8700e-003	0.0534	0.0449	3.2000e-004		4.0600e-003	4.0600e-003		4.0600e-003	4.0600e-003	0.0000	185.0542	185.0542	3.8900e-003	1.6400e-003	185.6444
Mobile	0.2029	0.2289	1.5657	3.1300e-003	0.2634	3.4200e-003	0.2668	0.0700	3.1500e-003	0.0731	0.0000	228.3113	228.3113	9.3000e-003	0.0000	228.5067
Waste						0.0000	0.0000		0.0000	0.0000	9.4208	0.0000	9.4208	0.5568	0.0000	21.1126
Water						0.0000	0.0000		0.0000	0.0000	0.3005	7.8888	8.1893	0.0310	7.6000e-004	9.0774
Total	0.2274	0.2823	1.6106	3.4500e-003	0.2634	7.4800e-003	0.2709	0.0700	7.2100e-003	0.0772	9.7213	421.2545	430.9758	0.6010	2.4000e-003	444.3413

	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	0.77	0.45	0.45	1.27	7.69	0.49
-------------------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Building Construction	Building Construction	1/1/2017	12/30/2016	5	0	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Building Construction	Cranes	1	7.00	226	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Building Construction	9	2.00	1.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

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	0.2029	0.2289	1.5657	3.1300e-003	0.2634	3.4200e-003	0.2668	0.0700	3.1500e-003	0.0731	0.0000	228.3113	228.3113	9.3000e-003	0.0000	228.5067
Unmitigated	0.2029	0.2289	1.5657	3.1300e-003	0.2634	3.4200e-003	0.2668	0.0700	3.1500e-003	0.0731	0.0000	228.3113	228.3113	9.3000e-003	0.0000	228.5067

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
High Turnover (Sit Down Restaurant)	495.89	617.64	514.18	703,073	703,073
Parking Lot	0.00	0.00	0.00		
Total	495.89	617.64	514.18	703,073	703,073

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
High Turnover (Sit Down Restaurant)	16.60	8.40	6.90	8.50	72.50	19.00	37	20	43
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.782800	0.080300	0.060200	0.050200	0.000000	0.000000	0.000000	0.020100	0.000000	0.000000	0.006500	0.000000	0.000000

5.0 Energy Detail

4.4 Fleet Mix

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					
NaturalGas Mitigated	5.8700e-003	0.0534	0.0449	3.2000e-004		4.0600e-003	4.0600e-003		4.0600e-003	4.0600e-003	0.0000	58.1380	58.1380	1.1100e-003	1.0700e-003	58.4918
NaturalGas Unmitigated	5.8700e-003	0.0534	0.0449	3.2000e-004		4.0600e-003	4.0600e-003		4.0600e-003	4.0600e-003	0.0000	58.1380	58.1380	1.1100e-003	1.0700e-003	58.4918
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	126.9162	126.9162	2.7800e-003	5.7000e-004	127.1526
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	126.9162	126.9162	2.7800e-003	5.7000e-004	127.1526

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					
High Turnover (Sit Down Restaurant)	1.08947e+006	5.8700e-003	0.0534	0.0449	3.2000e-004		4.0600e-003	4.0600e-003		4.0600e-003	4.0600e-003	0.0000	58.1380	58.1380	1.1100e-003	1.0700e-003	58.4918
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
Total		5.8700e-003	0.0534	0.0449	3.2000e-004		4.0600e-003	4.0600e-003		4.0600e-003	4.0600e-003	0.0000	58.1380	58.1380	1.1100e-003	1.0700e-003	58.4918

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						
High Turnover (Sit Down Restaurant)	1.08947e+006	5.8700e-003	0.0534	0.0449	3.2000e-004		4.0600e-003	4.0600e-003		4.0600e-003	4.0600e-003	0.0000	58.1380	58.1380	1.1100e-003	1.0700e-003	58.4918
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
Total		5.8700e-003	0.0534	0.0449	3.2000e-004		4.0600e-003	4.0600e-003		4.0600e-003	4.0600e-003	0.0000	58.1380	58.1380	1.1100e-003	1.0700e-003	58.4918

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
High Turnover (Sit Down Restaurant)	211068	126.9162	2.7800e-003	5.7000e-004	127.1526
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		126.9162	2.7800e-003	5.7000e-004	127.1526

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
High Turnover (Sit Down Restaurant)	211068	126.9162	2.7800e-003	5.7000e-004	127.1526
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		126.9162	2.7800e-003	5.7000e-004	127.1526

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	0.0186	0.0000	1.1000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.0000e-004	2.0000e-004	0.0000	0.0000	2.1000e-004
Unmitigated	0.0186	0.0000	1.1000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.0000e-004	2.0000e-004	0.0000	0.0000	2.1000e-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	4.5200e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0141					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.0000e-005	0.0000	1.1000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.0000e-004	2.0000e-004	0.0000	0.0000	2.1000e-004
Total	0.0186	0.0000	1.1000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.0000e-004	2.0000e-004	0.0000	0.0000	2.1000e-004

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	4.5200e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0141					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.0000e-005	0.0000	1.1000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.0000e-004	2.0000e-004	0.0000	0.0000	2.1000e-004
Total	0.0186	0.0000	1.1000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.0000e-004	2.0000e-004	0.0000	0.0000	2.1000e-004

7.0 Water Detail

7.1 Mitigation Measures Water

- Install Low Flow Bathroom Faucet
- Install Low Flow Kitchen Faucet
- Install Low Flow Toilet
- Install Low Flow Shower
- Use Water Efficient Irrigation System

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Unmitigated	10.1489	0.0388	9.6000e-004	11.2595
Mitigated	8.1893	0.0310	7.6000e-004	9.0774

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e

Land Use	Mgal	MT/yr			
High Turnover (Sit Down Restaurant)	1.18378 / 0.0755605	10.1489	0.0388	9.6000e-004	11.2595
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		10.1489	0.0388	9.6000e-004	11.2595

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
High Turnover (Sit Down Restaurant)	0.947025 / 0.0709513	8.1893	0.0310	7.6000e-004	9.0774
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		8.1893	0.0310	7.6000e-004	9.0774

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	9.4208	0.5568	0.0000	21.1126
Unmitigated	9.4208	0.5568	0.0000	21.1126

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
High Turnover (Sit Down Restaurant)	46.41	9.4208	0.5568	0.0000	21.1126
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		9.4208	0.5568	0.0000	21.1126

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
High Turnover (Sit Down Restaurant)	46.41	9.4208	0.5568	0.0000	21.1126
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		9.4208	0.5568	0.0000	21.1126

9.0 Operational Offroad

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

10.0 Vegetation

Peninsula Retail Partners Commercial/Restaurant
Riverside-South Coast County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Non-Asphalt Surfaces	2.98	Acre	2.98	129,808.80	0
Parking Lot	412.00	Space	3.71	164,800.00	0
Fast Food Restaurant with Drive Thru	2.00	1000sqft	0.05	2,000.00	0
Health Club	37.80	1000sqft	0.87	37,800.00	0
High Turnover (Sit Down Restaurant)	3.90	1000sqft	0.09	3,900.00	0
Supermarket	41.10	1000sqft	0.94	41,100.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.4	Precipitation Freq (Days)	28
Climate Zone	10			Operational Year	2017
Utility Company	Riverside Public Utilities				
CO2 Intensity (lb/MWhr)	1325.65	CH4 Intensity (lb/MWhr)	0.029	N2O Intensity (lb/MWhr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Construction Phase - Construction schedule provided by contractor

Off-road Equipment -

Off-road Equipment -

Off-road Equipment -

Off-road Equipment - Information from contractor

Off-road Equipment -

Off-road Equipment - Information from contractor

Off-road Equipment - phases moved

Trips and VMT - Information provided by contractor

On-road Fugitive Dust -

Grading - Grading information provided by contractor

Architectural Coating - Architectural coatings as required by SCAQMD Rule 1113.

Vehicle Trips - Trips rates from traffic study, used peak day for all days.

Vehicle Emission Factors - Adjusted fleet mix for land uses.

Vehicle Emission Factors - Adjusted fleet mix for land uses.

Vehicle Emission Factors - Adjusted fleet mix for land uses.

Construction Off-road Equipment Mitigation - Dust control measures as required by SCAQMD Rule 403, assume all diesel equipment at least Tier 2.

Energy Mitigation -

Water Mitigation -

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	100.00
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	100.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	5.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	11.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2

tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstructionPhase	NumDays	20.00	55.00
tblConstructionPhase	NumDays	230.00	110.00
tblConstructionPhase	NumDays	20.00	10.00
tblConstructionPhase	PhaseEndDate	6/14/2017	3/29/2017
tblConstructionPhase	PhaseStartDate	3/30/2017	1/12/2017
tblGrading	AcresOfGrading	10.00	8.21
tblGrading	MaterialImported	0.00	500.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblProjectCharacteristics	OperationalYear	2014	2017
tblVehicleEF	HHD	0.04	0.03
tblVehicleEF	HHD	0.04	0.03
tblVehicleEF	HHD	0.04	0.03
tblVehicleEF	LDA	0.46	0.70
tblVehicleEF	LDA	0.46	0.70
tblVehicleEF	LDA	0.46	0.70
tblVehicleEF	LDT1	0.07	0.08
tblVehicleEF	LDT1	0.07	0.08
tblVehicleEF	LDT1	0.07	0.08
tblVehicleEF	LDT2	0.18	0.08
tblVehicleEF	LDT2	0.18	0.08
tblVehicleEF	LDT2	0.18	0.08

tblVehicleEF	LHD1	0.05	0.00
tblVehicleEF	LHD1	0.05	0.00
tblVehicleEF	LHD1	0.05	0.00
tblVehicleEF	LHD2	7.3830e-003	0.00
tblVehicleEF	LHD2	7.3830e-003	0.00
tblVehicleEF	LHD2	7.3830e-003	0.00
tblVehicleEF	MCY	6.4540e-003	3.7000e-003
tblVehicleEF	MCY	6.4540e-003	3.7000e-003
tblVehicleEF	MCY	6.4540e-003	3.7000e-003
tblVehicleEF	MDV	0.17	0.10
tblVehicleEF	MDV	0.17	0.10
tblVehicleEF	MDV	0.17	0.10
tblVehicleEF	MH	3.2420e-003	0.00
tblVehicleEF	MH	3.2420e-003	0.00
tblVehicleEF	MH	3.2420e-003	0.00
tblVehicleEF	MHD	0.01	0.00
tblVehicleEF	MHD	0.01	0.00
tblVehicleEF	MHD	0.01	0.00
tblVehicleEF	OBUS	9.5400e-004	0.00
tblVehicleEF	OBUS	9.5400e-004	0.00
tblVehicleEF	OBUS	9.5400e-004	0.00
tblVehicleEF	SBUS	8.8400e-004	0.00
tblVehicleEF	SBUS	8.8400e-004	0.00
tblVehicleEF	SBUS	8.8400e-004	0.00
tblVehicleEF	UBUS	1.0560e-003	0.00
tblVehicleEF	UBUS	1.0560e-003	0.00
tblVehicleEF	UBUS	1.0560e-003	0.00
tblVehicleTrips	ST_TR	722.03	458.50
tblVehicleTrips	ST_TR	20.87	32.93
tblVehicleTrips	ST_TR	177.59	98.84
tblVehicleTrips	SU_TR	542.72	458.50

tblVehicleTrips	SU_TR	26.73	32.93
tblVehicleTrips	SU_TR	166.44	98.84
tblVehicleTrips	WD_TR	496.12	458.50
tblVehicleTrips	WD_TR	102.24	98.84

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2016	5.1460	54.7138	42.1261	0.0607	18.2675	2.9399	21.2074	9.9840	2.7047	12.6888	0.0000	5,699.0750	5,699.0750	1.2348	0.0000	5,725.0051
2017	41.5127	34.0648	34.5554	0.0678	2.4691	2.0577	4.5268	0.6628	1.9412	2.6040	0.0000	6,191.1926	6,191.1926	0.7693	0.0000	6,207.3474
Total	46.6588	88.7785	76.6815	0.1284	20.7366	4.9976	25.7342	10.6468	4.6459	15.2928	0.0000	11,890.2676	11,890.2676	2.0040	0.0000	11,932.3524

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2016	2.1543	34.5055	32.0538	0.0607	8.3310	1.0134	9.2933	4.5222	1.0044	5.4844	0.0000	5,699.0750	5,699.0750	1.2348	0.0000	5,725.0051
2017	39.2701	31.2880	34.2062	0.0678	2.4691	1.0998	3.5689	0.6628	1.0916	1.7544	0.0000	6,191.1926	6,191.1926	0.7693	0.0000	6,207.3474
Total	41.4244	65.7935	66.2601	0.1284	10.8001	2.1132	12.8623	5.1850	2.0960	7.2388	0.0000	11,890.2676	11,890.2676	2.0040	0.0000	11,932.3524

