

Appendix I

Greenhouse Gas Emissions Technical Report

**GREENHOUSE GAS
ANALYSIS FOR THE
MIDWAY-PACIFIC HIGHWAY COMMUNITY PLAN UPDATE**

Prepared for:

City of San Diego
Planning Department
1010 Second Ave., Suite 1200
San Diego, California 92101

Prepared by:

AECOM Technical Services, Inc.
401 West A Street, Suite 1200
San Diego, California 92101

~~June 2017~~ May 2018

TABLE OF CONTENTS

<u>Section</u>	<u>Page</u>
LIST OF ACRONYMS AND ABBREVIATIONS	iii
SECTION 1 – INTRODUCTION	1
1.1 Project Description.....	1
SECTION 2 – EXISTING CONDITIONS.....	5
2.1 Scientific Basis of Climate Change	5
2.2 GHG Emission Sources	6
2.3 Global Climate Trends and Associated Impacts	9
SECTION 3 – EXISTING CONDITIONS.....	11
SECTION 4 – PROJECT IMPACTS	15
SECTION 5 – REFERENCES	17
APPENDIX A. CalEEMod Data	

LIST OF FIGURES

<u>Figure</u>		<u>Page</u>
1	Project Location Maps	3
2	2015 California GHG Emissions by Category.....	8

LIST OF TABLES

<u>Table</u>		<u>Page</u>
1	GHG Emissions for the Midway-Pacific Highway Community Plan Area (MT CO ₂ e per Year)	15

LIST OF ACRONYMS AND ABBREVIATIONS

AB	Assembly Bill
ADT	average daily trips
ARB	California Air Resources Board
CAA	Clean Air Act
CalEEMod	California Emissions Estimator Model
CH ₄	methane
CO ₂	carbon dioxide
CO ₂ e	carbon dioxide equivalent
CPU	Community Plan Update
EPA	United States Environmental Protection Agency
°F	degrees Fahrenheit
GHG	greenhouse gas emissions
GWP	global warming potential
HFC	hydrofluorocarbon
IPCC	Intergovernmental Panel on Climate Change
MT	metric tons
MMT	million metric tons
N ₂ O	nitrous oxide
NF ₃	nitrogen trifluoride
PFC	perfluorocarbon
RPS	Renewable Portfolio Standard
SF ₆	sulfur hexafluoride
VMT	vehicle miles traveled

This page intentionally left blank.

SECTION 1

INTRODUCTION

The project analyzed in this air quality technical study is the proposed Midway-Pacific Highway Community Plan Update (CPU). The Midway-Pacific Highway CPU area is centrally located to the north of Downtown San Diego and south of Mission Bay. The Midway-Pacific Highway Community Plan area lies between the north end of the Peninsula Community Plan area to the west and Old Town San Diego to the east. The Midway-Pacific Highway CPU provides a long-range guide for the future physical development of the community. The existing Midway-Pacific Highway Community Plan was last updated in 1991. The proposed CPU, and associated actions, will ensure consistency of the CPU with and incorporate relevant policies from the City of San Diego General Plan (General Plan), as well as provide a long-range, comprehensive policy framework and vision for growth and development in the Midway - Pacific Highway community through 2035.

The greenhouse gas (GHG) analysis was prepared to support the City of San Diego environmental review process. The purpose of this report is to discuss global climate change and existing GHG emissions sources and estimate the emissions from implementation of the proposed CPU.

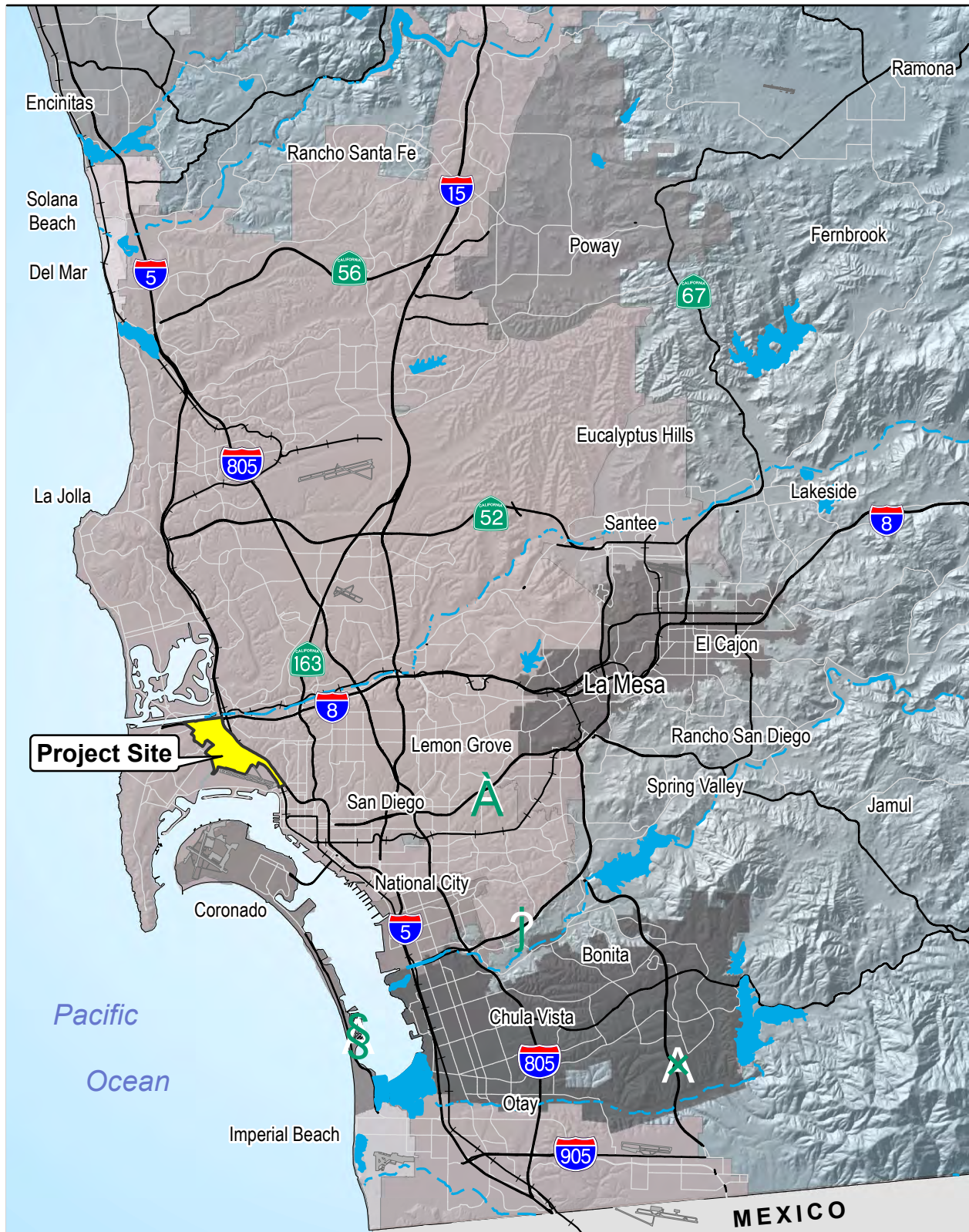
GHG emissions have the potential to adversely affect the environment because such emissions contribute, on a cumulative basis, to global climate change. Global climate change also has the potential to result in sea level rise (resulting in flooding of low-lying areas), affect rainfall and snowfall (leading to changes in water supply and runoff), affect temperatures and habitats (affecting biological and agricultural resources), and result in many other adverse effects.

1.1 PROJECT DESCRIPTION

The project includes the comprehensive update to the Midway-Pacific Highway Community Plan, which is intended to guide development through 2035 build-out of the Community Plan. The proposed CPU provides a detailed policy direction to implement the General Plan with respect to the distribution and arrangement of land uses (public and private); local street and transit network; prioritization and provision of public facilities, community, and site-specific urban design guidelines; and recommendations to preserve and enhance natural open space and historic and cultural resources within the Midway-Pacific Highway community.

The Midway-Pacific Highway community desires to be an attractive, vibrant and healthy community with entertainment, employment, commercial, and housing uses. The community

will contain new mixed-use and multiple-use development and a diversity of housing types in districts and villages close to transit stops and stations, supporting the “City of Villages” General Plan concept. The community also seeks to have high-quality parks and recreational facilities including linear parks, community parks and plazas, and improved access to the nearby recreational amenities at San Diego Bay, Mission Bay and the San Diego River. The CPU proposes a multi-modal transportation system that improves access to community land uses, comfort, and safety for pedestrians, bicyclists, and transit riders.



Source: Esri; SanGIS; SANDAG.

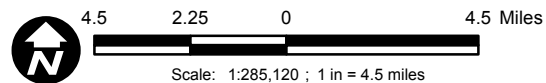


Figure 1
Regional Location

This page intentionally left blank.

SECTION 2

EXISTING CONDITIONS

2.1 SCIENTIFIC BASIS OF CLIMATE CHANGE

Certain gases in the earth's atmosphere, classified as GHGs, play a critical role in determining the earth's surface temperature. A portion of the solar radiation that enters the earth's atmosphere is absorbed by the earth's surface, and a smaller portion of this radiation is reflected back toward space. This infrared radiation (i.e., thermal heat) is absorbed by GHGs within the earth's atmosphere. As a result, infrared radiation released from the earth that otherwise would have escaped back into space is instead "trapped," resulting in a warming of the atmosphere. This phenomenon, known as the "greenhouse effect," is responsible for maintaining a habitable climate on the earth.

GHGs are present in the atmosphere naturally, are released by natural and anthropogenic sources, and are formed from secondary reactions taking place in the atmosphere. Natural sources of GHGs include the respiration of humans, animals and plants, decomposition of organic matter, and evaporation from the oceans. Anthropogenic sources include the combustion of fossil fuels, waste treatment, and agricultural processes. The following are GHGs that are widely accepted as the principal contributors to human-induced global climate change:

- Carbon dioxide (CO₂)
- Methane (CH₄)
- Nitrous oxide (N₂O)
- Hydrofluorocarbons (HFCs)
- Perfluorocarbons (PFCs)
- Sulfur Hexafluoride (SF₆)
- Nitrogen Trifluoride (NF₃)

Emissions of CO₂ are byproducts of fossil fuel combustion. CH₄ is the main component of natural gas and is associated with agricultural practices and landfills. N₂O is a colorless GHG that results from industrial processes, vehicle emissions, and agricultural practices. HFCs are synthetic chemicals used as a substitute for chlorofluorocarbons in automobile air conditioners and refrigerants. PFCs are produced as a byproduct of various industrial processes associated with aluminum production and the manufacturing of semiconductors. SF₆ is an inorganic, odorless, colorless, nontoxic, nonflammable GHG used for insulation in electric power transmission and distribution equipment, and in semiconductor manufacturing. NF₃ is used in the

electronics industry during the manufacturing of consumer items, including photovoltaic solar panels and liquid-crystal-display (i.e., LCD) television screens.

Global warming potential (GWP) is a concept developed to compare the ability of each GHG to trap heat in the atmosphere relative to CO₂. The GWP of a GHG is based on several factors, including the relative effectiveness of a gas to absorb infrared radiation and length of time (i.e., lifetime) that the gas remains in the atmosphere (“atmospheric lifetime”). The reference gas for GWP is CO₂; therefore, CO₂ has a GWP of 1. The other main GHGs that have been attributed to human activity include CH₄, which has a GWP of 25, and N₂O, which has a GWP of 298 (IPCC 2013). For example, 1 ton of CH₄ has the same contribution to the greenhouse effect as approximately 25 tons of CO₂. GHGs with lower emissions rates than CO₂ may still contribute to climate change, because they are more effective at absorbing outgoing infrared radiation than CO₂ (i.e., high GWP). The concept of CO₂-equivalents (CO₂e) is used to account for the different GWP potentials of GHGs to absorb infrared radiation.