	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	11.22	25.89	13.59	0.00	47.92	57.72	50.02	51.30	54.89	52.67	0.00	0.00	0.00	0.00	0.00	0.00

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	lb/day										lb/day					
Area	8.9113	4.9000e-004	0.0520	0.0000		1.9000e-004	1.9000e-004		1.9000e-004	1.9000e-004		0.1094	0.1094	3.0000e-004		0.1158
Energy	0.1098	0.9977	0.8381	5.9900e-003		0.0758	0.0758		0.0758	0.0758		1,197.2226	1,197.2226	0.0230	0.0220	1,204.5087
Mobile	16.9555	21.8803	126.9295	0.2773	20.6125	0.3354	20.9479	5.4708	0.3089	5.7797		22,657.7391	22,657.7391	0.8344		22,675.2615
Total	25.9766	22.8784	127.8195	0.2833	20.6125	0.4115	21.0239	5.4708	0.3849	5.8557		23,855.0710	23,855.0710	0.8577	0.0220	23,879.8860

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	lb/day										lb/day					
Area	8.9113	4.9000e-004	0.0520	0.0000		1.9000e-004	1.9000e-004		1.9000e-004	1.9000e-004		0.1094	0.1094	3.0000e-004		0.1158
Energy	0.1098	0.9977	0.8381	5.9900e-003		0.0758	0.0758		0.0758	0.0758		1,197.2226	1,197.2226	0.0230	0.0220	1,204.5087
Mobile	16.9555	21.8803	126.9295	0.2773	20.6125	0.3354	20.9479	5.4708	0.3089	5.7797		22,657.7391	22,657.7391	0.8344		22,675.2615
Total	25.9766	22.8784	127.8195	0.2833	20.6125	0.4115	21.0239	5.4708	0.3849	5.8557		23,855.0710	23,855.0710	0.8577	0.0220	23,879.8860

	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

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	9/1/2016	9/14/2016	5	10	
2	Trenching	Trenching	9/15/2016	9/28/2016	5	10	
3	Grading	Grading	9/29/2016	10/26/2016	5	20	
4	Building Construction	Building Construction	10/27/2016	3/29/2017	5	110	
5	Architectural Coating	Architectural Coating	1/12/2017	3/29/2017	5	55	
6	Paving	Paving	3/30/2017	4/12/2017	5	10	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 8.21

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 329,329; Non-Residential Outdoor: 109,776 (Architectural Coating –

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Rubber Tired Dozers	3	8.00	255	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Trenching	Excavators	1	8.00	162	0.38
Trenching	Rubber Tired Dozers	1	8.00	255	0.40
Trenching	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Grading	Excavators	1	8.00	162	0.38
Grading	Graders	1	8.00	174	0.41
Grading	Rubber Tired Dozers	1	8.00	255	0.40

Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Building Construction	Cranes	1	7.00	226	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Architectural Coating	Air Compressors	1	6.00	78	0.48
Paving	Pavers	1	8.00	125	0.42
Paving	Paving Equipment	2	8.00	130	0.36
Paving	Rollers	2	8.00	80	0.38

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Trenching	3	8.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	0.00	63.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	155.00	62.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	31.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	5	13.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 Site Preparation - 2016

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	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	5.0771	54.6323	41.1053	0.0391		2.9387	2.9387		2.7036	2.7036		4,065.0053	4,065.0053	1.2262		4,090.7544
Total	5.0771	54.6323	41.1053	0.0391	18.0663	2.9387	21.0049	9.9307	2.7036	12.6343		4,065.0053	4,065.0053	1.2262		4,090.7544

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	lb/day										lb/day					
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
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
Worker	0.0690	0.0814	1.0208	2.4100e-003	0.2012	1.2600e-003	0.2025	0.0534	1.1600e-003	0.0545		199.7247	199.7247	8.6100e-003		199.9056
Total	0.0690	0.0814	1.0208	2.4100e-003	0.2012	1.2600e-003	0.2025	0.0534	1.1600e-003	0.0545		199.7247	199.7247	8.6100e-003		199.9056

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	lb/day										lb/day					
Fugitive Dust					8.1298	0.0000	8.1298	4.4688	0.0000	4.4688			0.0000			0.0000
Off-Road	1.2300	34.4240	23.4003	0.0391		0.9611	0.9611		0.9611	0.9611	0.0000	4,065.0053	4,065.0053	1.2262		4,090.7544

Total	1.2300	34.4240	23.4003	0.0391	8.1298	0.9611	9.0909	4.4688	0.9611	5.4299	0.0000	4,065.0053	4,065.0053	1.2262		4,090.7544
-------	--------	---------	---------	--------	--------	--------	--------	--------	--------	--------	--------	------------	------------	--------	--	------------

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	lb/day										lb/day					
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
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
Worker	0.0690	0.0814	1.0208	2.4100e-003	0.2012	1.2600e-003	0.2025	0.0534	1.1600e-003	0.0545		199.7247	199.7247	8.6100e-003		199.9056
Total	0.0690	0.0814	1.0208	2.4100e-003	0.2012	1.2600e-003	0.2025	0.0534	1.1600e-003	0.0545		199.7247	199.7247	8.6100e-003		199.9056

3.3 Trenching - 2016

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	lb/day										lb/day					
Off-Road	1.9670	21.5566	16.3260	0.0173		1.1140	1.1140		1.0249	1.0249		1,797.0274	1,797.0274	0.5421		1,808.4104
Total	1.9670	21.5566	16.3260	0.0173		1.1140	1.1140		1.0249	1.0249		1,797.0274	1,797.0274	0.5421		1,808.4104

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	lb/day										lb/day					
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
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
Worker	0.0307	0.0362	0.4537	1.0700e-003	0.0894	5.6000e-004	0.0900	0.0237	5.1000e-004	0.0242		88.7665	88.7665	3.8300e-003		88.8469
Total	0.0307	0.0362	0.4537	1.0700e-003	0.0894	5.6000e-004	0.0900	0.0237	5.1000e-004	0.0242		88.7665	88.7665	3.8300e-003		88.8469

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	lb/day										lb/day					
Off-Road	0.5678	15.0000	11.0366	0.0173		0.4188	0.4188		0.4188	0.4188	0.0000	1,797.0274	1,797.0274	0.5421		1,808.4104
Total	0.5678	15.0000	11.0366	0.0173		0.4188	0.4188		0.4188	0.4188	0.0000	1,797.0274	1,797.0274	0.5421		1,808.4104

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	lb/day										lb/day					
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
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

Worker	0.0307	0.0362	0.4537	1.0700e-003	0.0894	5.6000e-004	0.0900	0.0237	5.1000e-004	0.0242		88.7665	88.7665	3.8300e-003		88.8469
Total	0.0307	0.0362	0.4537	1.0700e-003	0.0894	5.6000e-004	0.0900	0.0237	5.1000e-004	0.0242		88.7665	88.7665	3.8300e-003		88.8469

3.4 Grading - 2016

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	lb/day										lb/day					
Fugitive Dust					6.4606	0.0000	6.4606	3.3577	0.0000	3.3577			0.0000			0.0000
Off-Road	3.6669	38.4466	26.0787	0.0298		2.1984	2.1984		2.0225	2.0225		3,093.7889	3,093.7889	0.9332		3,113.3860
Total	3.6669	38.4466	26.0787	0.0298	6.4606	2.1984	8.6590	3.3577	2.0225	5.3802		3,093.7889	3,093.7889	0.9332		3,113.3860

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	lb/day										lb/day					
Hauling	0.0472	0.8347	0.5329	2.2400e-003	0.0550	0.0153	0.0702	0.0151	0.0141	0.0291		226.2104	226.2104	1.4300e-003		226.2404
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
Worker	0.0575	0.0679	0.8507	2.0100e-003	0.1677	1.0500e-003	0.1687	0.0445	9.6000e-004	0.0454		166.4372	166.4372	7.1800e-003		166.5880
Total	0.1046	0.9026	1.3835	4.2500e-003	0.2226	0.0163	0.2389	0.0595	0.0150	0.0745		392.6476	392.6476	8.6100e-003		392.8284

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	lb/day										lb/day					
Fugitive Dust					2.9073	0.0000	2.9073	1.5110	0.0000	1.5110			0.0000			0.0000
Off-Road	1.0980	26.2602	20.3762	0.0298		0.8229	0.8229		0.8229	0.8229	0.0000	3,093.7889	3,093.7889	0.9332		3,113.3860
Total	1.0980	26.2602	20.3762	0.0298	2.9073	0.8229	3.7302	1.5110	0.8229	2.3339	0.0000	3,093.7889	3,093.7889	0.9332		3,113.3860

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	lb/day										lb/day					
Hauling	0.0472	0.8347	0.5329	2.2400e-003	0.0550	0.0153	0.0702	0.0151	0.0141	0.0291		226.2104	226.2104	1.4300e-003		226.2404
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
Worker	0.0575	0.0679	0.8507	2.0100e-003	0.1677	1.0500e-003	0.1687	0.0445	9.6000e-004	0.0454		166.4372	166.4372	7.1800e-003		166.5880
Total	0.1046	0.9026	1.3835	4.2500e-003	0.2226	0.0163	0.2389	0.0595	0.0150	0.0745		392.6476	392.6476	8.6100e-003		392.8284

3.5 Building Construction - 2016

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	lb/day										lb/day					
Off-Road	3.4062	28.5063	18.5066	0.0268		1.9674	1.9674		1.8485	1.8485		2,669.2864	2,669.2864	0.6620		2,683.1890

Total	3.4062	28.5063	18.5066	0.0268		1.9674	1.9674		1.8485	1.8485		2,669.2864	2,669.2864	0.6620		2,683.1890
-------	--------	---------	---------	--------	--	--------	--------	--	--------	--------	--	------------	------------	--------	--	------------

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	lb/day										lb/day					
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
Vendor	0.4822	5.2028	5.4481	0.0131	0.3901	0.1010	0.4911	0.1114	0.0929	0.2043		1,309.9371	1,309.9371	8.5200e-003		1,310.1161
Worker	0.5939	0.7013	8.7901	0.0208	1.7325	0.0108	1.7434	0.4595	9.9600e-003	0.4694		1,719.8515	1,719.8515	0.0742		1,721.4093
Total	1.0761	5.9041	14.2383	0.0338	2.1226	0.1118	2.2344	0.5709	0.1028	0.6737		3,029.7886	3,029.7886	0.0827		3,031.5254

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	lb/day										lb/day					
Off-Road	1.0782	23.4615	17.8156	0.0268		0.9016	0.9016		0.9016	0.9016	0.0000	2,669.2864	2,669.2864	0.6620		2,683.1890
Total	1.0782	23.4615	17.8156	0.0268		0.9016	0.9016		0.9016	0.9016	0.0000	2,669.2864	2,669.2864	0.6620		2,683.1890

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	lb/day										lb/day					
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
Vendor	0.4822	5.2028	5.4481	0.0131	0.3901	0.1010	0.4911	0.1114	0.0929	0.2043		1,309.9371	1,309.9371	8.5200e-003		1,310.1161
Worker	0.5939	0.7013	8.7901	0.0208	1.7325	0.0108	1.7434	0.4595	9.9600e-003	0.4694		1,719.8515	1,719.8515	0.0742		1,721.4093
Total	1.0761	5.9041	14.2383	0.0338	2.1226	0.1118	2.2344	0.5709	0.1028	0.6737		3,029.7886	3,029.7886	0.0827		3,031.5254

3.5 Building Construction - 2017

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	lb/day										lb/day					
Off-Road	3.1024	26.4057	18.1291	0.0268		1.7812	1.7812		1.6730	1.6730		2,639.8053	2,639.8053	0.6497		2,653.4490
Total	3.1024	26.4057	18.1291	0.0268		1.7812	1.7812		1.6730	1.6730		2,639.8053	2,639.8053	0.6497		2,653.4490

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	lb/day										lb/day					
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

Vendor	0.4351	4.7190	5.0851	0.0130	0.3901	0.0905	0.4806	0.1114	0.0832	0.1947		1,287.8186	1,287.8186	8.2100e-003		1,287.9910
Worker	0.5320	0.6292	7.8943	0.0208	1.7325	0.0105	1.7431	0.4595	9.7200e-003	0.4692		1,651.7673	1,651.7673	0.0680		1,653.1961
Total	0.9671	5.3482	12.9794	0.0338	2.1226	0.1010	2.2237	0.5709	0.0930	0.6639		2,939.5858	2,939.5858	0.0763		2,941.1871

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	lb/day										lb/day					
Off-Road	1.0782	23.4615	17.8156	0.0268		0.9016	0.9016		0.9016	0.9016	0.0000	2,639.8053	2,639.8053	0.6497		2,653.4490
Total	1.0782	23.4615	17.8156	0.0268		0.9016	0.9016		0.9016	0.9016	0.0000	2,639.8053	2,639.8053	0.6497		2,653.4490

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	lb/day										lb/day					
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
Vendor	0.4351	4.7190	5.0851	0.0130	0.3901	0.0905	0.4806	0.1114	0.0832	0.1947		1,287.8186	1,287.8186	8.2100e-003		1,287.9910
Worker	0.5320	0.6292	7.8943	0.0208	1.7325	0.0105	1.7431	0.4595	9.7200e-003	0.4692		1,651.7673	1,651.7673	0.0680		1,653.1961
Total	0.9671	5.3482	12.9794	0.0338	2.1226	0.1010	2.2237	0.5709	0.0930	0.6639		2,939.5858	2,939.5858	0.0763		2,941.1871

3.6 Architectural Coating - 2017

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	lb/day										lb/day					
Archit. Coating	37.0046					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.3323	2.1850	1.8681	2.9700e-003		0.1733	0.1733		0.1733	0.1733		281.4481	281.4481	0.0297		282.0721
Total	37.3369	2.1850	1.8681	2.9700e-003		0.1733	0.1733		0.1733	0.1733		281.4481	281.4481	0.0297		282.0721

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	lb/day										lb/day					
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
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
Worker	0.1064	0.1259	1.5789	4.1600e-003	0.3465	2.1100e-003	0.3486	0.0919	1.9400e-003	0.0938		330.3535	330.3535	0.0136		330.6392
Total	0.1064	0.1259	1.5789	4.1600e-003	0.3465	2.1100e-003	0.3486	0.0919	1.9400e-003	0.0938		330.3535	330.3535	0.0136		330.6392

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	lb/day										lb/day					

Archit. Coating	37.0046					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1139	2.3524	1.8324	2.9700e-003		0.0951	0.0951		0.0951	0.0951	0.0000	281.4481	281.4481	0.0297		282.0721
Total	37.1185	2.3524	1.8324	2.9700e-003		0.0951	0.0951		0.0951	0.0951	0.0000	281.4481	281.4481	0.0297		282.0721

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	lb/day										lb/day					
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
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
Worker	0.1064	0.1259	1.5789	4.1600e-003	0.3465	2.1100e-003	0.3486	0.0919	1.9400e-003	0.0938		330.3535	330.3535	0.0136		330.6392
Total	0.1064	0.1259	1.5789	4.1600e-003	0.3465	2.1100e-003	0.3486	0.0919	1.9400e-003	0.0938		330.3535	330.3535	0.0136		330.6392

3.7 Paving - 2017

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	lb/day										lb/day					
Off-Road	1.5473	16.2657	11.8910	0.0178		0.9401	0.9401		0.8649	0.8649		1,819.0446	1,819.0446	0.5574		1,830.7490
Paving	0.9720					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	2.5193	16.2657	11.8910	0.0178		0.9401	0.9401		0.8649	0.8649		1,819.0446	1,819.0446	0.5574		1,830.7490

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	lb/day										lb/day					
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
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
Worker	0.0446	0.0528	0.6621	1.7400e-003	0.1453	8.8000e-004	0.1462	0.0385	8.1000e-004	0.0394		138.5353	138.5353	5.7100e-003		138.6552
Total	0.0446	0.0528	0.6621	1.7400e-003	0.1453	8.8000e-004	0.1462	0.0385	8.1000e-004	0.0394		138.5353	138.5353	5.7100e-003		138.6552

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	lb/day										lb/day					
Off-Road	0.7362	15.8387	13.5016	0.0178		0.5357	0.5357		0.5357	0.5357	0.0000	1,819.0446	1,819.0446	0.5574		1,830.7490
Paving	0.9720					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.7082	15.8387	13.5016	0.0178		0.5357	0.5357		0.5357	0.5357	0.0000	1,819.0446	1,819.0446	0.5574		1,830.7490

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	lb/day										lb/day					

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
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
Worker	0.0446	0.0528	0.6621	1.7400e-003	0.1453	8.8000e-004	0.1462	0.0385	8.1000e-004	0.0394		138.5353	138.5353	5.7100e-003		138.6552
Total	0.0446	0.0528	0.6621	1.7400e-003	0.1453	8.8000e-004	0.1462	0.0385	8.1000e-004	0.0394		138.5353	138.5353	5.7100e-003		138.6552

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	lb/day										lb/day					
Mitigated	16.9555	21.8803	126.9295	0.2773	20.6125	0.3354	20.9479	5.4708	0.3089	5.7797		22,657.7391	22,657.7391	0.8344		22,675.2615
Unmitigated	16.9555	21.8803	126.9295	0.2773	20.6125	0.3354	20.9479	5.4708	0.3089	5.7797		22,657.7391	22,657.7391	0.8344		22,675.2615

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Fast Food Restaurant with Drive Thru	917.00	917.00	917.00	965,039	965,039
Health Club	1,244.75	1,244.75	1244.75	2,662,244	2,662,244
High Turnover (Sit Down Restaurant)	495.89	617.64	514.18	703,073	703,073
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Supermarket	4,062.32	4,062.32	4062.32	5,360,118	5,360,118
Total	6,719.96	6,841.72	6,738.25	9,690,474	9,690,474

4.3 Trip Type Information

	Miles	Trip %	Trip Purpose %
--	-------	--------	----------------

Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-S	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Fast Food Restaurant with Drive Thru	16.60	8.40	6.90	2.20	78.80	19.00	29	21	50
Health Club	16.60	8.40	6.90	16.90	64.10	19.00	52	39	9
High Turnover (Sit Down Restaurant)	16.60	8.40	6.90	8.50	72.50	19.00	37	20	43
Other Non-Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Supermarket	16.60	8.40	6.90	6.50	74.50	19.00	34	30	36

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.702800	0.080300	0.080300	0.100400	0.000000	0.000000	0.000000	0.032500	0.000000	0.000000	0.003700	0.000000	0.000000

5.0 Energy Detail

4.4 Fleet Mix

Historical Energy Use: N

5.1 Mitigation Measures Energy

Exceed Title 24

	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	lb/day										lb/day					
NaturalGas Mitigated	0.1098	0.9977	0.8381	5.9900e-003		0.0758	0.0758		0.0758	0.0758		1,197.2226	1,197.2226	0.0230	0.0220	1,204.5087
NaturalGas Unmitigated	0.1098	0.9977	0.8381	5.9900e-003		0.0758	0.0758		0.0758	0.0758		1,197.2226	1,197.2226	0.0230	0.0220	1,204.5087

5.2 Energy by Land Use - NaturalGas

Unmitigated

	Natural Gas 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	lb/day										lb/day					
Fast Food Restaurant with Drive-Thru	1520.6	0.0164	0.1491	0.1252	8.9000e-004		0.0113	0.0113		0.0113	0.0113		178.8944	178.8944	3.4300e-003	3.2800e-003	179.9832
Health Club	3447.57	0.0372	0.3380	0.2839	2.0300e-003		0.0257	0.0257		0.0257	0.0257		405.5961	405.5961	7.7700e-003	7.4400e-003	408.0645
High Turnover (Sit Down Restaurant)	2965.18	0.0320	0.2907	0.2442	1.7400e-003		0.0221	0.0221		0.0221	0.0221		348.8442	348.8442	6.6900e-003	6.4000e-003	350.9672
Other Non-Asphalt Surfaces	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
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
Supermarket	2243.05	0.0242	0.2199	0.1847	1.3200e-003		0.0167	0.0167		0.0167	0.0167		263.8878	263.8878	5.0600e-003	4.8400e-003	265.4938
Total		0.1098	0.9977	0.8381	5.9800e-003		0.0758	0.0758		0.0758	0.0758		1,197.2226	1,197.2226	0.0230	0.0220	1,204.5087

Mitigated

	Natural Gas 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	lb/day										lb/day					
Health Club	3.44757	0.0372	0.3380	0.2839	2.0300e-003		0.0257	0.0257		0.0257	0.0257		405.5961	405.5961	7.7700e-003	7.4400e-003	408.0645
High Turnover (Sit Down Restaurant)	2.96518	0.0320	0.2907	0.2442	1.7400e-003		0.0221	0.0221		0.0221	0.0221		348.8442	348.8442	6.6900e-003	6.4000e-003	350.9672
Other Non-Asphalt Surfaces	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
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
Supermarket	2.24305	0.0242	0.2199	0.1847	1.3200e-003		0.0167	0.0167		0.0167	0.0167		263.8878	263.8878	5.0600e-003	4.8400e-003	265.4938
Fast Food Restaurant with Drive-Thru	1.5206	0.0164	0.1491	0.1252	8.9000e-004		0.0113	0.0113		0.0113	0.0113		178.8944	178.8944	3.4300e-003	3.2800e-003	179.9832
Total		0.1098	0.9977	0.8381	5.9800e-003		0.0758	0.0758		0.0758	0.0758		1,197.2226	1,197.2226	0.0230	0.0220	1,204.5087

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	lb/day										lb/day					
Mitigated	8.9113	4.9000e-004	0.0520	0.0000		1.9000e-004	1.9000e-004		1.9000e-004	1.9000e-004		0.1094	0.1094	3.0000e-004		0.1158
Unmitigated	8.9113	4.9000e-004	0.0520	0.0000		1.9000e-004	1.9000e-004		1.9000e-004	1.9000e-004		0.1094	0.1094	3.0000e-004		0.1158

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	lb/day										lb/day					
Architectural Coating	1.3940					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	7.5123					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	5.0200e-003	4.9000e-004	0.0520	0.0000		1.9000e-004	1.9000e-004		1.9000e-004	1.9000e-004		0.1094	0.1094	3.0000e-004		0.1158
Total	8.9113	4.9000e-004	0.0520	0.0000		1.9000e-004	1.9000e-004		1.9000e-004	1.9000e-004		0.1094	0.1094	3.0000e-004		0.1158

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	lb/day										lb/day					
Architectural Coating	1.3940					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	7.5123					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	5.0200e-003	4.9000e-004	0.0520	0.0000		1.9000e-004	1.9000e-004		1.9000e-004	1.9000e-004		0.1094	0.1094	3.0000e-004		0.1158
Total	8.9113	4.9000e-004	0.0520	0.0000		1.9000e-004	1.9000e-004		1.9000e-004	1.9000e-004		0.1094	0.1094	3.0000e-004		0.1158

7.0 Water Detail

7.1 Mitigation Measures Water

- Install Low Flow Bathroom Faucet
- Install Low Flow Kitchen Faucet
- Install Low Flow Toilet
- Install Low Flow Shower
- Use Water Efficient Irrigation System

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

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

10.0 Vegetation

Peninsula Retail Partners Commercial/Restaurant
Riverside-South Coast County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Non-Asphalt Surfaces	2.98	Acre	2.98	129,808.80	0
Parking Lot	412.00	Space	3.71	164,800.00	0
Fast Food Restaurant with Drive Thru	2.00	1000sqft	0.05	2,000.00	0
Health Club	37.80	1000sqft	0.87	37,800.00	0
High Turnover (Sit Down Restaurant)	3.90	1000sqft	0.09	3,900.00	0
Supermarket	41.10	1000sqft	0.94	41,100.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.4	Precipitation Freq (Days)	28
Climate Zone	10			Operational Year	2017
Utility Company	Riverside Public Utilities				
CO2 Intensity (lb/MWhr)	1325.65	CH4 Intensity (lb/MWhr)	0.029	N2O Intensity (lb/MWhr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Construction Phase - Construction schedule provided by contractor

Off-road Equipment -

Off-road Equipment -

Off-road Equipment -

Off-road Equipment - Information from contractor

Off-road Equipment -

Off-road Equipment - Information from contractor

Off-road Equipment - phases moved

Trips and VMT - Information provided by contractor

On-road Fugitive Dust -

Grading - Grading information provided by contractor

Architectural Coating - Architectural coatings as required by SCAQMD Rule 1113.

Vehicle Trips - Trips rates from traffic study, used peak day for all days.

Vehicle Emission Factors - Adjusted fleet mix for land uses.

Vehicle Emission Factors - Adjusted fleet mix for land uses.

Vehicle Emission Factors - Adjusted fleet mix for land uses.

Construction Off-road Equipment Mitigation - Dust control measures as required by SCAQMD Rule 403, assume all diesel equipment at least Tier 2.