Although the exact lifetime of any particular GHG molecule is dependent on multiple variables, it is understood by scientists who study atmospheric chemistry that more CO₂ is emitted into the atmosphere than is sequestered by ocean uptake, vegetation, and other forms of sequestration. GHG emissions related to human activities have been determined as “extremely likely” to be responsible (indicating 95 percent certainty) for intensifying the greenhouse effect and leading to a trend of unnatural warming of the earth’s atmosphere and oceans, with corresponding effects on global circulation patterns and climate (ARB 2014a). The quantity of GHGs that it takes to ultimately result in climate change is not precisely known; however, no single project is expected to measurably contribute to a noticeable incremental change in the global average temperature, or to a global, local, or micro climate.

2.2 GHG EMISSION SOURCES

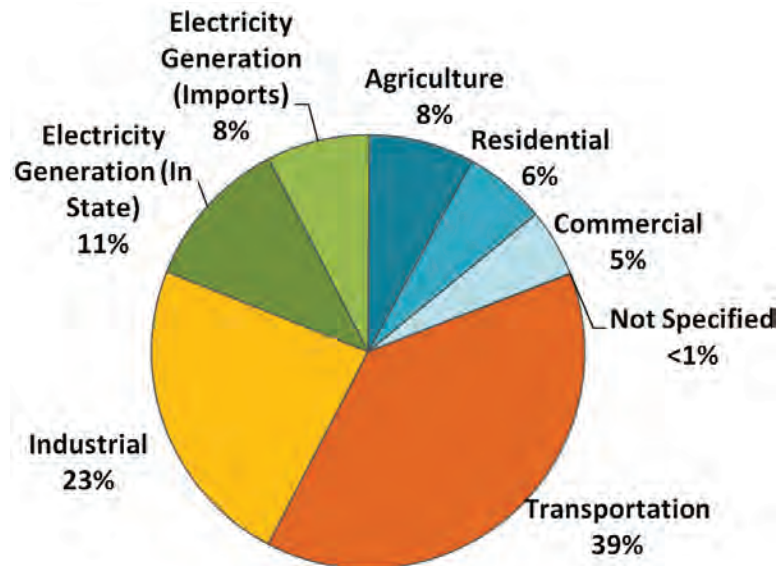
GHG emissions contributing to global climate change are attributable in large part to human activities associated with the transportation, industrial/manufacturing, electric utility, residential, commercial, and agricultural categories. Emissions of CO₂ are byproducts of fossil fuel combustion, and CH₄, a highly potent GHG, is the primary component in natural gas and is associated with agricultural practices and landfills. N₂O is also largely attributable to agricultural practices and soil management.

For purposes of accounting for and regulating GHG emissions, sources of GHG emissions are grouped into emission categories. The California Air Resources Board (ARB) identifies the following main GHG emission categories that account for most anthropogenic GHG emissions generated within California:

- *Transportation:* On-road motor vehicles, recreational vehicles, aviation, ships, and rail
- *Electric Power:* Use and production of electrical energy
- *Industrial:* Mainly stationary sources (e.g., boilers and engines) associated with process emissions
- *Commercial and Residential:* Area sources, such as landscape maintenance equipment, fireplaces, and consumption of natural gas for space and water heating
- *Agriculture:* Agricultural sources that include off-road farm equipment; irrigation pumps; crop residue burning (CO₂); and emissions from flooded soils, livestock waste, crop residue decomposition, and fertilizer volatilization (CH₄ and N₂O)
- *High GWP:* Refrigerants for stationary and mobile-source air conditioning and refrigeration, electrical insulation (e.g., SF₆), and various consumer products that use pressurized containers
- *Recycling and Waste:* Waste management facilities and landfills; primary emissions are CO₂ from combustion and CH₄ from landfills and wastewater treatment

California

ARB performs an annual GHG inventory for emissions and sinks of the six major GHGs. As shown in Figure 2, California produced 440 million metric tons (MMT) of CO₂e in 2015. Combustion of fossil fuel in the transportation category was the single largest source of California's GHG emissions in 2015, accounting for 39 percent of total GHG emissions in the state. The transportation category was followed by the industrial category, which accounts for 23 percent of total GHG emissions in California, the electric power generation category (including in-state and out-of-state sources), which accounts for 19 percent of total GHG emissions in California, and the agriculture sector which accounts for 8 percent of the state's total GHG emissions (ARB 2017).



Source: ARB 2017

Figure 2. 2015 California GHG Emissions by Category

San Diego County

The University of San Diego School of Law, Energy Policy Initiative Center, prepared a GHG inventory for San Diego County in 2008. The inventory was updated in 2013 using the best available data and following the U.S. Community Protocol for Accounting and Reporting of GHG Emissions (University of San Diego 2013). Total GHG emissions in San Diego County in 2010 were estimated to be 32.1 MMT of CO₂e. This represents a 9 percent increase compared to 1990 emissions levels of 29 MMT CO₂e (University of San Diego 2013).

Transportation is the largest emissions sector, accounting for approximately 14 MMT of CO₂e, or 43 percent of total emissions. Energy consumption, including electricity and natural gas use, is the next largest source of emissions, at 33 percent of the total.

City of San Diego

The City of San Diego emitted approximately 15.5 million tons (MT) of GHGs in 1990 (City of San Diego 2005). Citywide emission levels were previously projected to result in an increase to 22.5 MT per year by 2010. The most recent GHG inventory for the year 2015 estimated the total emissions at 10.8 MMT CO₂e per year (City of San Diego 2016). Transportation is the largest emissions sector, accounting for approximately 54 percent of total emissions. Energy consumption is the next largest source of emissions, at 44 percent of the total. Accounting for future population and economic growth, the City estimates that GHG emissions will increase to approximately 14.1 MMT CO₂e in 2020 and 16.7 MMT CO₂e in 2035 (City of San Diego 2016).

2.3 GLOBAL CLIMATE TRENDS AND ASSOCIATED IMPACTS

Trends of Climate Change

The Intergovernmental Panel on Climate Change (IPCC) concluded that variations in natural phenomena, such as solar radiation and volcanoes, produced most of the warming of the earth from pre-industrial times to 1950. These variations in natural phenomena also had a small cooling effect. From 1950 to the present, increasing GHG concentrations resulting from human activity, such as fossil fuel burning and deforestation, have been responsible for most of the observed temperature increase.

Global surface temperature has increased by approximately 1.53 degrees Fahrenheit (°F) over the last 140 years (IPCC 2013); however, the rate of increase in global average surface temperature has not been consistent. The last three decades have warmed at a much faster rate per decade (IPCC 2013).

During the same period when increased global warming has occurred, many other changes have occurred in other natural systems. Sea levels have risen; precipitation patterns throughout the world have shifted, with some areas becoming wetter and others drier; snowlines have risen in elevation, resulting in changes to the snowpack, runoff, and water storage; and numerous other conditions have been observed. Although it is difficult to prove a definitive cause-and-effect relationship between global warming and other observed changes to natural systems, there is a high level of confidence in the scientific community that these changes are a direct result of increased global temperatures caused by the increased presence of GHGs in the atmosphere (IPCC 2013).

Additional changes related to climate change can be expected by the year 2050 and on to the end of the century, including the following:

- California's mean temperature may rise by 2.7°F by 2050 and by 4.1°F to 8.6°F by the end of the century (CEC 2012). Temperatures in San Diego County may rise by 3.2°F to 5.8°F during that same period (CEC 2016).
- A consistent rise in sea level has been recorded worldwide over the last 100 years. Rising average sea level over the past century has been attributed primarily to warming of the world's oceans, the related thermal expansion of ocean waters, and the addition of water to the world's oceans from the melting of land-based polar ice (IPCC 2007). Sea level rise is expected to continue, and the most recent climate science report, Sea Level Rise

for the Coasts of California, Oregon, and Washington: Past, Present, and Future, has estimated that sea levels along the U.S. Pacific coast will increase by up to 66 inches by 2100 (NRC 2012). The project site would not be subject to flooding as a result of climate-change-related sea level rise.

- Various California climate models provide mixed results regarding forecasted changes in total annual precipitation in the state through the end of this century. However, recent projections suggest that 30-year statewide average precipitation will decline by more than 10% (CEC 2012).
- Historically, extreme warm temperatures in the San Diego region have mostly occurred in July and August, but as climate warming continues, the occurrences of these events will likely begin in June and could continue to take place into September. All simulations indicate that hot daytime and nighttime temperatures (heat waves) will increase in frequency, magnitude, and duration (San Diego Foundation 2008).

SECTION 3

METHODOLOGY

GHG emissions due to the construction and operation of future projects under the proposed Midway-Pacific Highway CPU were calculated using California Emissions Estimator Model (CalEEMod) version 2016.3.1. The emissions sources include construction (off-road vehicles), mobile (on road vehicles), area (fireplaces, consumer products [cleansers, aerosols, and solvents], landscape maintenance equipment, and architectural coatings), water and wastewater, and solid waste sources. As explained previously, GHG emissions are estimated in terms of CO₂e to account for the different GWP potentials of GHGs. Where project-specific data was not available, model inputs were based on default CalEEMod estimates as explained in more detail below.

Construction Emissions

At a program level, it would be speculative to estimate the schedule and construction requirements of individual projects that could occur in the Midway-Pacific Highway CPU areas. In addition, GHG emissions would occur based on the entire construction activities through 2035. Thus, this analysis relies on the methodology used in the San Diego County Updated Greenhouse Gas Inventory (San Diego County 2013), which forecasts that between 2015 and 2035 construction emissions would comprise roughly 2.1 percent of total GHG emissions within the County of San Diego. Therefore, based on the operational GHG emissions estimated in Table 1, total construction emissions for the proposed Midway-Pacific Highway CPU would be approximately 3,604,248 MT CO₂e.

Operation Emissions

In order to analyze the GHG emissions associated with implementation of the proposed Midway-Pacific Highway CPU and associated discretionary actions, an inventory was developed based on the land use designations associated with the adopted and proposed Community Plans. Considering that the adopted Community Plan projects have not yet been completed at the time of this analysis, an analysis of existing emissions compared with the proposed Midway-Pacific Highway CPU improvements would not accurately disclose the impacts of the project. Rather, comparing GHG emissions from future operations with the adopted Community Plan and the proposed Midway-Pacific Highway CPU provides the best indicator of the project's long-term effect on GHG emissions. Therefore, the analysis of the proposed Midway-Pacific Highway CPU and associated discretionary actions is based on the net change in future GHG emissions estimates derived from the adopted Community Plan.

As compared to the existing land uses, the proposed Midway-Pacific Highway CPU and associated discretionary actions would reduce institutional land uses while increasing the development of commercial uses and multi-family dwelling units. This change represents an increase in land use types and density in the Community Plan area. ~~The proposed Midway-Pacific Highway CPU and associated discretionary actions would change the planned land use mix as follows:~~

- ~~• Increase the projected number of multi-family residential units by approximately 40 percent;~~
- ~~• Increase the amount of land designated for commercial development by 13 percent, and~~
- ~~• Decrease the amount of land designated for institutional development by three percent.~~

The following subsections describe the assumptions and methodology used for the mobile, energy, area, water and wastewater, and solid waste emission sources.

Mobile Source Emissions

GHG emissions from vehicles are calculated based on the vehicle type, the trip rate, and trip length for each land use. Mobile source emissions were estimated based on the vehicle miles traveled (VMT) for the area estimated in the TIS (Chen Ryan 2017). GHG emissions generated from mobile sources were estimated based on CARB's Emission Factor (EMFAC2014) model. EMFAC2014 includes GHG reducing effects from the implementation of Pavley I (Clean Car Standards) and the Low Carbon Fuel Standard, and are thus considered in the calculation of emissions.

The proposed Midway-Pacific Highway CPU encourages increased development diversity by increasing commercial and multi-family land uses in certain areas, decreasing the number of planned institutional land uses. The proposed Midway-Pacific Highway CPU and associated discretionary actions proposes an increase in multi-family residences in close proximity to transit and existing commercial uses.