Energy Mitigation -

Water Mitigation -

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	100.00
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	100.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	5.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	11.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2

tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstructionPhase	NumDays	20.00	55.00
tblConstructionPhase	NumDays	230.00	110.00
tblConstructionPhase	NumDays	20.00	10.00
tblConstructionPhase	PhaseEndDate	6/14/2017	3/29/2017
tblConstructionPhase	PhaseStartDate	3/30/2017	1/12/2017
tblGrading	AcresOfGrading	10.00	8.21
tblGrading	MaterialImported	0.00	500.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblProjectCharacteristics	OperationalYear	2014	2017
tblVehicleEF	HHD	0.04	0.03
tblVehicleEF	HHD	0.04	0.03
tblVehicleEF	HHD	0.04	0.03
tblVehicleEF	LDA	0.46	0.70
tblVehicleEF	LDA	0.46	0.70
tblVehicleEF	LDA	0.46	0.70
tblVehicleEF	LDT1	0.07	0.08
tblVehicleEF	LDT1	0.07	0.08
tblVehicleEF	LDT1	0.07	0.08
tblVehicleEF	LDT2	0.18	0.08
tblVehicleEF	LDT2	0.18	0.08
tblVehicleEF	LDT2	0.18	0.08

tblVehicleEF	LHD1	0.05	0.00
tblVehicleEF	LHD1	0.05	0.00
tblVehicleEF	LHD1	0.05	0.00
tblVehicleEF	LHD2	7.3830e-003	0.00
tblVehicleEF	LHD2	7.3830e-003	0.00
tblVehicleEF	LHD2	7.3830e-003	0.00
tblVehicleEF	MCY	6.4540e-003	3.7000e-003
tblVehicleEF	MCY	6.4540e-003	3.7000e-003
tblVehicleEF	MCY	6.4540e-003	3.7000e-003
tblVehicleEF	MDV	0.17	0.10
tblVehicleEF	MDV	0.17	0.10
tblVehicleEF	MDV	0.17	0.10
tblVehicleEF	MH	3.2420e-003	0.00
tblVehicleEF	MH	3.2420e-003	0.00
tblVehicleEF	MH	3.2420e-003	0.00
tblVehicleEF	MHD	0.01	0.00
tblVehicleEF	MHD	0.01	0.00
tblVehicleEF	MHD	0.01	0.00
tblVehicleEF	OBUS	9.5400e-004	0.00
tblVehicleEF	OBUS	9.5400e-004	0.00
tblVehicleEF	OBUS	9.5400e-004	0.00
tblVehicleEF	SBUS	8.8400e-004	0.00
tblVehicleEF	SBUS	8.8400e-004	0.00
tblVehicleEF	SBUS	8.8400e-004	0.00
tblVehicleEF	UBUS	1.0560e-003	0.00
tblVehicleEF	UBUS	1.0560e-003	0.00
tblVehicleEF	UBUS	1.0560e-003	0.00
tblVehicleTrips	ST_TR	722.03	458.50
tblVehicleTrips	ST_TR	20.87	32.93
tblVehicleTrips	ST_TR	177.59	98.84
tblVehicleTrips	SU_TR	542.72	458.50

tblVehicleTrips	SU_TR	26.73	32.93
tblVehicleTrips	SU_TR	166.44	98.84
tblVehicleTrips	WD_TR	496.12	458.50
tblVehicleTrips	WD_TR	102.24	98.84

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2016	5.1429	54.7191	41.9848	0.0587	18.2675	2.9399	21.2074	9.9840	2.7047	12.6888	0.0000	5,539.5665	5,539.5665	1.2348	0.0000	5,565.4965
2017	41.5098	34.2283	33.9870	0.0655	2.4691	2.0585	4.5276	0.6628	1.9419	2.6047	0.0000	6,009.0314	6,009.0314	0.7696	0.0000	6,025.1923
Total	46.6526	88.9474	75.9718	0.1242	20.7366	4.9984	25.7350	10.6468	4.6467	15.2935	0.0000	11,548.5979	11,548.5979	2.0043	0.0000	11,590.6888

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2016	2.1586	34.5108	31.5841	0.0587	8.3310	1.0143	9.2933	4.5222	1.0052	5.4844	0.0000	5,539.5665	5,539.5665	1.2348	0.0000	5,565.4965
2017	39.2672	31.4516	33.6378	0.0655	2.4691	1.1006	3.5697	0.6628	1.0923	1.7551	0.0000	6,009.0314	6,009.0314	0.7696	0.0000	6,025.1923
Total	41.4259	65.9624	65.2219	0.1242	10.8001	2.1149	12.8630	5.1850	2.0975	7.2395	0.0000	11,548.5979	11,548.5979	2.0043	0.0000	11,590.6888

	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	11.20	25.84	14.15	0.00	47.92	57.69	50.02	51.30	54.86	52.66	0.00	0.00	0.00	0.00	0.00	0.00

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	lb/day										lb/day					
Area	8.9113	4.9000e-004	0.0520	0.0000		1.9000e-004	1.9000e-004		1.9000e-004	1.9000e-004		0.1094	0.1094	3.0000e-004		0.1158
Energy	0.1098	0.9977	0.8381	5.9900e-003		0.0758	0.0758		0.0758	0.0758		1,197.2226	1,197.2226	0.0230	0.0220	1,204.5087
Mobile	16.4266	22.7234	124.5877	0.2565	20.6125	0.3374	20.9498	5.4708	0.3106	5.7814		21,003.5442	21,003.5442	0.8360		21,021.1003
Total	25.4477	23.7216	125.4777	0.2625	20.6125	0.4134	21.0259	5.4708	0.3866	5.8574		22,200.8761	22,200.8761	0.8593	0.0220	22,225.7247

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	lb/day										lb/day					
Area	8.9113	4.9000e-004	0.0520	0.0000		1.9000e-004	1.9000e-004		1.9000e-004	1.9000e-004		0.1094	0.1094	3.0000e-004		0.1158
Energy	0.1098	0.9977	0.8381	5.9900e-003		0.0758	0.0758		0.0758	0.0758		1,197.2226	1,197.2226	0.0230	0.0220	1,204.5087
Mobile	16.4266	22.7234	124.5877	0.2565	20.6125	0.3374	20.9498	5.4708	0.3106	5.7814		21,003.5442	21,003.5442	0.8360		21,021.1003
Total	25.4477	23.7216	125.4777	0.2625	20.6125	0.4134	21.0259	5.4708	0.3866	5.8574		22,200.8761	22,200.8761	0.8593	0.0220	22,225.7247

	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

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	9/1/2016	9/14/2016	5	10	
2	Trenching	Trenching	9/15/2016	9/28/2016	5	10	
3	Grading	Grading	9/29/2016	10/26/2016	5	20	
4	Building Construction	Building Construction	10/27/2016	3/29/2017	5	110	
5	Architectural Coating	Architectural Coating	1/12/2017	3/29/2017	5	55	
6	Paving	Paving	3/30/2017	4/12/2017	5	10	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 8.21

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 329,329; Non-Residential Outdoor: 109,776 (Architectural Coating –

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Rubber Tired Dozers	3	8.00	255	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Trenching	Excavators	1	8.00	162	0.38
Trenching	Rubber Tired Dozers	1	8.00	255	0.40
Trenching	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Grading	Excavators	1	8.00	162	0.38
Grading	Graders	1	8.00	174	0.41
Grading	Rubber Tired Dozers	1	8.00	255	0.40

Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Building Construction	Cranes	1	7.00	226	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Architectural Coating	Air Compressors	1	6.00	78	0.48
Paving	Pavers	1	8.00	125	0.42
Paving	Paving Equipment	2	8.00	130	0.36
Paving	Rollers	2	8.00	80	0.38

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Trenching	3	8.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	0.00	63.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	155.00	62.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	31.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	5	13.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 Site Preparation - 2016

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	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	5.0771	54.6323	41.1053	0.0391		2.9387	2.9387		2.7036	2.7036		4,065.0053	4,065.0053	1.2262		4,090.7544
Total	5.0771	54.6323	41.1053	0.0391	18.0663	2.9387	21.0049	9.9307	2.7036	12.6343		4,065.0053	4,065.0053	1.2262		4,090.7544

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	lb/day										lb/day					
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
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
Worker	0.0658	0.0868	0.8796	2.2000e-003	0.2012	1.2600e-003	0.2025	0.0534	1.1600e-003	0.0545		182.5176	182.5176	8.6100e-003		182.6986
Total	0.0658	0.0868	0.8796	2.2000e-003	0.2012	1.2600e-003	0.2025	0.0534	1.1600e-003	0.0545		182.5176	182.5176	8.6100e-003		182.6986

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	lb/day										lb/day					
Fugitive Dust					8.1298	0.0000	8.1298	4.4688	0.0000	4.4688			0.0000			0.0000
Off-Road	1.2300	34.4240	23.4003	0.0391		0.9611	0.9611		0.9611	0.9611	0.0000	4,065.0053	4,065.0053	1.2262		4,090.7544

Total	1.2300	34.4240	23.4003	0.0391	8.1298	0.9611	9.0909	4.4688	0.9611	5.4299	0.0000	4,065.0053	4,065.0053	1.2262		4,090.7544
-------	--------	---------	---------	--------	--------	--------	--------	--------	--------	--------	--------	------------	------------	--------	--	------------

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	lb/day										lb/day					
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
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
Worker	0.0658	0.0868	0.8796	2.2000e-003	0.2012	1.2600e-003	0.2025	0.0534	1.1600e-003	0.0545		182.5176	182.5176	8.6100e-003		182.6986
Total	0.0658	0.0868	0.8796	2.2000e-003	0.2012	1.2600e-003	0.2025	0.0534	1.1600e-003	0.0545		182.5176	182.5176	8.6100e-003		182.6986

3.3 Trenching - 2016

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	lb/day										lb/day					
Off-Road	1.9670	21.5566	16.3260	0.0173		1.1140	1.1140		1.0249	1.0249		1,797.0274	1,797.0274	0.5421		1,808.4104
Total	1.9670	21.5566	16.3260	0.0173		1.1140	1.1140		1.0249	1.0249		1,797.0274	1,797.0274	0.5421		1,808.4104

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	lb/day										lb/day					
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
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
Worker	0.0292	0.0386	0.3909	9.8000e-004	0.0894	5.6000e-004	0.0900	0.0237	5.1000e-004	0.0242		81.1190	81.1190	3.8300e-003		81.1994
Total	0.0292	0.0386	0.3909	9.8000e-004	0.0894	5.6000e-004	0.0900	0.0237	5.1000e-004	0.0242		81.1190	81.1190	3.8300e-003		81.1994

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	lb/day										lb/day					
Off-Road	0.5678	15.0000	11.0366	0.0173		0.4188	0.4188		0.4188	0.4188	0.0000	1,797.0274	1,797.0274	0.5421		1,808.4104
Total	0.5678	15.0000	11.0366	0.0173		0.4188	0.4188		0.4188	0.4188	0.0000	1,797.0274	1,797.0274	0.5421		1,808.4104

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	lb/day										lb/day					
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
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

Worker	0.0292	0.0386	0.3909	9.8000e-004	0.0894	5.6000e-004	0.0900	0.0237	5.1000e-004	0.0242		81.1190	81.1190	3.8300e-003		81.1994
Total	0.0292	0.0386	0.3909	9.8000e-004	0.0894	5.6000e-004	0.0900	0.0237	5.1000e-004	0.0242		81.1190	81.1190	3.8300e-003		81.1994

3.4 Grading - 2016

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	lb/day										lb/day					
Fugitive Dust					6.4606	0.0000	6.4606	3.3577	0.0000	3.3577			0.0000			0.0000
Off-Road	3.6669	38.4466	26.0787	0.0298		2.1984	2.1984		2.0225	2.0225		3,093.7889	3,093.7889	0.9332		3,113.3860
Total	3.6669	38.4466	26.0787	0.0298	6.4606	2.1984	8.6590	3.3577	2.0225	5.3802		3,093.7889	3,093.7889	0.9332		3,113.3860

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	lb/day										lb/day					
Hauling	0.0491	0.8665	0.5861	2.2400e-003	0.0550	0.0153	0.0703	0.0151	0.0141	0.0291		225.6538	225.6538	1.4500e-003		225.6843
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
Worker	0.0548	0.0723	0.7330	1.8400e-003	0.1677	1.0500e-003	0.1687	0.0445	9.6000e-004	0.0454		152.0980	152.0980	7.1800e-003		152.2488
Total	0.1039	0.9388	1.3191	4.0800e-003	0.2226	0.0164	0.2390	0.0595	0.0150	0.0746		377.7518	377.7518	8.6300e-003		377.9330

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	lb/day										lb/day					
Fugitive Dust					2.9073	0.0000	2.9073	1.5110	0.0000	1.5110			0.0000			0.0000
Off-Road	1.0980	26.2602	20.3762	0.0298		0.8229	0.8229		0.8229	0.8229	0.0000	3,093.7889	3,093.7889	0.9332		3,113.3860
Total	1.0980	26.2602	20.3762	0.0298	2.9073	0.8229	3.7302	1.5110	0.8229	2.3339	0.0000	3,093.7889	3,093.7889	0.9332		3,113.3860

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	lb/day										lb/day					
Hauling	0.0491	0.8665	0.5861	2.2400e-003	0.0550	0.0153	0.0703	0.0151	0.0141	0.0291		225.6538	225.6538	1.4500e-003		225.6843
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
Worker	0.0548	0.0723	0.7330	1.8400e-003	0.1677	1.0500e-003	0.1687	0.0445	9.6000e-004	0.0454		152.0980	152.0980	7.1800e-003		152.2488
Total	0.1039	0.9388	1.3191	4.0800e-003	0.2226	0.0164	0.2390	0.0595	0.0150	0.0746		377.7518	377.7518	8.6300e-003		377.9330

3.5 Building Construction - 2016

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	lb/day										lb/day					
Off-Road	3.4062	28.5063	18.5066	0.0268		1.9674	1.9674		1.8485	1.8485		2,669.2864	2,669.2864	0.6620		2,683.1890

Total	3.4062	28.5063	18.5066	0.0268		1.9674	1.9674		1.8485	1.8485		2,669.2864	2,669.2864	0.6620		2,683.1890
-------	--------	---------	---------	--------	--	--------	--------	--	--------	--------	--	------------	------------	--------	--	------------

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	lb/day										lb/day					
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
Vendor	0.5139	5.3334	6.1945	0.0129	0.3901	0.1019	0.4920	0.1114	0.0937	0.2051		1,298.6004	1,298.6004	8.8100e-003		1,298.7854
Worker	0.5666	0.7471	7.5740	0.0190	1.7325	0.0108	1.7434	0.4595	9.9600e-003	0.4694		1,571.6797	1,571.6797	0.0742		1,573.2375
Total	1.0805	6.0805	13.7686	0.0319	2.1226	0.1127	2.2353	0.5709	0.1037	0.6746		2,870.2801	2,870.2801	0.0830		2,872.0229

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	lb/day										lb/day					
Off-Road	1.0782	23.4615	17.8156	0.0268		0.9016	0.9016		0.9016	0.9016	0.0000	2,669.2864	2,669.2864	0.6620		2,683.1890
Total	1.0782	23.4615	17.8156	0.0268		0.9016	0.9016		0.9016	0.9016	0.0000	2,669.2864	2,669.2864	0.6620		2,683.1890

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	lb/day										lb/day					
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
Vendor	0.5139	5.3334	6.1945	0.0129	0.3901	0.1019	0.4920	0.1114	0.0937	0.2051		1,298.6004	1,298.6004	8.8100e-003		1,298.7854
Worker	0.5666	0.7471	7.5740	0.0190	1.7325	0.0108	1.7434	0.4595	9.9600e-003	0.4694		1,571.6797	1,571.6797	0.0742		1,573.2375
Total	1.0805	6.0805	13.7686	0.0319	2.1226	0.1127	2.2353	0.5709	0.1037	0.6746		2,870.2801	2,870.2801	0.0830		2,872.0229

3.5 Building Construction - 2017

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	lb/day										lb/day					
Off-Road	3.1024	26.4057	18.1291	0.0268		1.7812	1.7812		1.6730	1.6730		2,639.8053	2,639.8053	0.6497		2,653.4490
Total	3.1024	26.4057	18.1291	0.0268		1.7812	1.7812		1.6730	1.6730		2,639.8053	2,639.8053	0.6497		2,653.4490

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	lb/day										lb/day					
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

Vendor	0.4632	4.8340	5.8511	0.0129	0.3901	0.0913	0.4814	0.1114	0.0839	0.1954		1,276.638 2	1,276.6382	8.5100e- 003		1,276.816 8
Worker	0.5061	0.6697	6.7822	0.0190	1.7325	0.0105	1.7431	0.4595	9.7200e- 003	0.4692		1,509.283 2	1,509.2832	0.0680		1,510.712 0
Total	0.9693	5.5037	12.6333	0.0319	2.1226	0.1018	2.2244	0.5709	0.0937	0.6646		2,785.921 4	2,785.9214	0.0766		2,787.528 8

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	lb/day										lb/day					
Off-Road	1.0782	23.4615	17.8156	0.0268		0.9016	0.9016		0.9016	0.9016	0.0000	2,639.805 3	2,639.8053	0.6497		2,653.449 0
Total	1.0782	23.4615	17.8156	0.0268		0.9016	0.9016		0.9016	0.9016	0.0000	2,639.805 3	2,639.8053	0.6497		2,653.449 0

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	lb/day										lb/day					
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
Vendor	0.4632	4.8340	5.8511	0.0129	0.3901	0.0913	0.4814	0.1114	0.0839	0.1954		1,276.638 2	1,276.6382	8.5100e- 003		1,276.816 8
Worker	0.5061	0.6697	6.7822	0.0190	1.7325	0.0105	1.7431	0.4595	9.7200e- 003	0.4692		1,509.283 2	1,509.2832	0.0680		1,510.712 0
Total	0.9693	5.5037	12.6333	0.0319	2.1226	0.1018	2.2244	0.5709	0.0937	0.6646		2,785.921 4	2,785.9214	0.0766		2,787.528 8

3.6 Architectural Coating - 2017

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	lb/day										lb/day					
Archit. Coating	37.0046					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.3323	2.1850	1.8681	2.9700e-003		0.1733	0.1733		0.1733	0.1733		281.4481	281.4481	0.0297		282.0721
Total	37.3369	2.1850	1.8681	2.9700e-003		0.1733	0.1733		0.1733	0.1733		281.4481	281.4481	0.0297		282.0721

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	lb/day										lb/day					
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
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
Worker	0.1012	0.1339	1.3564	3.7900e-003	0.3465	2.1100e-003	0.3486	0.0919	1.9400e-003	0.0938		301.8566	301.8566	0.0136		302.1424
Total	0.1012	0.1339	1.3564	3.7900e-003	0.3465	2.1100e-003	0.3486	0.0919	1.9400e-003	0.0938		301.8566	301.8566	0.0136		302.1424

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	lb/day										lb/day					

Archit. Coating	37.0046					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1139	2.3524	1.8324	2.9700e-003		0.0951	0.0951		0.0951	0.0951	0.0000	281.4481	281.4481	0.0297		282.0721
Total	37.1185	2.3524	1.8324	2.9700e-003		0.0951	0.0951		0.0951	0.0951	0.0000	281.4481	281.4481	0.0297		282.0721

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	lb/day										lb/day					
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
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
Worker	0.1012	0.1339	1.3564	3.7900e-003	0.3465	2.1100e-003	0.3486	0.0919	1.9400e-003	0.0938		301.8566	301.8566	0.0136		302.1424
Total	0.1012	0.1339	1.3564	3.7900e-003	0.3465	2.1100e-003	0.3486	0.0919	1.9400e-003	0.0938		301.8566	301.8566	0.0136		302.1424

3.7 Paving - 2017

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	lb/day										lb/day					
Off-Road	1.5473	16.2657	11.8910	0.0178		0.9401	0.9401		0.8649	0.8649		1,819.0446	1,819.0446	0.5574		1,830.7490
Paving	0.9720					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	2.5193	16.2657	11.8910	0.0178		0.9401	0.9401		0.8649	0.8649		1,819.0446	1,819.0446	0.5574		1,830.7490

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	lb/day										lb/day					
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
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
Worker	0.0425	0.0562	0.5688	1.5900e-003	0.1453	8.8000e-004	0.1462	0.0385	8.1000e-004	0.0394		126.5850	126.5850	5.7100e-003		126.7049
Total	0.0425	0.0562	0.5688	1.5900e-003	0.1453	8.8000e-004	0.1462	0.0385	8.1000e-004	0.0394		126.5850	126.5850	5.7100e-003		126.7049

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	lb/day										lb/day					
Off-Road	0.7362	15.8387	13.5016	0.0178		0.5357	0.5357		0.5357	0.5357	0.0000	1,819.0446	1,819.0446	0.5574		1,830.7490
Paving	0.9720					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.7082	15.8387	13.5016	0.0178		0.5357	0.5357		0.5357	0.5357	0.0000	1,819.0446	1,819.0446	0.5574		1,830.7490

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	lb/day										lb/day					

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
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
Worker	0.0425	0.0562	0.5688	1.5900e-003	0.1453	8.8000e-004	0.1462	0.0385	8.1000e-004	0.0394		126.5850	126.5850	5.7100e-003		126.7049
Total	0.0425	0.0562	0.5688	1.5900e-003	0.1453	8.8000e-004	0.1462	0.0385	8.1000e-004	0.0394		126.5850	126.5850	5.7100e-003		126.7049

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	lb/day										lb/day					
Mitigated	16.4266	22.7234	124.5877	0.2565	20.6125	0.3374	20.9498	5.4708	0.3106	5.7814		21,003.5442	21,003.5442	0.8360		21,021.1003
Unmitigated	16.4266	22.7234	124.5877	0.2565	20.6125	0.3374	20.9498	5.4708	0.3106	5.7814		21,003.5442	21,003.5442	0.8360		21,021.1003

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Fast Food Restaurant with Drive Thru	917.00	917.00	917.00	965,039	965,039
Health Club	1,244.75	1,244.75	1244.75	2,662,244	2,662,244
High Turnover (Sit Down Restaurant)	495.89	617.64	514.18	703,073	703,073
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Supermarket	4,062.32	4,062.32	4062.32	5,360,118	5,360,118
Total	6,719.96	6,841.72	6,738.25	9,690,474	9,690,474

4.3 Trip Type Information

	Miles	Trip %	Trip Purpose %
--	-------	--------	----------------

Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-S	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Fast Food Restaurant with Drive Thru	16.60	8.40	6.90	2.20	78.80	19.00	29	21	50
Health Club	16.60	8.40	6.90	16.90	64.10	19.00	52	39	9
High Turnover (Sit Down Restaurant)	16.60	8.40	6.90	8.50	72.50	19.00	37	20	43
Other Non-Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Supermarket	16.60	8.40	6.90	6.50	74.50	19.00	34	30	36

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.702800	0.080300	0.080300	0.100400	0.000000	0.000000	0.000000	0.032500	0.000000	0.000000	0.003700	0.000000	0.000000

5.0 Energy Detail

4.4 Fleet Mix

Historical Energy Use: N

5.1 Mitigation Measures Energy

Exceed Title 24

	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	lb/day										lb/day					
NaturalGas Mitigated	0.1098	0.9977	0.8381	5.9900e-003		0.0758	0.0758		0.0758	0.0758		1,197.2226	1,197.2226	0.0230	0.0220	1,204.5087
NaturalGas Unmitigated	0.1098	0.9977	0.8381	5.9900e-003		0.0758	0.0758		0.0758	0.0758		1,197.2226	1,197.2226	0.0230	0.0220	1,204.5087

5.2 Energy by Land Use - NaturalGas

Unmitigated

	Natural Gas 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	lb/day										lb/day					
Fast Food Restaurant with Drive-Thru	1520.6	0.0164	0.1491	0.1252	8.9000e-004		0.0113	0.0113		0.0113	0.0113		178.8944	178.8944	3.4300e-003	3.2800e-003	179.9832
Health Club	3447.57	0.0372	0.3380	0.2839	2.0300e-003		0.0257	0.0257		0.0257	0.0257		405.5961	405.5961	7.7700e-003	7.4400e-003	408.0645
High Turnover (Sit Down Restaurant)	2965.18	0.0320	0.2907	0.2442	1.7400e-003		0.0221	0.0221		0.0221	0.0221		348.8442	348.8442	6.6900e-003	6.4000e-003	350.9672
Other Non-Asphalt Surfaces	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
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
Supermarket	2243.05	0.0242	0.2199	0.1847	1.3200e-003		0.0167	0.0167		0.0167	0.0167		263.8878	263.8878	5.0600e-003	4.8400e-003	265.4938
Total		0.1098	0.9977	0.8381	5.9800e-003		0.0758	0.0758		0.0758	0.0758		1,197.2226	1,197.2226	0.0230	0.0220	1,204.5087