Energy Source Emissions

CalEEMod estimates GHG emissions from energy use by multiplying average rates of residential and non-residential energy consumption by the number of residential units and non-residential square footage to obtain total projected energy use. This value is then multiplied by electricity and natural gas GHG emission factors applicable to the project location and utility provider.

Building energy use is typically divided into energy consumed by the built environment and energy consumed by uses that are independent of the construction of the building such as plug-in appliances. In California, Title 24 governs energy consumed by the built environment, mechanical systems, and some types of fixed lighting. Non-building energy use, or “plug-in energy use,” can be further subdivided by specific end-use (refrigeration, cooking, office equipment, etc.).

Energy consumption values are based on the California Energy Commission (CEC) sponsored *California Commercial End Use Survey and Residential Appliance Saturation Survey* studies, which identify energy use by building type and climate zone. CalEEMod 2016.3.1 is based on the 2013 Title 24 energy code (Part 6 of the Building Code).

The Midway-Pacific Highway CPU area would be served by San Diego Gas & Electric (SDG&E). Therefore, SDG&E’s specific energy intensity factors (i.e., the amount of CO₂, CH₄, and N₂O per kilowatt-hour) are used in the calculations of GHG emissions. The state mandate for renewable energy is 33 percent by 2020 and 50 percent by 2030 under the RPS. However, the analysis conservatively assumes the same RPS as existing conditions.

Area Source Emissions

Area sources include GHG emissions that would occur from the use of landscaping and related equipment. The use of landscape equipment emits GHGs associated with the equipment’s fuel combustion. Emissions from landscape maintenance equipment within CalEEMod are based on statewide average number of usage hours, number of dwelling units, and non-residential square footage. However, statewide landscape equipment usage on a per dwelling unit or per square foot basis is not representative of the urban and higher-density land uses of the Midway-Pacific Highway Community Plan area. For example, landscape equipment usage would not increase in proportion to the increase in units for high density multi-family residential and square footage for multi-story buildings. Higher density buildings are typically multi-story and thus would not result in an increase in landscape areas. Therefore, emissions associated with landscape equipment were calculated off-model and based on San Diego County annual emission estimates for lawn and garden equipment for the San Diego Air Basin and acres of development for the San Diego region. Additional details are available in Appendix A.

Area source emissions also include natural gas combustion from the use of natural gas fireplaces. CalEEMod defaults for the number of natural gas fireplaces were adjusted to account for the supplemental development regulations which limit the use of dwelling unit fireplaces within the Sports Arena Community Village and Dutch Flats Urban Village Community Plan

Implementation Overlay Zones. However, the analysis conservatively assumes the remaining dwelling units would still include natural gas fireplaces. Based on recent studies, only between 4 and 5 percent of new multi-family residential buildings built in 2014 and 2015 had fireplaces (Hearth & Home 2017, NREI 2016).

Water and Wastewater Emissions

The amount of water used and wastewater generated by a project has indirect GHG emissions associated with it. These emissions are a result of the energy used to supply, distribute, and treat the water and wastewater. In addition to the indirect GHG emissions associated with energy use, wastewater treatment can directly emit both CH₄ and N₂O.

The indoor and outdoor water use consumption data in CalEEMod for each land use subtype comes from the Pacific Institute's Waste Not, Want Not: The Potential for Urban Water Conservation in California 2003 and the American Water Works Association Research Foundation's Commercial and Institutional End Uses of Water 2000. Based on those reports, a percentage of total water consumption was dedicated to landscape irrigation, which is used to determine outdoor water use. Wastewater generation was similarly based on a reported percentage of total indoor water use (ARB 2008).

In addition to water reductions under the California Green Building Standards Code, the GHG emissions from the energy used to transport the water are affected by RPS. As discussed previously, the analysis conservatively assumes existing RPS.

Solid Waste Emissions

The disposal of solid waste produces GHG emissions from anaerobic decomposition in landfills, incineration, and transportation of waste. To calculate the GHG emissions generated by disposing of solid waste for the project, CalEEMod uses waste disposal rates identified by California Department of Resources Recycling and Recovery to calculate the total volume of solid waste. The methods for quantifying GHG emissions from solid waste are based on the Intergovernmental Panel on Climate Change (IPCC) method using the degradable organic content of waste. GHG emissions associated with the project's waste disposal were calculated using these parameters. No solid waste reductions were modeled.

SECTION 4 PROJECT IMPACTS

Based on the methodology summarized above, GHG emissions were calculated for the land uses of the adopted Community Plan (in 2035), and the land uses of the proposed Midway-Pacific Highway CPU and associated discretionary actions (in 2035). Table 1 summarizes the GHG emissions under each scenario. Appendix A contains additional methodology and modeling details.

Table 1
GHG Emissions for the Midway-Pacific Highway Community Plan Area
(MT CO₂e per Year)

Emission Source	Adopted Community Plan	Proposed CPU	Difference (Proposed – Adopted)
Mobile Sources	83,889	84,289	401
Energy Use	63,97664,885	64,24274,691	2669,806
Area Sources	2,21610,838	17,4713,109	8936,633
Solid Waste Disposal	6,6427,196	6,5258,306	-1181,110
Water Use	12,97414,202	13,42517,514	4513,311
Construction	3,5643,801	3,6034,248	4460
TOTAL	169,696184,811	171,590206,518	1,93321,707

Source: Estimated by AECOM in 2017⁸

Notes: Totals may not add due to rounding. Area source emissions include emissions associated with hearths and landscape maintenance equipment.

As shown in the Table 1, implementation of the proposed Midway-Pacific Highway CPU and associated discretionary actions would result in an increase in GHG emissions of 1,93321,707 MT CO₂e per year when compared to the emissions that would occur under the adopted Community Plan.

This page intentionally left blank.

SECTION 5

REFERENCES

California Air Pollution Control Officers Association (CAPCOA)

- 2016 California Emissions Estimator Model (CalEEMod) Version 2016.3.1. Appendix E Technical Source Documentation. Available at http://www.aqmd.gov/docs/default-source/caleemod/upgrades/2016.3/06_appendix-e2016-3-1.pdf?sfvrsn=2. Accessed June 2017.

California Air Resources Board (ARB)

- 2008 Local Government Operations Protocol: Chapter 10 – Wastewater Treatment Facilities and EPA’s Inventory of US Greenhouse Gas Emissions and Sinks Available at https://www.arb.ca.gov/cc/protocols/localgov/archive/final_lgo_protocol_2008-09-25.pdf. Accessed June 2017.
- 2017 California Greenhouse Gas Inventory for 2000–2017. Available at <https://www.arb.ca.gov/cc/inventory/data/data.htm>. Accessed June 2017.

California Energy Commission (CEC)

- 2012 Our Changing Climate 2012. Vulnerability & Adaptation to the Increasing Risks from Climate Change in California. Available at <http://www.energy.ca.gov/2012publications/CEC-500-2012-007/CEC-500-2012-007.pdf>. Accessed June 2017.
- 2016 Local Climate. Temperature. San Diego County Average. Available at <http://cal-adapt.org/>. Accessed June 2017.

City of San Diego

- 2005 Climate Action Protection Plan. Available at https://www.sandiego.gov/sites/default/files/legacy/environmental-services/pdf/sustainable/action_plan_07_05.pdf. Accessed June 2017.
- 2016 Annual Report. Climate Action Plan. Available at https://www.sandiego.gov/sites/default/files/2016_annual_report_climate_action_plan.pdf. Accessed June 2017.

Intergovernmental Panel on Climate Change (IPCC)

2007 *Climate Change 2007: The Physical Science Basis*. Contribution of Working Group I to the Fourth Assessment Report of the IPCC. Geneva, Switzerland. February.

2013 *Climate Change 2013: The Physical Science Basis*. Available at <http://www.ipcc.ch/report/ar5/wg1/>. Accessed June 2017.

Chen Ryan

2017 *Transportation Impact Study*. San Diego, CA. May.

Hearth & Home.

2017 *Facts, Figures & the Future II*. Available at http://www.hearthandhome.com/magazine/2016-12-20/facts_figures_the_future_ii.html. Accessed May 2018.

National Real Estate Investor.

2016 *How Apartment Amenities Have Changed over the Years*. Available at <http://www.nreionline.com/multifamily/how-apartment-amenities-have-changed-over-years-and-what-says-about-target-tenants>. Accessed May 2018.

National Research Council (NRC)

2012 *Sea-Level Rise for the Coasts of California, Oregon, and Washington: Past, Present, and Future*. Washington, DC: The National Academies Press.

San Diego Foundation

2008 *The San Diego Foundation Regional Focus 2050 Study: Climate Change Related Impacts in the San Diego Region by 2050*. Available at http://sandiegohealth.org/sdfoundation/focus2050/Focus2050_whitepaper_final.pdf. Accessed June 2017.

University of San Diego

2014 *GHG Emissions Inventory for the San Diego Region*. Energy Policy Initiatives Center (EPIC) at University of San Diego. April.

APPENDIX A

CALEEMOD MODELING DATA

Midway-Pacific Highway Emission Estimates - Greenhouse Gas Emissions

Operations - Proposed Plan

Pollutant	MT CO2e	Percent
Hearth	17,415.03	8.43%
Residential Landscaping	5.30	0.00%
Commercial Landscaping	50.66	0.02%
Energy Sources	74,690.91	36.17%
Waste	8,305.64	4.02%
Water	17,513.60	8.48%
Mobile Sources	84,289.05	40.81%
Construction	4,247.67	2.06%
Proposed Plan Total	206,517.86	100%

Operations - Adopted Plan

Pollutant	MT CO2e	Percent
Hearth	10,782.03	5.83%
Residential Landscaping	4.82	0.00%
Commercial Landscaping	51.14	0.03%
Energy Sources	64,885.41	35.11%
Waste	7,195.71	3.89%
Water	14,202.24	7.68%
Mobile Sources	83,888.57	45.39%
Construction	3,801.21	2.06%
Adopted Plan Total	184,811.13	100%

Net Change	MT CO2e
Proposed Plan	206,517.86
Adopted Plan	184,811.13
Net Change	21,706.73

Operations - Existing

Pollutant	MT CO2e
Hearth	3,001.16
Residential Landscaping	3.46
Commercial Landscaping	52.25
Energy Sources	57,000.13
Waste	5,816.31
Water	11,824.81
Mobile Sources	120,762.25
Proposed Plan Total	198,460.37

Difference by Emission Source	
Hearth	6,632.99
Landscaping	0.00
Energy	9,805.50
Waste	1,109.93
Water	3,311.35
Mobile	400.48
Construction	446.47
Total	21,706.73

GHG Emissions - Landscaping

San Diego Air Basin Lawn and Garden Equipment Emissions

	MMT CO ₂ e	MT CO ₂ e
Lawn and Garden	0.0930	93,000

Source:

<https://www.sandiegocounty.gov/content/dam/sdc/pds/advance/cap/publicreviewdocuments/CAPfilespublicreview/Appendix%20A%20Greenhouse%20Gas%20Emissions%20Inventory%20and%20Projections.pdf>

San Diego County Total Acres	2,200,382 acres
------------------------------	-----------------

Source: [http://www.sdforward.com/pdfs/EIR_final/Section 4.11 Land Use.pdf](http://www.sdforward.com/pdfs/EIR_final/Section%204.11%20Land%20Use.pdf)

SD County GHG Landscaping Factor per Acre	0.04227	MT CO ₂ e/Acre
---	---------	---------------------------

Midway-Pacific Hwy Community Plan Landscaping Emissions

Proposed Plan	Acres	GHG Emissions
Residential	125.40	5.30
Non-residential	1,198.60	50.66

Adopted Plan	Acres	GHG Emissions
Residential	113.96	4.82
Non-residential	1,210.00	51.14

Existing	Acres	GHG Emissions
Residential	81.90	3.4617
Non-residential	1,236.27	52.2514

Midway-Pacific Hwy Proposed Plan Operations - San Diego County, Annual

Midway-Pacific Hwy Proposed Plan Operations San Diego County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	1,915.42	1000sqft	44.08	1,915,423.00	0
Government Office Building	733.21	1000sqft	27.70	733,213.00	0
Junior College (2Yr)	186.87	1000sqft	17.10	186,873.00	0
Industrial Park	4,522.63	1000sqft	796.60	4,522,629.00	0
Other Asphalt Surfaces	9.80	Acre	9.80	426,888.00	0
City Park	27.80	Acre	27.80	1,210,968.00	0
Apartments Mid Rise	4,285.00	Dwelling Unit	125.40	4,285,000.00	10013
Apartments Mid Rise	3,025.00	Dwelling Unit	69.62	3,025,000.00	7068
Apartments Mid Rise	4,275.00	Dwelling Unit	114.52	3,420,000.00	9989
Strip Mall	2,227.33	1000sqft	74.58	2,227,328.00	0
Strip Mall	505.75	1000sqft	16.70	505,750.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.6	Precipitation Freq (Days)	40
Climate Zone	13			Operational Year	2035
Utility Company	San Diego Gas & Electric				
CO2 Intensity (lb/MW hr)	720.49	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Midway-Pacific Hwy Proposed Plan Operations - San Diego County, Annual

Project Characteristics - Proposed Plan at build-out.