Mitigated

	Natural Gas 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	lb/day										lb/day					
Health Club	3.44757	0.0372	0.3380	0.2839	2.0300e-003		0.0257	0.0257		0.0257	0.0257		405.5961	405.5961	7.7700e-003	7.4400e-003	408.0645
High Turnover (Sit Down Restaurant)	2.96518	0.0320	0.2907	0.2442	1.7400e-003		0.0221	0.0221		0.0221	0.0221		348.8442	348.8442	6.6900e-003	6.4000e-003	350.9672
Other Non-Asphalt Surfaces	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
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
Supermarket	2.24305	0.0242	0.2199	0.1847	1.3200e-003		0.0167	0.0167		0.0167	0.0167		263.8878	263.8878	5.0600e-003	4.8400e-003	265.4938
Fast Food Restaurant with Drive-Thru	1.5206	0.0164	0.1491	0.1252	8.9000e-004		0.0113	0.0113		0.0113	0.0113		178.8944	178.8944	3.4300e-003	3.2800e-003	179.9832
Total		0.1098	0.9977	0.8381	5.9800e-003		0.0758	0.0758		0.0758	0.0758		1,197.2226	1,197.2226	0.0230	0.0220	1,204.5087

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	lb/day										lb/day					
Mitigated	8.9113	4.9000e-004	0.0520	0.0000		1.9000e-004	1.9000e-004		1.9000e-004	1.9000e-004		0.1094	0.1094	3.0000e-004		0.1158
Unmitigated	8.9113	4.9000e-004	0.0520	0.0000		1.9000e-004	1.9000e-004		1.9000e-004	1.9000e-004		0.1094	0.1094	3.0000e-004		0.1158

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	lb/day										lb/day					
Architectural Coating	1.3940					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	7.5123					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	5.0200e-003	4.9000e-004	0.0520	0.0000		1.9000e-004	1.9000e-004		1.9000e-004	1.9000e-004		0.1094	0.1094	3.0000e-004		0.1158
Total	8.9113	4.9000e-004	0.0520	0.0000		1.9000e-004	1.9000e-004		1.9000e-004	1.9000e-004		0.1094	0.1094	3.0000e-004		0.1158

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	lb/day										lb/day					
Architectural Coating	1.3940					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	7.5123					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	5.0200e-003	4.9000e-004	0.0520	0.0000		1.9000e-004	1.9000e-004		1.9000e-004	1.9000e-004		0.1094	0.1094	3.0000e-004		0.1158
Total	8.9113	4.9000e-004	0.0520	0.0000		1.9000e-004	1.9000e-004		1.9000e-004	1.9000e-004		0.1094	0.1094	3.0000e-004		0.1158

7.0 Water Detail

7.1 Mitigation Measures Water

- Install Low Flow Bathroom Faucet
- Install Low Flow Kitchen Faucet
- Install Low Flow Toilet
- Install Low Flow Shower
- Use Water Efficient Irrigation System

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

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

10.0 Vegetation

Peninsula Retail Partners Commercial/Restaurant
Riverside-South Coast County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Non-Asphalt Surfaces	2.98	Acre	2.98	129,808.80	0
Parking Lot	412.00	Space	3.71	164,800.00	0
Fast Food Restaurant with Drive Thru	2.00	1000sqft	0.05	2,000.00	0
Health Club	37.80	1000sqft	0.87	37,800.00	0
High Turnover (Sit Down Restaurant)	3.90	1000sqft	0.09	3,900.00	0
Supermarket	41.10	1000sqft	0.94	41,100.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.4	Precipitation Freq (Days)	28
Climate Zone	10			Operational Year	2017
Utility Company	Riverside Public Utilities				
CO2 Intensity (lb/MWhr)	1325.65	CH4 Intensity (lb/MWhr)	0.029	N2O Intensity (lb/MWhr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Construction Phase - Construction schedule provided by contractor

Off-road Equipment -

Off-road Equipment -

Off-road Equipment -

Off-road Equipment - Information from contractor

Off-road Equipment -

Off-road Equipment - Information from contractor

Off-road Equipment - phases moved

Trips and VMT - Information provided by contractor

On-road Fugitive Dust -

Grading - Grading information provided by contractor

Architectural Coating - Architectural coatings as required by SCAQMD Rule 1113.

Vehicle Trips - Trips rates from traffic study, used peak day for all days.

Vehicle Emission Factors - Adjusted fleet mix for land uses.

Vehicle Emission Factors - Adjusted fleet mix for land uses.

Vehicle Emission Factors - Adjusted fleet mix for land uses.

Construction Off-road Equipment Mitigation - Dust control measures as required by SCAQMD Rule 403, assume all diesel equipment at least Tier 2.

Energy Mitigation -

Water Mitigation -

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	100.00
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	100.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	5.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	11.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2

tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstructionPhase	NumDays	20.00	55.00
tblConstructionPhase	NumDays	230.00	110.00
tblConstructionPhase	NumDays	20.00	10.00
tblConstructionPhase	PhaseEndDate	6/14/2017	3/29/2017
tblConstructionPhase	PhaseStartDate	3/30/2017	1/12/2017
tblGrading	AcresOfGrading	10.00	8.21
tblGrading	MaterialImported	0.00	500.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblProjectCharacteristics	OperationalYear	2014	2017
tblVehicleEF	HHD	0.04	0.03
tblVehicleEF	HHD	0.04	0.03
tblVehicleEF	HHD	0.04	0.03
tblVehicleEF	LDA	0.46	0.70
tblVehicleEF	LDA	0.46	0.70
tblVehicleEF	LDA	0.46	0.70
tblVehicleEF	LDT1	0.07	0.08
tblVehicleEF	LDT1	0.07	0.08
tblVehicleEF	LDT1	0.07	0.08
tblVehicleEF	LDT2	0.18	0.08
tblVehicleEF	LDT2	0.18	0.08
tblVehicleEF	LDT2	0.18	0.08

tblVehicleEF	LHD1	0.05	0.00
tblVehicleEF	LHD1	0.05	0.00
tblVehicleEF	LHD1	0.05	0.00
tblVehicleEF	LHD2	7.3830e-003	0.00
tblVehicleEF	LHD2	7.3830e-003	0.00
tblVehicleEF	LHD2	7.3830e-003	0.00
tblVehicleEF	MCY	6.4540e-003	3.7000e-003
tblVehicleEF	MCY	6.4540e-003	3.7000e-003
tblVehicleEF	MCY	6.4540e-003	3.7000e-003
tblVehicleEF	MDV	0.17	0.10
tblVehicleEF	MDV	0.17	0.10
tblVehicleEF	MDV	0.17	0.10
tblVehicleEF	MH	3.2420e-003	0.00
tblVehicleEF	MH	3.2420e-003	0.00
tblVehicleEF	MH	3.2420e-003	0.00
tblVehicleEF	MHD	0.01	0.00
tblVehicleEF	MHD	0.01	0.00
tblVehicleEF	MHD	0.01	0.00
tblVehicleEF	OBUS	9.5400e-004	0.00
tblVehicleEF	OBUS	9.5400e-004	0.00
tblVehicleEF	OBUS	9.5400e-004	0.00
tblVehicleEF	SBUS	8.8400e-004	0.00
tblVehicleEF	SBUS	8.8400e-004	0.00
tblVehicleEF	SBUS	8.8400e-004	0.00
tblVehicleEF	UBUS	1.0560e-003	0.00
tblVehicleEF	UBUS	1.0560e-003	0.00
tblVehicleEF	UBUS	1.0560e-003	0.00
tblVehicleTrips	ST_TR	722.03	458.50
tblVehicleTrips	ST_TR	20.87	32.93
tblVehicleTrips	ST_TR	177.59	98.84
tblVehicleTrips	SU_TR	542.72	458.50

tblVehicleTrips	SU_TR	26.73	32.93
tblVehicleTrips	SU_TR	166.44	98.84
tblVehicleTrips	WD_TR	496.12	458.50
tblVehicleTrips	WD_TR	102.24	98.84

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2016	0.1779	1.5916	1.3371	2.0200e-003	0.2076	0.0913	0.2989	0.0974	0.0849	0.1823	0.0000	178.0111	178.0111	0.0325	0.0000	178.6936
2017	1.1693	1.1546	1.1341	2.1400e-003	0.0759	0.0688	0.1447	0.0204	0.0648	0.0852	0.0000	179.3094	179.3094	0.0244	0.0000	179.8215
Total	1.3472	2.7462	2.4712	4.1600e-003	0.2835	0.1601	0.4436	0.1178	0.1497	0.2675	0.0000	357.3205	357.3205	0.0569	0.0000	358.5150

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2016	0.0712	1.2174	1.1489	2.0200e-003	0.1224	0.0391	0.1615	0.0516	0.0389	0.0905	0.0000	178.0110	178.0110	0.0325	0.0000	178.6935
2017	1.0955	1.0643	1.1313	2.1400e-003	0.0759	0.0370	0.1128	0.0204	0.0367	0.0571	0.0000	179.3093	179.3093	0.0244	0.0000	179.8214
Total	1.1667	2.2817	2.2801	4.1600e-003	0.1983	0.0761	0.2744	0.0720	0.0756	0.1476	0.0000	357.3203	357.3203	0.0569	0.0000	358.5148

	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	13.40	16.92	7.73	0.00	30.06	52.49	38.16	38.85	49.50	44.81	0.00	0.00	0.00	0.00	0.00	0.00

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	1.6260	6.0000e-005	6.5000e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.0124	0.0124	3.0000e-005	0.0000	0.0131
Energy	0.0200	0.1821	0.1530	1.0900e-003		0.0138	0.0138		0.0138	0.0138	0.0000	1,695.1641	1,695.1641	0.0366	0.0104	1,699.1585
Mobile	2.7689	4.1738	23.0504	0.0466	3.6371	0.0603	3.6974	0.9666	0.0555	1.0220	0.0000	3,456.3264	3,456.3264	0.1358	0.0000	3,459.1772
Waste						0.0000	0.0000		0.0000	0.0000	104.8875	0.0000	104.8875	6.1987	0.0000	235.0596
Water						0.0000	0.0000		0.0000	0.0000	2.8847	82.1569	85.0416	0.2981	7.3700e-003	93.5854
Total	4.4150	4.3559	23.2099	0.0476	3.6371	0.0741	3.7112	0.9666	0.0693	1.0359	107.7722	5,233.6598	5,341.4320	6.6691	0.0178	5,486.9938

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	1.6260	6.0000e-005	6.5000e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.0124	0.0124	3.0000e-005	0.0000	0.0131
Energy	0.0200	0.1821	0.1530	1.0900e-003		0.0138	0.0138		0.0138	0.0138	0.0000	1,695.1641	1,695.1641	0.0366	0.0104	1,699.1585
Mobile	2.7689	4.1738	23.0504	0.0466	3.6371	0.0603	3.6974	0.9666	0.0555	1.0220	0.0000	3,456.3264	3,456.3264	0.1358	0.0000	3,459.1772

Waste						0.0000	0.0000		0.0000	0.0000	104.8875	0.0000	104.8875	6.1987	0.0000	235.0596
Water						0.0000	0.0000		0.0000	0.0000	2.3078	67.2495	69.5573	0.2385	5.8900e-003	76.3915
Total	4.4150	4.3559	23.2099	0.0476	3.6371	0.0741	3.7112	0.9666	0.0693	1.0359	107.1952	5,218.7524	5,325.9477	6.6095	0.0163	5,469.7998

	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	0.54	0.28	0.29	0.89	8.32	0.31

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	9/1/2016	9/14/2016	5	10	
2	Trenching	Trenching	9/15/2016	9/28/2016	5	10	
3	Grading	Grading	9/29/2016	10/26/2016	5	20	
4	Building Construction	Building Construction	10/27/2016	3/29/2017	5	110	
5	Architectural Coating	Architectural Coating	1/12/2017	3/29/2017	5	55	
6	Paving	Paving	3/30/2017	4/12/2017	5	10	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 8.21

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 329,329; Non-Residential Outdoor: 109,776 (Architectural Coating)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Rubber Tired Dozers	3	8.00	255	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Trenching	Excavators	1	8.00	162	0.38

Trenching	Rubber Tired Dozers	1	8.00	255	0.40
Trenching	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Grading	Excavators	1	8.00	162	0.38
Grading	Graders	1	8.00	174	0.41
Grading	Rubber Tired Dozers	1	8.00	255	0.40
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Building Construction	Cranes	1	7.00	226	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Architectural Coating	Air Compressors	1	6.00	78	0.48
Paving	Pavers	1	8.00	125	0.42
Paving	Paving Equipment	2	8.00	130	0.36
Paving	Rollers	2	8.00	80	0.38

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Trenching	3	8.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	0.00	63.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	155.00	62.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	31.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	5	13.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 Site Preparation - 2016