Land Use - Industrial park land use includes industrial, transportation, military, and utilities land uses.

Construction Phase - Operations run only.

Off-road Equipment - Operations run only.

Off-road Equipment - Operations run only.

Off-road Equipment - Operations run only.

Off-road Equipment - Operations run only.

Off-road Equipment - Operations run only.

Off-road Equipment - Operations run only.

Trips and VMT - Operations run only.

Grading - Operations run only.

Architectural Coating - Operations run only.

Vehicle Trips - Operations run only.

Vehicle Emission Factors -

Vehicle Emission Factors -

Vehicle Emission Factors -

Woodstoves - Assumes no woodstoves or woodburning fireplaces. No gas fireplaces assumed for SA and DF areas.

Consumer Products - SD County specific EF.

Area Coating - SDAPCD Rule 67.0.1

Energy Use -

Area Mitigation - SDAPCD Rule 67.0.1

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	ConstArea_Nonresidential_Exterior	5,045,608.00	0.00
tblArchitecturalCoating	ConstArea_Nonresidential_Interior	15,136,824.00	0.00
tblArchitecturalCoating	ConstArea_Parking	25,613.00	0.00
tblArchitecturalCoating	ConstArea_Residential_Exterior	7,242,750.00	0.00

Midway-Pacific Hwy Proposed Plan Operations - San Diego County, Annual

tblArchitecturalCoating	ConstArea_Residential_Interior	21,728,250.00	0.00
tblAreaCoating	Area_EF_Residential_Interior	250	50
tblAreaMitigation	UseLowVOCPaintResidentialExteriorValue	250	100
tblConstructionPhase	NumDays	11,000.00	1.00
tblConstructionPhase	NumDays	155,000.00	1.00
tblConstructionPhase	NumDays	10,000.00	1.00
tblConstructionPhase	NumDays	15,500.00	1.00
tblConstructionPhase	NumDays	11,000.00	1.00
tblConstructionPhase	NumDays	6,000.00	1.00
tblConsumerProducts	ROG_EF	2.14E-05	1.6463E-05
tblFireplaces	NumberGas	6,371.75	7,326.50
tblFireplaces	NumberWood	4,054.75	0.00
tblLandUse	BuildingSpaceSquareFeet	1,915,420.00	1,915,423.00
tblLandUse	BuildingSpaceSquareFeet	733,210.00	733,213.00
tblLandUse	BuildingSpaceSquareFeet	186,870.00	186,873.00
tblLandUse	BuildingSpaceSquareFeet	4,522,630.00	4,522,629.00
tblLandUse	BuildingSpaceSquareFeet	4,275,000.00	3,420,000.00
tblLandUse	BuildingSpaceSquareFeet	2,227,330.00	2,227,328.00
tblLandUse	LandUseSquareFeet	1,915,420.00	1,915,423.00
tblLandUse	LandUseSquareFeet	733,210.00	733,213.00
tblLandUse	LandUseSquareFeet	186,870.00	186,873.00
tblLandUse	LandUseSquareFeet	4,522,630.00	4,522,629.00
tblLandUse	LandUseSquareFeet	4,275,000.00	3,420,000.00
tblLandUse	LandUseSquareFeet	2,227,330.00	2,227,328.00
tblLandUse	LotAcreage	43.97	44.08
tblLandUse	LotAcreage	16.83	27.70
tblLandUse	LotAcreage	4.29	17.10

Midway-Pacific Hwy Proposed Plan Operations - San Diego County, Annual

tblLandUse	LotAcreage	103.83	796.60
tblLandUse	LotAcreage	79.61	69.62
tblLandUse	LotAcreage	112.50	114.52
tblLandUse	LotAcreage	112.76	125.40
tblLandUse	LotAcreage	51.13	74.58
tblLandUse	LotAcreage	11.61	16.70
tblLandUse	Population	8,652.00	7,068.00
tblLandUse	Population	12,227.00	9,989.00
tblLandUse	Population	12,255.00	10,013.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	0.00

Midway-Pacific Hwy Proposed Plan Operations - San Diego County, Annual

tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	UsageHours	6.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	7.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	7.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblProjectCharacteristics	OperationalYear	2018	2035
tblTripsAndVMT	VendorTripNumber	3,161.00	0.00
tblTripsAndVMT	WorkerTripNumber	12,729.00	0.00
tblTripsAndVMT	WorkerTripNumber	2,546.00	0.00
tblVehicleTrips	ST_TR	6.39	0.00
tblVehicleTrips	ST_TR	22.75	0.00
tblVehicleTrips	ST_TR	2.46	0.00

Midway-Pacific Hwy Proposed Plan Operations - San Diego County, Annual

tblVehicleTrips	ST_TR	2.49	0.00
tblVehicleTrips	ST_TR	11.23	0.00
tblVehicleTrips	ST_TR	42.04	0.00
tblVehicleTrips	SU_TR	5.86	0.00
tblVehicleTrips	SU_TR	16.74	0.00
tblVehicleTrips	SU_TR	1.05	0.00
tblVehicleTrips	SU_TR	0.73	0.00
tblVehicleTrips	SU_TR	1.21	0.00
tblVehicleTrips	SU_TR	20.43	0.00
tblVehicleTrips	WD_TR	6.65	0.00
tblVehicleTrips	WD_TR	1.89	0.00
tblVehicleTrips	WD_TR	11.03	0.00
tblVehicleTrips	WD_TR	68.93	0.00
tblVehicleTrips	WD_TR	6.83	0.00
tblVehicleTrips	WD_TR	27.49	0.00
tblVehicleTrips	WD_TR	44.32	0.00
tblWoodstoves	NumberCatalytic	579.25	0.00
tblWoodstoves	NumberNoncatalytic	579.25	0.00

2.0 Emissions Summary

Midway-Pacific Hwy Proposed Plan Operations - San Diego County, Annual

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	4/30/2018	4/30/2018	5	1	
2	Site Preparation	Site Preparation	5/1/2018	5/1/2018	5	1	
3	Grading	Grading	5/2/2018	5/2/2018	5	1	
4	Building Construction	Building Construction	5/3/2018	5/3/2018	5	1	
5	Paving	Paving	5/4/2018	5/4/2018	5	1	
6	Architectural Coating	Architectural Coating	5/5/2018	5/7/2018	5	1	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 9.8

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

OffRoad Equipment

Midway-Pacific Hwy Proposed Plan Operations - San Diego County, Annual

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	0	0.00	81	0.73
Demolition	Excavators	0	0.00	158	0.38
Demolition	Rubber Tired Dozers	0	0.00	247	0.40
Site Preparation	Rubber Tired Dozers	0	0.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	0	0.00	97	0.37
Grading	Excavators	0	0.00	158	0.38
Grading	Graders	0	0.00	187	0.41
Grading	Rubber Tired Dozers	0	0.00	247	0.40
Grading	Scrapers	0	0.00	367	0.48
Grading	Tractors/Loaders/Backhoes	0	0.00	97	0.37
Building Construction	Cranes	0	0.00	231	0.29
Building Construction	Forklifts	0	0.00	89	0.20
Building Construction	Generator Sets	0	0.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	0	0.00	97	0.37
Building Construction	Welders	0	0.00	46	0.45
Paving	Pavers	0	0.00	130	0.42
Paving	Paving Equipment	0	0.00	132	0.36
Paving	Rollers	0	0.00	80	0.38
Architectural Coating	Air Compressors	0	0.00	78	0.48

Trips and VMT

Midway-Pacific Hwy Proposed Plan Operations - San Diego County, Annual

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	0	0.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	0	0.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	0	0.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	0	0.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	0	0.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	0	0.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2018

Unmitigated Construction On-Site

[illegible]

Midway-Pacific Hwy Proposed Plan Operations - San Diego County, Annual

3.2 Demolition - 2018

Unmitigated Construction Off-Site

[illegible]

Mitigated Construction On-Site

[illegible]

Midway-Pacific Hwy Proposed Plan Operations - San Diego County, Annual

3.2 Demolition - 2018

Mitigated Construction Off-Site

[illegible]

3.3 Site Preparation - 2018

Unmitigated Construction On-Site

[illegible]

Midway-Pacific Hwy Proposed Plan Operations - San Diego County, Annual

3.3 Site Preparation - 2018

Unmitigated Construction Off-Site

[illegible]

Mitigated Construction On-Site

[illegible]

Midway-Pacific Hwy Proposed Plan Operations - San Diego County, Annual

3.3 Site Preparation - 2018

Mitigated Construction Off-Site

[illegible]

3.4 Grading - 2018

Unmitigated Construction On-Site

[illegible]

Midway-Pacific Hwy Proposed Plan Operations - San Diego County, Annual

3.4 Grading - 2018

Unmitigated Construction Off-Site

[illegible]

Mitigated Construction On-Site

[illegible]

Midway-Pacific Hwy Proposed Plan Operations - San Diego County, Annual

3.4 Grading - 2018

Mitigated Construction Off-Site

[illegible]

3.5 Building Construction - 2018

Unmitigated Construction On-Site

[illegible]

Midway-Pacific Hwy Proposed Plan Operations - San Diego County, Annual

3.5 Building Construction - 2018

Unmitigated Construction Off-Site

[illegible]

Mitigated Construction On-Site

[illegible]

Midway-Pacific Hwy Proposed Plan Operations - San Diego County, Annual

3.5 Building Construction - 2018

Mitigated Construction Off-Site

[illegible]

3.6 Paving - 2018

Unmitigated Construction On-Site

[illegible]

Midway-Pacific Hwy Proposed Plan Operations - San Diego County, Annual

3.6 Paving - 2018

Unmitigated Construction Off-Site

[illegible]

Mitigated Construction On-Site

[illegible]

Midway-Pacific Hwy Proposed Plan Operations - San Diego County, Annual

3.6 Paving - 2018

Mitigated Construction Off-Site

[illegible]

3.7 Architectural Coating - 2018

Unmitigated Construction On-Site

[illegible]

Midway-Pacific Hwy Proposed Plan Operations - San Diego County, Annual

3.7 Architectural Coating - 2018

Unmitigated Construction Off-Site

[illegible]

Mitigated Construction On-Site

[illegible]