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					0.0903	0.0000	0.0903	0.0497	0.0000	0.0497	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0254	0.2732	0.2055	2.0000e-004		0.0147	0.0147		0.0135	0.0135	0.0000	18.4386	18.4386	5.5600e-003	0.0000	18.5554
Total	0.0254	0.2732	0.2055	2.0000e-004	0.0903	0.0147	0.1050	0.0497	0.0135	0.0632	0.0000	18.4386	18.4386	5.5600e-003	0.0000	18.5554

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	3.1000e-004	4.5000e-004	4.5600e-003	1.0000e-005	9.9000e-004	1.0000e-005	1.0000e-003	2.6000e-004	1.0000e-005	2.7000e-004	0.0000	0.8392	0.8392	4.0000e-005	0.0000	0.8400
Total	3.1000e-004	4.5000e-004	4.5600e-003	1.0000e-005	9.9000e-004	1.0000e-005	1.0000e-003	2.6000e-004	1.0000e-005	2.7000e-004	0.0000	0.8392	0.8392	4.0000e-005	0.0000	0.8400

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					0.0407	0.0000	0.0407	0.0223	0.0000	0.0223	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	6.1500e-003	0.1721	0.1170	2.0000e-004		4.8100e-003	4.8100e-003		4.8100e-003	4.8100e-003	0.0000	18.4385	18.4385	5.5600e-003	0.0000	18.5553
Total	6.1500e-003	0.1721	0.1170	2.0000e-004	0.0407	4.8100e-003	0.0455	0.0223	4.8100e-003	0.0272	0.0000	18.4385	18.4385	5.5600e-003	0.0000	18.5553

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	3.1000e-004	4.5000e-004	4.5600e-003	1.0000e-005	9.9000e-004	1.0000e-005	1.0000e-003	2.6000e-004	1.0000e-005	2.7000e-004	0.0000	0.8392	0.8392	4.0000e-005	0.0000	0.8400
Total	3.1000e-004	4.5000e-004	4.5600e-003	1.0000e-005	9.9000e-004	1.0000e-005	1.0000e-003	2.6000e-004	1.0000e-005	2.7000e-004	0.0000	0.8392	0.8392	4.0000e-005	0.0000	0.8400

3.3 Trenching - 2016

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	9.8400e-003	0.1078	0.0816	9.0000e-005		5.5700e-003	5.5700e-003		5.1200e-003	5.1200e-003	0.0000	8.1512	8.1512	2.4600e-003	0.0000	8.2028
Total	9.8400e-003	0.1078	0.0816	9.0000e-005		5.5700e-003	5.5700e-003		5.1200e-003	5.1200e-003	0.0000	8.1512	8.1512	2.4600e-003	0.0000	8.2028

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.4000e-004	2.0000e-004	2.0300e-003	0.0000	4.4000e-004	0.0000	4.4000e-004	1.2000e-004	0.0000	1.2000e-004	0.0000	0.3730	0.3730	2.0000e-005	0.0000	0.3733
Total	1.4000e-004	2.0000e-004	2.0300e-003	0.0000	4.4000e-004	0.0000	4.4000e-004	1.2000e-004	0.0000	1.2000e-004	0.0000	0.3730	0.3730	2.0000e-005	0.0000	0.3733

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	2.8400e-003	0.0750	0.0552	9.0000e-005		2.0900e-003	2.0900e-003		2.0900e-003	2.0900e-003	0.0000	8.1512	8.1512	2.4600e-003	0.0000	8.2028
Total	2.8400e-003	0.0750	0.0552	9.0000e-005		2.0900e-003	2.0900e-003		2.0900e-003	2.0900e-003	0.0000	8.1512	8.1512	2.4600e-003	0.0000	8.2028

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
--	-----	-----	----	-----	---------------	--------------	------------	----------------	---------------	-------------	----------	-----------	-----------	-----	-----	------

Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.4000e-004	2.0000e-004	2.0300e-003	0.0000	4.4000e-004	0.0000	4.4000e-004	1.2000e-004	0.0000	1.2000e-004	0.0000	0.3730	0.3730	2.0000e-005	0.0000	0.3733
Total	1.4000e-004	2.0000e-004	2.0300e-003	0.0000	4.4000e-004	0.0000	4.4000e-004	1.2000e-004	0.0000	1.2000e-004	0.0000	0.3730	0.3730	2.0000e-005	0.0000	0.3733

3.4 Grading - 2016

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					0.0646	0.0000	0.0646	0.0336	0.0000	0.0336	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0367	0.3845	0.2608	3.0000e-004		0.0220	0.0220		0.0202	0.0202	0.0000	28.0664	28.0664	8.4700e-003	0.0000	28.2442
Total	0.0367	0.3845	0.2608	3.0000e-004	0.0646	0.0220	0.0866	0.0336	0.0202	0.0538	0.0000	28.0664	28.0664	8.4700e-003	0.0000	28.2442

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	4.9000e-004	8.8000e-003	6.0100e-003	2.0000e-005	5.4000e-004	1.5000e-004	6.9000e-004	1.5000e-004	1.4000e-004	2.9000e-004	0.0000	2.0500	2.0500	1.0000e-005	0.0000	2.0503
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.2000e-004	7.5000e-004	7.6000e-003	2.0000e-005	1.6500e-003	1.0000e-005	1.6600e-003	4.4000e-004	1.0000e-005	4.5000e-004	0.0000	1.3986	1.3986	7.0000e-005	0.0000	1.4000

Total	1.0100e-003	9.5500e-003	0.0136	4.0000e-005	2.1900e-003	1.6000e-004	2.3500e-003	5.9000e-004	1.5000e-004	7.4000e-004	0.0000	3.4487	3.4487	8.0000e-005	0.0000	3.4503
--------------	--------------------	--------------------	---------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	---------------	---------------	---------------	--------------------	---------------	---------------

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					0.0291	0.0000	0.0291	0.0151	0.0000	0.0151	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0110	0.2626	0.2038	3.0000e-004		8.2300e-003	8.2300e-003		8.2300e-003	8.2300e-003	0.0000	28.0664	28.0664	8.4700e-003	0.0000	28.2441
Total	0.0110	0.2626	0.2038	3.0000e-004	0.0291	8.2300e-003	0.0373	0.0151	8.2300e-003	0.0233	0.0000	28.0664	28.0664	8.4700e-003	0.0000	28.2441

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	4.9000e-004	8.8000e-003	6.0100e-003	2.0000e-005	5.4000e-004	1.5000e-004	6.9000e-004	1.5000e-004	1.4000e-004	2.9000e-004	0.0000	2.0500	2.0500	1.0000e-005	0.0000	2.0503
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.2000e-004	7.5000e-004	7.6000e-003	2.0000e-005	1.6500e-003	1.0000e-005	1.6600e-003	4.4000e-004	1.0000e-005	4.5000e-004	0.0000	1.3986	1.3986	7.0000e-005	0.0000	1.4000
Total	1.0100e-003	9.5500e-003	0.0136	4.0000e-005	2.1900e-003	1.6000e-004	2.3500e-003	5.9000e-004	1.5000e-004	7.4000e-004	0.0000	3.4487	3.4487	8.0000e-005	0.0000	3.4503

3.5 Building Construction - 2016

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	0.0801	0.6699	0.4349	6.3000e-004		0.0462	0.0462		0.0434	0.0434	0.0000	56.9061	56.9061	0.0141	0.0000	57.2025
Total	0.0801	0.6699	0.4349	6.3000e-004		0.0462	0.0462		0.0434	0.0434	0.0000	56.9061	56.9061	0.0141	0.0000	57.2025

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	0.0120	0.1278	0.1496	3.1000e-004	9.0400e-003	2.3800e-003	0.0114	2.5900e-003	2.1900e-003	4.7800e-003	0.0000	27.8248	27.8248	1.8000e-004	0.0000	27.8287
Worker	0.0125	0.0183	0.1845	4.5000e-004	0.0400	2.5000e-004	0.0403	0.0106	2.3000e-004	0.0109	0.0000	33.9633	33.9633	1.5800e-003	0.0000	33.9965
Total	0.0245	0.1461	0.3341	7.6000e-004	0.0491	2.6300e-003	0.0517	0.0132	2.4200e-003	0.0157	0.0000	61.7881	61.7881	1.7600e-003	0.0000	61.8252

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	0.0253	0.5514	0.4187	6.3000e-004		0.0212	0.0212		0.0212	0.0212	0.0000	56.9060	56.9060	0.0141	0.0000	57.2024
Total	0.0253	0.5514	0.4187	6.3000e-004		0.0212	0.0212		0.0212	0.0212	0.0000	56.9060	56.9060	0.0141	0.0000	57.2024

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	0.0120	0.1278	0.1496	3.1000e-004	9.0400e-003	2.3800e-003	0.0114	2.5900e-003	2.1900e-003	4.7800e-003	0.0000	27.8248	27.8248	1.8000e-004	0.0000	27.8287
Worker	0.0125	0.0183	0.1845	4.5000e-004	0.0400	2.5000e-004	0.0403	0.0106	2.3000e-004	0.0109	0.0000	33.9633	33.9633	1.5800e-003	0.0000	33.9965
Total	0.0245	0.1461	0.3341	7.6000e-004	0.0491	2.6300e-003	0.0517	0.0132	2.4200e-003	0.0157	0.0000	61.7881	61.7881	1.7600e-003	0.0000	61.8252

3.5 Building Construction - 2017

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	0.0977	0.8318	0.5711	8.4000e-004		0.0561	0.0561		0.0527	0.0527	0.0000	75.4359	75.4359	0.0186	0.0000	75.8258
Total	0.0977	0.8318	0.5711	8.4000e-004		0.0561	0.0561		0.0527	0.0527	0.0000	75.4359	75.4359	0.0186	0.0000	75.8258

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	0.0144	0.1553	0.1892	4.1000e-004	0.0121	2.8600e-003	0.0150	3.4700e-003	2.6300e-003	6.1000e-003	0.0000	36.6669	36.6669	2.4000e-004	0.0000	36.6719
Worker	0.0150	0.0220	0.2213	6.1000e-004	0.0537	3.3000e-004	0.0540	0.0143	3.1000e-004	0.0146	0.0000	43.7186	43.7186	1.9400e-003	0.0000	43.7595
Total	0.0294	0.1773	0.4106	1.0200e-003	0.0658	3.1900e-003	0.0690	0.0177	2.9400e-003	0.0207	0.0000	80.3856	80.3856	2.1800e-003	0.0000	80.4314

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	0.0340	0.7390	0.5612	8.4000e-004		0.0284	0.0284		0.0284	0.0284	0.0000	75.4358	75.4358	0.0186	0.0000	75.8257
Total	0.0340	0.7390	0.5612	8.4000e-004		0.0284	0.0284		0.0284	0.0284	0.0000	75.4358	75.4358	0.0186	0.0000	75.8257

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	0.0144	0.1553	0.1892	4.1000e-004	0.0121	2.8600e-003	0.0150	3.4700e-003	2.6300e-003	6.1000e-003	0.0000	36.6669	36.6669	2.4000e-004	0.0000	36.6719

Worker	0.0150	0.0220	0.2213	6.1000e-004	0.0537	3.3000e-004	0.0540	0.0143	3.1000e-004	0.0146	0.0000	43.7186	43.7186	1.9400e-003	0.0000	43.7595
Total	0.0294	0.1773	0.4106	1.0200e-003	0.0658	3.1900e-003	0.0690	0.0177	2.9400e-003	0.0207	0.0000	80.3856	80.3856	2.1800e-003	0.0000	80.4314

3.6 Architectural Coating - 2017

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	1.0176					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	9.1400e-003	0.0601	0.0514	8.0000e-005		4.7700e-003	4.7700e-003		4.7700e-003	4.7700e-003	0.0000	7.0215	7.0215	7.4000e-004	0.0000	7.0370
Total	1.0268	0.0601	0.0514	8.0000e-005		4.7700e-003	4.7700e-003		4.7700e-003	4.7700e-003	0.0000	7.0215	7.0215	7.4000e-004	0.0000	7.0370

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.6100e-003	3.8400e-003	0.0387	1.1000e-004	9.3700e-003	6.0000e-005	9.4300e-003	2.4900e-003	5.0000e-005	2.5400e-003	0.0000	7.6334	7.6334	3.4000e-004	0.0000	7.6405
Total	2.6100e-003	3.8400e-003	0.0387	1.1000e-004	9.3700e-003	6.0000e-005	9.4300e-003	2.4900e-003	5.0000e-005	2.5400e-003	0.0000	7.6334	7.6334	3.4000e-004	0.0000	7.6405

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	1.0176					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.1300e-003	0.0647	0.0504	8.0000e-005		2.6100e-003	2.6100e-003		2.6100e-003	2.6100e-003	0.0000	7.0214	7.0214	7.4000e-004	0.0000	7.0370
Total	1.0208	0.0647	0.0504	8.0000e-005		2.6100e-003	2.6100e-003		2.6100e-003	2.6100e-003	0.0000	7.0214	7.0214	7.4000e-004	0.0000	7.0370