Midway-Pacific Hwy Proposed Plan Operations - San Diego County, Annual

3.7 Architectural Coating - 2018**Mitigated Construction Off-Site**

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

4.0 Operational Detail - Mobile**4.1 Mitigation Measures Mobile**

Midway-Pacific Hwy Proposed Plan Operations - San Diego County, Annual

	ROG	NOx	CO	SO2	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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Mid Rise	0.00	0.00	0.00		
Apartments Mid Rise	0.00	0.00	0.00		
Apartments Mid Rise	0.00	0.00	0.00		
City Park	0.00	0.00	0.00		
General Office Building	0.00	0.00	0.00		
Government Office Building	0.00	0.00	0.00		
Industrial Park	0.00	0.00	0.00		
Junior College (2Yr)	0.00	0.00	0.00		
Other Asphalt Surfaces	0.00	0.00	0.00		
Strip Mall	0.00	0.00	0.00		
Strip Mall	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

Midway-Pacific Hwy Proposed Plan Operations - San Diego County, Annual

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Mid Rise	10.80	7.30	7.50	41.60	18.80	39.60	86	11	3
Apartments Mid Rise	10.80	7.30	7.50	41.60	18.80	39.60	86	11	3
Apartments Mid Rise	10.80	7.30	7.50	41.60	18.80	39.60	86	11	3
City Park	9.50	7.30	7.30	33.00	48.00	19.00	66	28	6
General Office Building	9.50	7.30	7.30	33.00	48.00	19.00	77	19	4
Government Office Building	9.50	7.30	7.30	33.00	62.00	5.00	50	34	16
Industrial Park	9.50	7.30	7.30	59.00	28.00	13.00	79	19	2
Junior College (2Yr)	9.50	7.30	7.30	6.40	88.60	5.00	92	7	1
Other Asphalt Surfaces	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Strip Mall	9.50	7.30	7.30	16.60	64.40	19.00	45	40	15
Strip Mall	9.50	7.30	7.30	16.60	64.40	19.00	45	40	15

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Office Building	0.617626	0.036451	0.176904	0.096837	0.011340	0.005282	0.018425	0.026503	0.001944	0.001632	0.005548	0.000800	0.000709
Government Office Building	0.617626	0.036451	0.176904	0.096837	0.011340	0.005282	0.018425	0.026503	0.001944	0.001632	0.005548	0.000800	0.000709
Junior College (2Yr)	0.617626	0.036451	0.176904	0.096837	0.011340	0.005282	0.018425	0.026503	0.001944	0.001632	0.005548	0.000800	0.000709
Industrial Park	0.617626	0.036451	0.176904	0.096837	0.011340	0.005282	0.018425	0.026503	0.001944	0.001632	0.005548	0.000800	0.000709
Other Asphalt Surfaces	0.617626	0.036451	0.176904	0.096837	0.011340	0.005282	0.018425	0.026503	0.001944	0.001632	0.005548	0.000800	0.000709
City Park	0.617626	0.036451	0.176904	0.096837	0.011340	0.005282	0.018425	0.026503	0.001944	0.001632	0.005548	0.000800	0.000709
Apartments Mid Rise	0.617626	0.036451	0.176904	0.096837	0.011340	0.005282	0.018425	0.026503	0.001944	0.001632	0.005548	0.000800	0.000709
Apartments Mid Rise	0.617626	0.036451	0.176904	0.096837	0.011340	0.005282	0.018425	0.026503	0.001944	0.001632	0.005548	0.000800	0.000709
Apartments Mid Rise	0.617626	0.036451	0.176904	0.096837	0.011340	0.005282	0.018425	0.026503	0.001944	0.001632	0.005548	0.000800	0.000709
Strip Mall	0.617626	0.036451	0.176904	0.096837	0.011340	0.005282	0.018425	0.026503	0.001944	0.001632	0.005548	0.000800	0.000709
Strip Mall	0.617626	0.036451	0.176904	0.096837	0.011340	0.005282	0.018425	0.026503	0.001944	0.001632	0.005548	0.000800	0.000709

5.0 Energy Detail

Historical Energy Use: N

Midway-Pacific Hwy Proposed Plan Operations - San Diego County, Annual

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	60,467.2696	60,467.2696	2.4338	0.5036	60,678.1737
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	60,467.2696	60,467.2696	2.4338	0.5036	60,678.1737
NaturalGas Mitigated	1.4076	12.4938	8.5328	0.0768		0.9725	0.9725		0.9725	0.9725	0.0000	13,929.9605	13,929.9605	0.2670	0.2554	14,012.7393
NaturalGas Unmitigated	1.4076	12.4938	8.5328	0.0768		0.9725	0.9725		0.9725	0.9725	0.0000	13,929.9605	13,929.9605	0.2670	0.2554	14,012.7393

Midway-Pacific Hwy Proposed Plan Operations - San Diego County, Annual

5.2 Energy by Land Use - NaturalGas**Unmitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Apartments Mid Rise	2.68255e+007	0.1447	1.2361	0.5260	7.8900e-003		0.0999	0.0999		0.0999	0.0999	0.0000	1,431.5102	1,431.5102	0.0274	0.0262	1,440.0170
Apartments Mid Rise	3.79104e+007	0.2044	1.7469	0.7433	0.0112		0.1412	0.1412		0.1412	0.1412	0.0000	2,023.0434	2,023.0434	0.0388	0.0371	2,035.0653
Apartments Mid Rise	3.79991e+007	0.2049	1.7509	0.7451	0.0112		0.1416	0.1416		0.1416	0.1416	0.0000	2,027.7756	2,027.7756	0.0389	0.0372	2,039.8257
City Park	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
General Office Building	3.88256e+007	0.2094	1.9032	1.5987	0.0114		0.1446	0.1446		0.1446	0.1446	0.0000	2,071.8832	2,071.8832	0.0397	0.0380	2,084.1953
Government Office Building	1.48622e+007	0.0801	0.7285	0.6120	4.3700e-003		0.0554	0.0554		0.0554	0.0554	0.0000	793.1051	793.1051	0.0152	0.0145	797.8181
Industrial Park	9.16737e+007	0.4943	4.4938	3.7748	0.0270		0.3415	0.3415		0.3415	0.3415	0.0000	4,892.0572	4,892.0572	0.0938	0.0897	4,921.1283
Junior College (2Yr)	6.819e+006	0.0368	0.3343	0.2808	2.0100e-003		0.0254	0.0254		0.0254	0.0254	0.0000	363.8876	363.8876	6.9700e-003	6.6700e-003	366.0500
Other 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
Strip Mall	1.13288e+006	6.1100e-003	0.0555	0.0467	3.3000e-004		4.2200e-003	4.2200e-003		4.2200e-003	4.2200e-003	0.0000	60.4548	60.4548	1.1600e-003	1.1100e-003	60.8140
Strip Mall	4.98921e+006	0.0269	0.2446	0.2054	1.4700e-003		0.0186	0.0186		0.0186	0.0186	0.0000	266.2435	266.2435	5.1000e-003	4.8800e-003	267.8257
Total		1.4076	12.4938	8.5328	0.0768		0.9725	0.9725		0.9725	0.9725	0.0000	13,929.9605	13,929.9605	0.2670	0.2554	14,012.7393

Midway-Pacific Hwy Proposed Plan Operations - San Diego County, Annual

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Apartments Mid Rise	2.68255e+007	0.1447	1.2361	0.5260	7.8900e-003		0.0999	0.0999		0.0999	0.0999	0.0000	1,431.5102	1,431.5102	0.0274	0.0262	1,440.0170
Apartments Mid Rise	3.79104e+007	0.2044	1.7469	0.7433	0.0112		0.1412	0.1412		0.1412	0.1412	0.0000	2,023.0434	2,023.0434	0.0388	0.0371	2,035.0653
Apartments Mid Rise	3.79991e+007	0.2049	1.7509	0.7451	0.0112		0.1416	0.1416		0.1416	0.1416	0.0000	2,027.7756	2,027.7756	0.0389	0.0372	2,039.8257
City Park	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
General Office Building	3.88256e+007	0.2094	1.9032	1.5987	0.0114		0.1446	0.1446		0.1446	0.1446	0.0000	2,071.8832	2,071.8832	0.0397	0.0380	2,084.1953
Government Office Building	1.48622e+007	0.0801	0.7285	0.6120	4.3700e-003		0.0554	0.0554		0.0554	0.0554	0.0000	793.1051	793.1051	0.0152	0.0145	797.8181
Industrial Park	9.16737e+007	0.4943	4.4938	3.7748	0.0270		0.3415	0.3415		0.3415	0.3415	0.0000	4,892.0572	4,892.0572	0.0938	0.0897	4,921.1283
Junior College (2Yr)	6.819e+006	0.0368	0.3343	0.2808	2.0100e-003		0.0254	0.0254		0.0254	0.0254	0.0000	363.8876	363.8876	6.9700e-003	6.6700e-003	366.0500
Other 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
Strip Mall	1.13288e+006	6.1100e-003	0.0555	0.0467	3.3000e-004		4.2200e-003	4.2200e-003		4.2200e-003	4.2200e-003	0.0000	60.4548	60.4548	1.1600e-003	1.1100e-003	60.8140
Strip Mall	4.98921e+006	0.0269	0.2446	0.2054	1.4700e-003		0.0186	0.0186		0.0186	0.0186	0.0000	266.2435	266.2435	5.1000e-003	4.8800e-003	267.8257
Total		1.4076	12.4938	8.5328	0.0768		0.9725	0.9725		0.9725	0.9725	0.0000	13,929.9605	13,929.9605	0.2670	0.2554	14,012.7393

Midway-Pacific Hwy Proposed Plan Operations - San Diego County, Annual

5.3 Energy by Land Use - Electricity**Unmitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Mid Rise	1.29029e+007	4,216.7893	0.1697	0.0351	4,231.4970
Apartments Mid Rise	1.82347e+007	5,959.2642	0.2399	0.0496	5,980.0495
Apartments Mid Rise	1.82774e+007	5,973.2040	0.2404	0.0497	5,994.0379
City Park	0	0.0000	0.0000	0.0000	0.0000
General Office Building	2.63562e+007	8,613.4439	0.3467	0.0717	8,643.4868
Government Office Building	1.0089e+007	3,297.1772	0.1327	0.0275	3,308.6774
Industrial Park	6.22314e+007	20,337.7589	0.8186	0.1694	20,408.6951
Junior College (2Yr)	1.70241e+006	556.3635	0.0224	4.6300e-003	558.3041
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Strip Mall	2.87103e+007	9,382.7640	0.3777	0.0781	9,415.4902
Strip Mall	6.51912e+006	2,130.5048	0.0858	0.0177	2,137.9358
Total		60,467.2696	2.4338	0.5036	60,678.1737

Midway-Pacific Hwy Proposed Plan Operations - San Diego County, Annual

5.3 Energy by Land Use - Electricity**Mitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Mid Rise	1.29029e+007	4,216.7893	0.1697	0.0351	4,231.4970
Apartments Mid Rise	1.82347e+007	5,959.2642	0.2399	0.0496	5,980.0495
Apartments Mid Rise	1.82774e+007	5,973.2040	0.2404	0.0497	5,994.0379
City Park	0	0.0000	0.0000	0.0000	0.0000
General Office Building	2.63562e+007	8,613.4439	0.3467	0.0717	8,643.4868
Government Office Building	1.0089e+007	3,297.1772	0.1327	0.0275	3,308.6774
Industrial Park	6.22314e+007	20,337.7589	0.8186	0.1694	20,408.6951
Junior College (2Yr)	1.70241e+006	556.3635	0.0224	4.6300e-003	558.3041
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Strip Mall	2.87103e+007	9,382.7640	0.3777	0.0781	9,415.4902
Strip Mall	6.51912e+006	2,130.5048	0.0858	0.0177	2,137.9358
Total		60,467.2696	2.4338	0.5036	60,678.1737

6.0 Area Detail**6.1 Mitigation Measures Area**

Midway-Pacific Hwy Proposed Plan Operations - San Diego County, Annual

Use Low VOC Paint - Residential Exterior

	ROG	NOx	CO	SO2	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	82.8213	15.9384	92.1713	0.1000		1.6860	1.6860		1.6860	1.6860	0.0000	17,452.8421	17,452.8421	0.4660	0.3174	17,559.0751
Unmitigated	85.3390	15.9384	92.1713	0.1000		1.6860	1.6860		1.6860	1.6860	0.0000	17,452.8421	17,452.8421	0.4660	0.3174	17,559.0751

6.2 Area by SubCategory

Unmitigated

[illegible]

Midway-Pacific Hwy Proposed Plan Operations - San Diego County, Annual

6.2 Area by SubCategory**Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	15.9043					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	62.5963					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	1.7493	14.9487	6.3611	0.0954		1.2086	1.2086		1.2086	1.2086	0.0000	17,312.14 90	17,312.14 90	0.3318	0.3174	17,415.02 64
Landscaping																
Total																

7.0 Water Detail**7.1 Mitigation Measures Water**

Midway-Pacific Hwy Proposed Plan Operations - San Diego County, Annual

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	14,856.47 24	81.9756	2.0394	17,513.59 64
Unmitigated	14,856.47 24	81.9756	2.0394	17,513.59 64

Midway-Pacific Hwy Proposed Plan Operations - San Diego County, Annual

7.2 Water by Land Use**Unmitigated**

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Mid Rise	754.809 / 475.858	5,179.2318	24.7943	0.6219	5,984.4124
City Park	0 / 33.1232	120.2652	4.8400e-003	1.0000e-003	120.6846
General Office Building	340.435 / 208.654	2,314.2714	11.1819	0.2803	2,677.3490
Government Office Building	145.659 / 89.275	990.1899	4.7843	0.1199	1,145.5372
Industrial Park	1045.86 / 0	4,782.3234	34.2584	0.8418	5,889.6255
Junior College (2Yr)	9.16579 / 14.3362	93.9645	0.3023	7.8100e-003	103.8503
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Strip Mall	202.446 / 124.08	1,376.2263	6.6495	0.1667	1,592.1374
Total		14,856.4724	81.9756	2.0394	17,513.5964

Midway-Pacific Hwy Proposed Plan Operations - San Diego County, Annual

7.2 Water by Land Use**Mitigated**

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Mid Rise	754.809 / 475.858	5,179.2318	24.7943	0.6219	5,984.4124
City Park	0 / 33.1232	120.2652	4.8400e-003	1.0000e-003	120.6846
General Office Building	340.435 / 208.654	2,314.2714	11.1819	0.2803	2,677.3490
Government Office Building	145.659 / 89.275	990.1899	4.7843	0.1199	1,145.5372
Industrial Park	1045.86 / 0	4,782.3234	34.2584	0.8418	5,889.6255
Junior College (2Yr)	9.16579 / 14.3362	93.9645	0.3023	7.8100e-003	103.8503
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Strip Mall	202.446 / 124.08	1,376.2263	6.6495	0.1667	1,592.1374
Total		14,856.4724	81.9756	2.0394	17,513.5964

8.0 Waste Detail**8.1 Mitigation Measures Waste**

Midway-Pacific Hwy Proposed Plan Operations - San Diego County, Annual

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	3,352.485 1	198.1262	0.0000	8,305.639 9
Unmitigated	3,352.485 1	198.1262	0.0000	8,305.639 9

Midway-Pacific Hwy Proposed Plan Operations - San Diego County, Annual

8.2 Waste by Land Use**Unmitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Mid Rise	5329.1	1,081.759 1	63.9301	0.0000	2,680.012 5
City Park	2.39	0.4852	0.0287	0.0000	1.2019
General Office Building	1781.34	361.5959	21.3697	0.0000	895.8386
Government Office Building	681.89	138.4175	8.1802	0.0000	342.9235
Industrial Park	5608.06	1,138.385 5	67.2767	0.0000	2,820.301 9
Junior College (2Yr)	242.93	49.3126	2.9143	0.0000	122.1699
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Strip Mall	2869.73	582.5293	34.4265	0.0000	1,443.191 6
Total		3,352.485 1	198.1262	0.0000	8,305.639 9

Midway-Pacific Hwy Proposed Plan Operations - San Diego County, Annual

8.2 Waste by Land Use**Mitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Mid Rise	5329.1	1,081.759 1	63.9301	0.0000	2,680.012 5
City Park	2.39	0.4852	0.0287	0.0000	1.2019
General Office Building	1781.34	361.5959	21.3697	0.0000	895.8386
Government Office Building	681.89	138.4175	8.1802	0.0000	342.9235
Industrial Park	5608.06	1,138.385 5	67.2767	0.0000	2,820.301 9
Junior College (2Yr)	242.93	49.3126	2.9143	0.0000	122.1699
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Strip Mall	2869.73	582.5293	34.4265	0.0000	1,443.191 6
Total		3,352.485 1	198.1262	0.0000	8,305.639 9

9.0 Operational Offroad

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

10.0 Stationary Equipment**Fire Pumps and Emergency Generators**

Midway-Pacific Hwy Proposed Plan Operations - San Diego County, Annual

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

Boilers

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

User Defined Equipment

Equipment Type	Number
----------------	--------

11.0 Vegetation

Midway-Pacific Hwy Adopted Plan Operations - San Diego County, Annual

Midway-Pacific Hwy Adopted Plan Operations

San Diego County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	1,270.14	1000sqft	38.51	1,270,139.00	0
Government Office Building	754.73	1000sqft	28.50	754,733.00	0
Junior College (2Yr)	186.87	1000sqft	10.93	186,873.00	0
Industrial Park	4,994.01	1000sqft	854.61	4,994,010.00	0
Other Asphalt Surfaces	22.47	Acre	22.47	978,793.20	0
Apartments Mid Rise	1,860.00	Dwelling Unit	78.09	1,488,000.00	4347
Apartments Mid Rise	126.00	Dwelling Unit	3.82	126,000.00	294
Apartments Mid Rise	3,054.00	Dwelling Unit	113.96	3,054,000.00	7137
Strip Mall	2,975.76	1000sqft	156.00	2,975,759.00	0
Strip Mall	520.76	1000sqft	16.94	520,756.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.6	Precipitation Freq (Days)	40
Climate Zone	13			Operational Year	2035
Utility Company	San Diego Gas & Electric				
CO2 Intensity (lb/MW hr)	720.49	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Midway-Pacific Hwy Adopted Plan Operations - San Diego County, Annual

Project Characteristics - Adopted plan build-out by 2035.

Land Use - Adopted Plan land uses at build out. Industrial land use includes industrial, military, transportation, and utilities land uses. Population assumed based on 2.46 pop/DU and 95% occupancy.

Construction Phase - Operations run only.

Off-road Equipment - Operations run only.

Off-road Equipment - Operations run only.

Off-road Equipment - Operations run only.

Off-road Equipment - Operations run only.

Off-road Equipment - Operations run only.

Off-road Equipment - Operations run only.

Trips and VMT - Operations run only.

Grading - Operations run only.

Architectural Coating - Operations run only.

Vehicle Trips - Mobile sources calculated separately.

Woodstoves - Assumes no woodstoves or woodburning fireplaces.

Area Coating - SDAPCD Rule 67.0.1

Vehicle Emission Factors -

Vehicle Emission Factors -

Vehicle Emission Factors -

Consumer Products - SD County specific EF for consumer products.

Energy Use -

Area Mitigation - SDAPCD Rule 67.0.1

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	ConstArea_Nonresidential_Exterior	5,351,135.00	0.00
tblArchitecturalCoating	ConstArea_Nonresidential_Interior	16,053,405.00	0.00
tblArchitecturalCoating	ConstArea_Parking	58,728.00	0.00
tblArchitecturalCoating	ConstArea_Residential_Exterior	5,159,537.00	0.00

Midway-Pacific Hwy Adopted Plan Operations - San Diego County, Annual

tblArchitecturalCoating	ConstArea_Residential_Interior	15,478,612.00	0.00
tblAreaCoating	Area_EF_Residential_Interior	250	50
tblAreaMitigation	UseLowVOCPaintResidentialExteriorValue	250	100
tblConstructionPhase	NumDays	11,000.00	1.00
tblConstructionPhase	NumDays	155,000.00	1.00
tblConstructionPhase	NumDays	10,000.00	1.00
tblConstructionPhase	NumDays	15,500.00	1.00
tblConstructionPhase	NumDays	11,000.00	1.00
tblConstructionPhase	NumDays	6,000.00	1.00
tblConsumerProducts	ROG_EF	2.14E-05	1.6463E-05
tblFireplaces	NumberGas	2,772.00	4,536.00
tblFireplaces	NumberWood	1,764.00	0.00
tblLandUse	BuildingSpaceSquareFeet	1,270,140.00	1,270,139.00
tblLandUse	BuildingSpaceSquareFeet	754,730.00	754,733.00
tblLandUse	BuildingSpaceSquareFeet	186,870.00	186,873.00
tblLandUse	BuildingSpaceSquareFeet	1,860,000.00	1,488,000.00
tblLandUse	BuildingSpaceSquareFeet	2,975,760.00	2,975,759.00
tblLandUse	BuildingSpaceSquareFeet	520,760.00	520,756.00
tblLandUse	LandUseSquareFeet	1,270,140.00	1,270,139.00
tblLandUse	LandUseSquareFeet	754,730.00	754,733.00
tblLandUse	LandUseSquareFeet	186,870.00	186,873.00
tblLandUse	LandUseSquareFeet	1,860,000.00	1,488,000.00
tblLandUse	LandUseSquareFeet	2,975,760.00	2,975,759.00
tblLandUse	LandUseSquareFeet	520,760.00	520,756.00
tblLandUse	LotAcreage	29.16	38.51
tblLandUse	LotAcreage	17.33	28.50
tblLandUse	LotAcreage	4.29	10.93

Midway-Pacific Hwy Adopted Plan Operations - San Diego County, Annual

tblLandUse	LotAcreage	114.65	854.61
tblLandUse	LotAcreage	3.32	3.82
tblLandUse	LotAcreage	48.95	78.09
tblLandUse	LotAcreage	80.37	113.96
tblLandUse	LotAcreage	68.31	156.00
tblLandUse	LotAcreage	11.96	16.94
tblLandUse	Population	360.00	294.00
tblLandUse	Population	5,320.00	4,347.00
tblLandUse	Population	8,734.00	7,137.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	0.00

Midway-Pacific Hwy Adopted Plan Operations - San Diego County, Annual

tblVehicleTrips	ST_TR	11.23	0.00
tblVehicleTrips	ST_TR	42.04	0.00
tblVehicleTrips	SU_TR	5.86	0.00
tblVehicleTrips	SU_TR	1.05	0.00
tblVehicleTrips	SU_TR	0.73	0.00
tblVehicleTrips	SU_TR	1.21	0.00
tblVehicleTrips	SU_TR	20.43	0.00
tblVehicleTrips	WD_TR	6.65	0.00
tblVehicleTrips	WD_TR	11.03	0.00
tblVehicleTrips	WD_TR	68.93	0.00
tblVehicleTrips	WD_TR	6.83	0.00
tblVehicleTrips	WD_TR	27.49	0.00
tblVehicleTrips	WD_TR	44.32	0.00
tblWoodstoves	NumberCatalytic	252.00	0.00
tblWoodstoves	NumberNoncatalytic	252.00	0.00

2.0 Emissions Summary

Midway-Pacific Hwy Adopted Plan Operations - San Diego County, Annual

2.1 Overall Construction

Unmitigated Construction

[illegible]

Mitigated Construction

[illegible][illegible]

Midway-Pacific Hwy Adopted Plan Operations - San Diego County, Annual

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	4/30/2018	4/30/2018	5	1	
2	Site Preparation	Site Preparation	5/1/2018	5/1/2018	5	1	
3	Grading	Grading	5/2/2018	5/2/2018	5	1	
4	Building Construction	Building Construction	5/3/2018	5/3/2018	5	1	
5	Paving	Paving	5/4/2018	5/4/2018	5	1	
6	Architectural Coating	Architectural Coating	5/5/2018	5/7/2018	5	1	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 22.47