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.6100e-003	3.8400e-003	0.0387	1.1000e-004	9.3700e-003	6.0000e-005	9.4300e-003	2.4900e-003	5.0000e-005	2.5400e-003	0.0000	7.6334	7.6334	3.4000e-004	0.0000	7.6405
Total	2.6100e-003	3.8400e-003	0.0387	1.1000e-004	9.3700e-003	6.0000e-005	9.4300e-003	2.4900e-003	5.0000e-005	2.5400e-003	0.0000	7.6334	7.6334	3.4000e-004	0.0000	7.6405

3.7 Paving - 2017

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	7.7400e-003	0.0813	0.0595	9.0000e-005		4.7000e-003	4.7000e-003		4.3200e-003	4.3200e-003	0.0000	8.2511	8.2511	2.5300e-003	0.0000	8.3041

Paving	4.8600e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0126	0.0813	0.0595	9.0000e-005		4.7000e-003	4.7000e-003		4.3200e-003	4.3200e-003	0.0000	8.2511	8.2511	2.5300e-003	0.0000	8.3041

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.0000e-004	2.9000e-004	2.9500e-003	1.0000e-005	7.1000e-004	0.0000	7.2000e-004	1.9000e-004	0.0000	1.9000e-004	0.0000	0.5820	0.5820	3.0000e-005	0.0000	0.5826
Total	2.0000e-004	2.9000e-004	2.9500e-003	1.0000e-005	7.1000e-004	0.0000	7.2000e-004	1.9000e-004	0.0000	1.9000e-004	0.0000	0.5820	0.5820	3.0000e-005	0.0000	0.5826

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	3.6800e-003	0.0792	0.0675	9.0000e-005		2.6800e-003	2.6800e-003		2.6800e-003	2.6800e-003	0.0000	8.2510	8.2510	2.5300e-003	0.0000	8.3041
Paving	4.8600e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	8.5400e-003	0.0792	0.0675	9.0000e-005		2.6800e-003	2.6800e-003		2.6800e-003	2.6800e-003	0.0000	8.2510	8.2510	2.5300e-003	0.0000	8.3041

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.0000e-004	2.9000e-004	2.9500e-003	1.0000e-005	7.1000e-004	0.0000	7.2000e-004	1.9000e-004	0.0000	1.9000e-004	0.0000	0.5820	0.5820	3.0000e-005	0.0000	0.5826
Total	2.0000e-004	2.9000e-004	2.9500e-003	1.0000e-005	7.1000e-004	0.0000	7.2000e-004	1.9000e-004	0.0000	1.9000e-004	0.0000	0.5820	0.5820	3.0000e-005	0.0000	0.5826

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					
Unmitigated	2.7689	4.1738	23.0504	0.0466	3.6371	0.0603	3.6974	0.9666	0.0555	1.0220	0.0000	3,456.3264	3,456.3264	0.1358	0.0000	3,459.1772
Mitigated	2.7689	4.1738	23.0504	0.0466	3.6371	0.0603	3.6974	0.9666	0.0555	1.0220	0.0000	3,456.3264	3,456.3264	0.1358	0.0000	3,459.1772

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Fast Food Restaurant with Drive Thru	917.00	917.00	917.00	965,039	965,039
Health Club	1,244.75	1,244.75	1,244.75	2,662,244	2,662,244
High Turnover (Sit Down Restaurant)	495.89	617.64	514.18	703,073	703,073
Other Non-Asphalt Surfaces	0.00	0.00	0.00		

Parking Lot	0.00	0.00	0.00		
Supermarket	4,062.32	4,062.32	4062.32	5,360,118	5,360,118
Total	6,719.96	6,841.72	6,738.25	9,690,474	9,690,474

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Fast Food Restaurant with Drive Thru	16.60	8.40	6.90	2.20	78.80	19.00	29	21	50
Health Club	16.60	8.40	6.90	16.90	64.10	19.00	52	39	9
High Turnover (Sit Down)	16.60	8.40	6.90	8.50	72.50	19.00	37	20	43
Other Non-Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Supermarket	16.60	8.40	6.90	6.50	74.50	19.00	34	30	36

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.702800	0.080300	0.080300	0.100400	0.000000	0.000000	0.000000	0.032500	0.000000	0.000000	0.003700	0.000000	0.000000

5.0 Energy Detail

4.4 Fleet Mix

Historical Energy Use: N

5.1 Mitigation Measures Energy

Exceed Title 24

	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					
NaturalGas Mitigated	0.0200	0.1821	0.1530	1.0900e-003		0.0138	0.0138		0.0138	0.0138	0.0000	198.2136	198.2136	3.8000e-003	3.6300e-003	199.4199
NaturalGas Unmitigated	0.0200	0.1821	0.1530	1.0900e-003		0.0138	0.0138		0.0138	0.0138	0.0000	198.2136	198.2136	3.8000e-003	3.6300e-003	199.4199
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	1,496.9505	1,496.9505	0.0328	6.7800e-003	1,499.7386

Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	1,496.950 5	1,496.9505	0.0328	6.7800e- 003	1,499.738 6
----------------------------	--	--	--	--	--	--------	--------	--	--------	--------	--------	----------------	------------	--------	-----------------	----------------

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas s 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					
Fast Food Restaurant with Drive Thru	555020	2.9900e-003	0.0272	0.0229	1.6000e-004		2.0700e-003	2.0700e-003		2.0700e-003	2.0700e-003	0.0000	29.6180	29.6180	5.7000e-004	5.4000e-004	29.7982
Health Club	1.25836e+006	6.7900e-003	0.0617	0.0518	3.7000e-004		4.6900e-003	4.6900e-003		4.6900e-003	4.6900e-003	0.0000	67.1510	67.1510	1.2900e-003	1.2300e-003	67.5597
High Turnover (Sit Down Restaurant)	1.08229e+006	5.8400e-003	0.0531	0.0446	3.2000e-004		4.0300e-003	4.0300e-003		4.0300e-003	4.0300e-003	0.0000	57.7551	57.7551	1.1100e-003	1.0600e-003	58.1066
Other Non-Asphalt Surfaces	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
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
Supermarket	818712	4.4100e-003	0.0401	0.0337	2.4000e-004		3.0500e-003	3.0500e-003		3.0500e-003	3.0500e-003	0.0000	43.6896	43.6896	8.4000e-004	8.0000e-004	43.9555
Total		0.0200	0.1821	0.1529	1.0900e-003		0.0138	0.0138		0.0138	0.0138	0.0000	198.2136	198.2136	3.8100e-003	3.6300e-003	199.4199

Mitigated

	NaturalGas s 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					
Fast Food Restaurant with Drive Thru	555020	2.9900e-003	0.0272	0.0229	1.6000e-004		2.0700e-003	2.0700e-003		2.0700e-003	2.0700e-003	0.0000	29.6180	29.6180	5.7000e-004	5.4000e-004	29.7982
Health Club	1.25836e+006	6.7900e-003	0.0617	0.0518	3.7000e-004		4.6900e-003	4.6900e-003		4.6900e-003	4.6900e-003	0.0000	67.1510	67.1510	1.2900e-003	1.2300e-003	67.5597
High Turnover (Sit Down Restaurant)	1.08229e+006	5.8400e-003	0.0531	0.0446	3.2000e-004		4.0300e-003	4.0300e-003		4.0300e-003	4.0300e-003	0.0000	57.7551	57.7551	1.1100e-003	1.0600e-003	58.1066

Other Non-Asphalt Surfaces	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
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
Supermarket	818712	4.4100e-003	0.0401	0.0337	2.4000e-004		3.0500e-003	3.0500e-003		3.0500e-003	3.0500e-003	0.0000	43.6896	43.6896	8.4000e-004	8.0000e-004	43.9555
Total		0.0200	0.1821	0.1529	1.0900e-003		0.0138	0.0138		0.0138	0.0138	0.0000	198.2136	198.2136	3.8100e-003	3.6300e-003	199.4199

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Fast Food Restaurant with Drive Thru	104800	63.0167	1.3800e-003	2.9000e-004	63.1341
Health Club	418446	251.6136	5.5000e-003	1.1400e-003	252.0822
High Turnover (Sit Down Restaurant)	204360	122.8826	2.6900e-003	5.6000e-004	123.1115
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	145024	87.2036	1.9100e-003	3.9000e-004	87.3660
Supermarket	1.61687e+006	972.2340	0.0213	4.4000e-003	974.0448
Total		1,496.9505	0.0328	6.7800e-003	1,499.7386

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			

Fast Food Restaurant with Drive-Thru	104800	63.0167	1.3800e-003	2.9000e-004	63.1341
Health Club	418446	251.6136	5.5000e-003	1.1400e-003	252.0822
High Turnover (Sit Down Restaurant)	204360	122.8826	2.6900e-003	5.6000e-004	123.1115
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	145024	87.2036	1.9100e-003	3.9000e-004	87.3660
Supermarket	1.61687e+006	972.2340	0.0213	4.4000e-003	974.0448
Total		1,496.9505	0.0328	6.7800e-003	1,499.7386

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					
Unmitigated	1.6260	6.0000e-005	6.5000e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.0124	0.0124	3.0000e-005	0.0000	0.0131
Mitigated	1.6260	6.0000e-005	6.5000e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.0124	0.0124	3.0000e-005	0.0000	0.0131

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	0.2544					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	1.3710					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	6.3000e-004	6.0000e-005	6.5000e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.0124	0.0124	3.0000e-005	0.0000	0.0131
Total	1.6260	6.0000e-005	6.5000e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.0124	0.0124	3.0000e-005	0.0000	0.0131

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	0.2544					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	1.3710					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	6.3000e-004	6.0000e-005	6.5000e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.0124	0.0124	3.0000e-005	0.0000	0.0131
Total	1.6260	6.0000e-005	6.5000e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.0124	0.0124	3.0000e-005	0.0000	0.0131

7.0 Water Detail

7.1 Mitigation Measures Water

- Install Low Flow Bathroom Faucet
- Install Low Flow Kitchen Faucet
- Install Low Flow Toilet
- Install Low Flow Shower
- Use Water Efficient Irrigation System

	Total CO2	CH4	N2O	CO2e
--	-----------	-----	-----	------

Category	MT/yr			
Unmitigated	85.0416	0.2981	7.3700e-003	93.5854
Mitigated	69.5573	0.2385	5.8900e-003	76.3915

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Fast Food Restaurant with Drive-Thru	0.607067 / 0.038749	5.2046	0.0199	4.9000e-004	5.7741
Health Club	2.23561 / 1.37021	27.3669	0.0734	1.8400e-003	29.4795
High Turnover (Sit Down Restaurant)	1.18378 / 0.0755605	10.1489	0.0388	9.6000e-004	11.2595
Other Non-Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Supermarket	5.06632 / 0.15669	42.3213	0.1660	4.0800e-003	47.0723
Total		85.0416	0.2981	7.3700e-003	93.5854

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			

Fast Food Restaurant with Drive Thru	0.485654 / 0.0363853	4.1996	0.0159	3.9000e-004	4.6551
Health Club	1.78849 / 1.28663	23.1659	0.0588	1.4800e-003	24.8575
High Turnover (Sit Down Restaurant)	0.947025 / 0.0709513	8.1893	0.0310	7.6000e-004	9.0774
Other Non-Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Supermarket	4.05306 / 0.147132	34.0026	0.1328	3.2600e-003	37.8016
Total		69.5573	0.2385	5.8900e-003	76.3915

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	104.8875	6.1987	0.0000	235.0596
Unmitigated	104.8875	6.1987	0.0000	235.0596

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
--	----------------	-----------	-----	-----	------

Land Use	tons	MT/yr			
Fast Food Restaurant with Drive-Thru	23.04	4.6769	0.2764	0.0000	10.4813
Health Club	215.46	43.7364	2.5848	0.0000	98.0162
High Turnover (Sit Down Restaurant)	46.41	9.4208	0.5568	0.0000	21.1126
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Supermarket	231.8	47.0533	2.7808	0.0000	105.4495
Total		104.8875	6.1987	0.0000	235.0596

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Fast Food Restaurant with Drive-Thru	23.04	4.6769	0.2764	0.0000	10.4813
Health Club	215.46	43.7364	2.5848	0.0000	98.0162
High Turnover (Sit Down Restaurant)	46.41	9.4208	0.5568	0.0000	21.1126
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Supermarket	231.8	47.0533	2.7808	0.0000	105.4495
Total		104.8875	6.1987	0.0000	235.0596

9.0 Operational Offroad

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

10.0 Vegetation