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

OffRoad Equipment

Midway-Pacific Hwy Adopted Plan Operations - San Diego County, Annual

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	0	0.00	78	0.48
Building Construction	Cranes	0	0.00	231	0.29
Building Construction	Forklifts	0	0.00	89	0.20
Building Construction	Generator Sets	0	0.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	0	0.00	97	0.37
Building Construction	Welders	0	0.00	46	0.45
Demolition	Concrete/Industrial Saws	0	0.00	81	0.73
Demolition	Excavators	0	0.00	158	0.38
Demolition	Rubber Tired Dozers	0	0.00	247	0.40
Grading	Excavators	0	0.00	158	0.38
Grading	Graders	0	0.00	187	0.41
Grading	Rubber Tired Dozers	0	0.00	247	0.40
Grading	Scrapers	0	0.00	367	0.48
Grading	Tractors/Loaders/Backhoes	0	0.00	97	0.37
Paving	Pavers	0	0.00	130	0.42
Paving	Paving Equipment	0	0.00	132	0.36
Paving	Rollers	0	0.00	80	0.38
Site Preparation	Rubber Tired Dozers	0	0.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	0	0.00	97	0.37

Trips and VMT

Midway-Pacific Hwy Adopted Plan Operations - San Diego County, Annual

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
Architectural Coating	0	0.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	0	0.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Demolition	0	0.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	0	0.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	0	0.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	0	0.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2018

Unmitigated Construction On-Site

[illegible]

Midway-Pacific Hwy Adopted Plan Operations - San Diego County, Annual

3.2 Demolition - 2018

Unmitigated Construction Off-Site

[illegible]

Mitigated Construction On-Site

[illegible]

Midway-Pacific Hwy Adopted Plan Operations - San Diego County, Annual

3.2 Demolition - 2018

Mitigated Construction Off-Site

[illegible]

3.3 Site Preparation - 2018

Unmitigated Construction On-Site

[illegible]

Midway-Pacific Hwy Adopted Plan Operations - San Diego County, Annual

3.3 Site Preparation - 2018

Unmitigated Construction Off-Site

[illegible]

Mitigated Construction On-Site

[illegible]

Midway-Pacific Hwy Adopted Plan Operations - San Diego County, Annual

3.3 Site Preparation - 2018

Mitigated Construction Off-Site

[illegible]

3.4 Grading - 2018

Unmitigated Construction On-Site

[illegible]

Midway-Pacific Hwy Adopted Plan Operations - San Diego County, Annual

3.4 Grading - 2018

Unmitigated Construction Off-Site

[illegible]

Mitigated Construction On-Site

[illegible]

Midway-Pacific Hwy Adopted Plan Operations - San Diego County, Annual

3.4 Grading - 2018

Mitigated Construction Off-Site

[illegible]

3.5 Building Construction - 2018

Unmitigated Construction On-Site

[illegible]

Midway-Pacific Hwy Adopted Plan Operations - San Diego County, Annual

3.5 Building Construction - 2018

Unmitigated Construction Off-Site

[illegible]

Mitigated Construction On-Site

[illegible]

Midway-Pacific Hwy Adopted Plan Operations - San Diego County, Annual

3.5 Building Construction - 2018

Mitigated Construction Off-Site

[illegible]

3.6 Paving - 2018

Unmitigated Construction On-Site

[illegible]

Midway-Pacific Hwy Adopted Plan Operations - San Diego County, Annual

3.6 Paving - 2018

Unmitigated Construction Off-Site

[illegible]

Mitigated Construction On-Site

[illegible]

Midway-Pacific Hwy Adopted Plan Operations - San Diego County, Annual

3.6 Paving - 2018

Mitigated Construction Off-Site

[illegible]

3.7 Architectural Coating - 2018

Unmitigated Construction On-Site

[illegible]

Midway-Pacific Hwy Adopted Plan Operations - San Diego County, Annual

3.7 Architectural Coating - 2018

Unmitigated Construction Off-Site

[illegible]

Mitigated Construction On-Site

[illegible]

Midway-Pacific Hwy Adopted Plan Operations - San Diego County, Annual

3.7 Architectural Coating - 2018**Mitigated Construction Off-Site**

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

4.0 Operational Detail - Mobile**4.1 Mitigation Measures Mobile**

Midway-Pacific Hwy Adopted Plan Operations - San Diego County, Annual

	ROG	NOx	CO	SO2	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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Mid Rise	0.00	0.00	0.00		
Apartments Mid Rise	0.00	0.00	0.00		
Apartments Mid Rise	0.00	0.00	0.00		
General Office Building	0.00	0.00	0.00		
Government Office Building	0.00	0.00	0.00		
Industrial Park	0.00	0.00	0.00		
Junior College (2Yr)	0.00	0.00	0.00		
Other Asphalt Surfaces	0.00	0.00	0.00		
Strip Mall	0.00	0.00	0.00		
Strip Mall	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

Midway-Pacific Hwy Adopted Plan Operations - San Diego County, Annual

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Mid Rise	10.80	7.30	7.50	41.60	18.80	39.60	86	11	3
Apartments Mid Rise	10.80	7.30	7.50	41.60	18.80	39.60	86	11	3
Apartments Mid Rise	10.80	7.30	7.50	41.60	18.80	39.60	86	11	3
General Office Building	9.50	7.30	7.30	33.00	48.00	19.00	77	19	4
Government Office Building	9.50	7.30	7.30	33.00	62.00	5.00	50	34	16
Industrial Park	9.50	7.30	7.30	59.00	28.00	13.00	79	19	2
Junior College (2Yr)	9.50	7.30	7.30	6.40	88.60	5.00	92	7	1
Other Asphalt Surfaces	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Strip Mall	9.50	7.30	7.30	16.60	64.40	19.00	45	40	15
Strip Mall	9.50	7.30	7.30	16.60	64.40	19.00	45	40	15

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Office Building	0.617626	0.036451	0.176904	0.096837	0.011340	0.005282	0.018425	0.026503	0.001944	0.001632	0.005548	0.000800	0.000709
Government Office Building	0.617626	0.036451	0.176904	0.096837	0.011340	0.005282	0.018425	0.026503	0.001944	0.001632	0.005548	0.000800	0.000709
Junior College (2Yr)	0.617626	0.036451	0.176904	0.096837	0.011340	0.005282	0.018425	0.026503	0.001944	0.001632	0.005548	0.000800	0.000709
Industrial Park	0.617626	0.036451	0.176904	0.096837	0.011340	0.005282	0.018425	0.026503	0.001944	0.001632	0.005548	0.000800	0.000709
Other Asphalt Surfaces	0.617626	0.036451	0.176904	0.096837	0.011340	0.005282	0.018425	0.026503	0.001944	0.001632	0.005548	0.000800	0.000709
Apartments Mid Rise	0.617626	0.036451	0.176904	0.096837	0.011340	0.005282	0.018425	0.026503	0.001944	0.001632	0.005548	0.000800	0.000709
Apartments Mid Rise	0.617626	0.036451	0.176904	0.096837	0.011340	0.005282	0.018425	0.026503	0.001944	0.001632	0.005548	0.000800	0.000709
Apartments Mid Rise	0.617626	0.036451	0.176904	0.096837	0.011340	0.005282	0.018425	0.026503	0.001944	0.001632	0.005548	0.000800	0.000709
Strip Mall	0.617626	0.036451	0.176904	0.096837	0.011340	0.005282	0.018425	0.026503	0.001944	0.001632	0.005548	0.000800	0.000709
Strip Mall	0.617626	0.036451	0.176904	0.096837	0.011340	0.005282	0.018425	0.026503	0.001944	0.001632	0.005548	0.000800	0.000709

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Midway-Pacific Hwy Adopted Plan Operations - San Diego County, Annual

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	53,874.44 97	53,874.44 97	2.1685	0.4487	54,062.35 86
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	53,874.44 97	53,874.44 97	2.1685	0.4487	54,062.35 86
NaturalGas Mitigated	1.0872	9.7518	7.3379	0.0593		0.7511	0.7511		0.7511	0.7511	0.0000	10,759.12 00	10,759.12 00	0.2062	0.1973	10,823.05 61
NaturalGas Unmitigated	1.0872	9.7518	7.3379	0.0593		0.7511	0.7511		0.7511	0.7511	0.0000	10,759.12 00	10,759.12 00	0.2062	0.1973	10,823.05 61

Midway-Pacific Hwy Adopted Plan Operations - San Diego County, Annual

5.2 Energy by Land Use - NaturalGas**Unmitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Apartments Mid Rise	1.11736e+006	6.0200e-003	0.0515	0.0219	3.3000e-004		4.1600e-003	4.1600e-003		4.1600e-003	4.1600e-003	0.0000	59.6265	59.6265	1.1400e-003	1.0900e-003	59.9809
Apartments Mid Rise	1.64943e+007	0.0889	0.7600	0.3234	4.8500e-003		0.0615	0.0615		0.0615	0.0615	0.0000	880.2013	880.2013	0.0169	0.0161	885.4319
Apartments Mid Rise	2.70827e+007	0.1460	1.2479	0.5310	7.9700e-003		0.1009	0.1009		0.1009	0.1009	0.0000	1,445.2338	1,445.2338	0.0277	0.0265	1,453.8221
General Office Building	2.57457e+007	0.1388	1.2620	1.0601	7.5700e-003		0.0959	0.0959		0.0959	0.0959	0.0000	1,373.8895	1,373.8895	0.0263	0.0252	1,382.0539
Government Office Building	1.52984e+007	0.0825	0.7499	0.6299	4.5000e-003		0.0570	0.0570		0.0570	0.0570	0.0000	816.3829	816.3829	0.0157	0.0150	821.2343
Industrial Park	1.01229e+008	0.5458	4.9622	4.1682	0.0298		0.3771	0.3771		0.3771	0.3771	0.0000	5,401.9427	5,401.9427	0.1035	0.0990	5,434.0437
Junior College (2Yr)	6.819e+006	0.0368	0.3343	0.2808	2.0100e-003		0.0254	0.0254		0.0254	0.0254	0.0000	363.8876	363.8876	6.9700e-003	6.6700e-003	366.0500
Other 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
Strip Mall	1.16649e+006	6.2900e-003	0.0572	0.0480	3.4000e-004		4.3500e-003	4.3500e-003		4.3500e-003	4.3500e-003	0.0000	62.2485	62.2485	1.1900e-003	1.1400e-003	62.6184
Strip Mall	6.6657e+006	0.0359	0.3268	0.2745	1.9600e-003		0.0248	0.0248		0.0248	0.0248	0.0000	355.7072	355.7072	6.8200e-003	6.5200e-003	357.8209
Total		1.0871	9.7518	7.3379	0.0593		0.7511	0.7511		0.7511	0.7511	0.0000	10,759.1200	10,759.1200	0.2062	0.1973	10,823.0561

Midway-Pacific Hwy Adopted Plan Operations - San Diego County, Annual

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Apartments Mid Rise	2.70827e+007	0.1460	1.2479	0.5310	7.9700e-003		0.1009	0.1009		0.1009	0.1009	0.0000	1,445.2338	1,445.2338	0.0277	0.0265	1,453.8221
Apartments Mid Rise	1.11736e+006	6.0200e-003	0.0515	0.0219	3.3000e-004		4.1600e-003	4.1600e-003		4.1600e-003	4.1600e-003	0.0000	59.6265	59.6265	1.1400e-003	1.0900e-003	59.9809
Apartments Mid Rise	1.64943e+007	0.0889	0.7600	0.3234	4.8500e-003		0.0615	0.0615		0.0615	0.0615	0.0000	880.2013	880.2013	0.0169	0.0161	885.4319
General Office Building	2.57457e+007	0.1388	1.2620	1.0601	7.5700e-003		0.0959	0.0959		0.0959	0.0959	0.0000	1,373.8895	1,373.8895	0.0263	0.0252	1,382.0539
Government Office Building	1.52984e+007	0.0825	0.7499	0.6299	4.5000e-003		0.0570	0.0570		0.0570	0.0570	0.0000	816.3829	816.3829	0.0157	0.0150	821.2343
Industrial Park	1.01229e+008	0.5458	4.9622	4.1682	0.0298		0.3771	0.3771		0.3771	0.3771	0.0000	5,401.9427	5,401.9427	0.1035	0.0990	5,434.0437
Junior College (2Yr)	6.819e+006	0.0368	0.3343	0.2808	2.0100e-003		0.0254	0.0254		0.0254	0.0254	0.0000	363.8876	363.8876	6.9700e-003	6.6700e-003	366.0500
Other 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
Strip Mall	1.16649e+006	6.2900e-003	0.0572	0.0480	3.4000e-004		4.3500e-003	4.3500e-003		4.3500e-003	4.3500e-003	0.0000	62.2485	62.2485	1.1900e-003	1.1400e-003	62.6184
Strip Mall	6.6657e+006	0.0359	0.3268	0.2745	1.9600e-003		0.0248	0.0248		0.0248	0.0248	0.0000	355.7072	355.7072	6.8200e-003	6.5200e-003	357.8209
Total		1.0871	9.7518	7.3379	0.0593		0.7511	0.7511		0.7511	0.7511	0.0000	10,759.1200	10,759.1200	0.2062	0.1973	10,823.0561

Midway-Pacific Hwy Adopted Plan Operations - San Diego County, Annual

5.3 Energy by Land Use - Electricity**Unmitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Mid Rise	1.30266e+007	4,257.2147	0.1714	0.0355	4,272.0634
Apartments Mid Rise	537444	175.6415	7.0700e-003	1.4600e-003	176.2541
Apartments Mid Rise	7.9337e+006	2,592.8027	0.1044	0.0216	2,601.8461
General Office Building	1.74771e+007	5,711.6736	0.2299	0.0476	5,731.5954
Government Office Building	1.03851e+007	3,393.9503	0.1366	0.0283	3,405.7880
Industrial Park	6.87176e+007	22,457.5068	0.9039	0.1870	22,535.8364
Junior College (2Yr)	1.70241e+006	556.3635	0.0224	4.6300e-003	558.3041
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Strip Mall	3.83575e+007	12,535.5782	0.5046	0.1044	12,579.3011
Strip Mall	6.71254e+006	2,193.7185	0.0883	0.0183	2,201.3700
Total		53,874.4497	2.1685	0.4486	54,062.3586

Midway-Pacific Hwy Adopted Plan Operations - San Diego County, Annual

5.3 Energy by Land Use - Electricity**Mitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Mid Rise	1.30266e+007	4,257.2147	0.1714	0.0355	4,272.0634
Apartments Mid Rise	537444	175.6415	7.0700e-003	1.4600e-003	176.2541
Apartments Mid Rise	7.9337e+006	2,592.8027	0.1044	0.0216	2,601.8461
General Office Building	1.74771e+007	5,711.6736	0.2299	0.0476	5,731.5954
Government Office Building	1.03851e+007	3,393.9503	0.1366	0.0283	3,405.7880
Industrial Park	6.87176e+007	22,457.5068	0.9039	0.1870	22,535.8364
Junior College (2Yr)	1.70241e+006	556.3635	0.0224	4.6300e-003	558.3041
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Strip Mall	3.83575e+007	12,535.5782	0.5046	0.1044	12,579.3011
Strip Mall	6.71254e+006	2,193.7185	0.0883	0.0183	2,201.3700
Total		53,874.4497	2.1685	0.4486	54,062.3586

6.0 Area Detail**6.1 Mitigation Measures Area**

Use Low VOC Paint - Residential Exterior

Midway-Pacific Hwy Adopted Plan Operations - San Diego County, Annual

	ROG	NOx	CO	SO2	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																
Unmitigated																

6.2 Area by SubCategory

Unmitigated

[illegible]

Midway-Pacific Hwy Adopted Plan Operations - San Diego County, Annual

6.2 Area by SubCategory**Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	15.4246					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	46.2432					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	1.0830	9.2550	3.9383	0.0591		0.7483	0.7483		0.7483	0.7483	0.0000	10,718.3386	10,718.3386	0.2054	0.1965	10,782.0323
Landscaping																
Total																

7.0 Water Detail**7.1 Mitigation Measures Water**

Midway-Pacific Hwy Adopted Plan Operations - San Diego County, Annual

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	11,942.46 34	69.7646	1.7304	14,202.24 26
Unmitigated	11,942.46 34	69.7646	1.7304	14,202.24 26

Midway-Pacific Hwy Adopted Plan Operations - San Diego County, Annual

7.2 Water by Land Use**Unmitigated**

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Mid Rise	328.376 / 207.02	2,253.2006	10.7866	0.2706	2,603.4906
General Office Building	225.747 / 138.361	1,534.6236	7.4149	0.1859	1,775.3851
Government Office Building	149.934 / 91.8953	1,019.2524	4.9247	0.1235	1,179.1592
Industrial Park	1154.86 / 0	5,280.7704	37.8291	0.9295	6,503.4833
Junior College (2Yr)	9.16579 / 14.3362	93.9645	0.3023	7.8100e-003	103.8503
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Strip Mall	258.996 / 158.74	1,760.6520	8.5070	0.2133	2,036.8743
Total		11,942.4634	69.7646	1.7304	14,202.2426

Midway-Pacific Hwy Adopted Plan Operations - San Diego County, Annual

7.2 Water by Land Use**Mitigated**

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Mid Rise	328.376 / 207.02	2,253.2006	10.7866	0.2706	2,603.4906
General Office Building	225.747 / 138.361	1,534.6236	7.4149	0.1859	1,775.3851
Government Office Building	149.934 / 91.8953	1,019.2524	4.9247	0.1235	1,179.1592
Industrial Park	1154.86 / 0	5,280.7704	37.8291	0.9295	6,503.4833
Junior College (2Yr)	9.16579 / 14.3362	93.9645	0.3023	7.8100e-003	103.8503
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Strip Mall	258.996 / 158.74	1,760.6520	8.5070	0.2133	2,036.8743
Total		11,942.4634	69.7646	1.7304	14,202.2426

8.0 Waste Detail**8.1 Mitigation Measures Waste**

Midway-Pacific Hwy Adopted Plan Operations - San Diego County, Annual

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	2,904.4718	171.6494	0.0000	7,195.7060
Unmitigated	2,904.4718	171.6494	0.0000	7,195.7060

Midway-Pacific Hwy Adopted Plan Operations - San Diego County, Annual

8.2 Waste by Land Use**Unmitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Mid Rise	2318.4	470.6143	27.8125	0.0000	1,165.926 9
General Office Building	1181.23	239.7790	14.1705	0.0000	594.0424
Government Office Building	701.9	142.4794	8.4203	0.0000	352.9866
Industrial Park	6192.57	1,257.035 8	74.2887	0.0000	3,114.252 9
Junior College (2Yr)	242.93	49.3126	2.9143	0.0000	122.1699
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Strip Mall	3671.35	745.2509	44.0431	0.0000	1,846.327 5
Total		2,904.471 8	171.6494	0.0000	7,195.706 0

Midway-Pacific Hwy Adopted Plan Operations - San Diego County, Annual

8.2 Waste by Land Use**Mitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Mid Rise	2318.4	470.6143	27.8125	0.0000	1,165.9269
General Office Building	1181.23	239.7790	14.1705	0.0000	594.0424
Government Office Building	701.9	142.4794	8.4203	0.0000	352.9866
Industrial Park	6192.57	1,257.0358	74.2887	0.0000	3,114.2529
Junior College (2Yr)	242.93	49.3126	2.9143	0.0000	122.1699
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Strip Mall	3671.35	745.2509	44.0431	0.0000	1,846.3275
Total		2,904.4718	171.6494	0.0000	7,195.7060

9.0 Operational Offroad

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

10.0 Stationary Equipment**Fire Pumps and Emergency Generators**

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

Midway-Pacific Hwy Adopted Plan Operations - San Diego County, Annual

Boilers

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

User Defined Equipment

Equipment Type	Number
----------------	--------

11.0 Vegetation

Midway-Pacific Hwy Existing - San Diego County, Annual

Midway-Pacific Hwy Existing

San Diego County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Regional Shopping Center	2,282.51	1000sqft	183.95	2,282,513.00	0
Industrial Park	4,682.98	1000sqft	576.31	4,682,978.00	0
Junior College (2Yr)	192.18	1000sqft	11.22	192,175.00	0
Government Office Building	891.54	1000sqft	42.96	891,539.00	0
Hotel	646.00	Room	18.97	511,089.00	0
General Office Building	1,082.06	1000sqft	38.82	1,082,059.00	0
Apartments Low Rise	1,970.00	Dwelling Unit	81.06	1,970,000.00	5634
Other Asphalt Surfaces	330.88	Acre	330.88	5,261.00	0
Single Family Housing	12.00	Dwelling Unit	0.85	21,600.00	34
Arena	33.16	Acre	33.16	150,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.6	Precipitation Freq (Days)	40
Climate Zone	13			Operational Year	2015
Utility Company	San Diego Gas & Electric				
CO2 Intensity (lb/MW hr)	720.49	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Midway-Pacific Hwy Existing - San Diego County, Annual

Project Characteristics - Existing conditions - operations only run.

Land Use - Existing land uses. Industrial land use includes industrial, utilities, and military land uses.

Construction Phase - Operations only.

Off-road Equipment - Operations only.

Off-road Equipment - Operations only.

Grading - Operations only.

Trips and VMT - Operations only.

Architectural Coating - Operations only.

Vehicle Trips - Operational Mobile Emissions calculated separately.

Consumer Products - EFs consistent with adopted plan and alternative 3B runs.

Area Coating - SDAPCD Rule 67

Energy Use -

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	ConstArea_Nonresidential_Exterior	4,896,177.00	0.00
tblArchitecturalCoating	ConstArea_Nonresidential_Interior	14,688,530.00	0.00
tblArchitecturalCoating	ConstArea_Parking	316.00	0.00
tblArchitecturalCoating	ConstArea_Residential_Exterior	1,344,330.00	0.00
tblArchitecturalCoating	ConstArea_Residential_Interior	4,032,990.00	0.00
tblArchitecturalCoating	EF_Parking	250.00	0.00
tblAreaCoating	Area_EF_Residential_Interior	250	50
tblConstructionPhase	NumDays	11,000.00	3.00
tblConstructionPhase	NumDays	6,000.00	3.00
tblConstructionPhase	PhaseEndDate	12/31/2013	1/4/2014
tblConstructionPhase	PhaseEndDate	12/31/2013	1/4/2014
tblConsumerProducts	ROG_EF_Degreaser	3.542E-07	3.54E-07
tblConsumerProducts	ROG_EF_PesticidesFertilizers	5.152E-08	5.15E-08

Midway-Pacific Hwy Existing - San Diego County, Annual

tblLandUse	BuildingSpaceSquareFeet	2,282,510.00	2,282,513.00
tblLandUse	BuildingSpaceSquareFeet	4,682,980.00	4,682,978.00
tblLandUse	BuildingSpaceSquareFeet	937,992.00	511,089.00
tblLandUse	BuildingSpaceSquareFeet	1,082,060.00	1,082,059.00
tblLandUse	BuildingSpaceSquareFeet	14,413,132.80	5,261.00
tblLandUse	BuildingSpaceSquareFeet	1,444,449.60	150,000.00
tblLandUse	LandUseSquareFeet	2,282,510.00	2,282,513.00
tblLandUse	LandUseSquareFeet	4,682,980.00	4,682,978.00
tblLandUse	LandUseSquareFeet	937,992.00	511,089.00
tblLandUse	LandUseSquareFeet	1,082,060.00	1,082,059.00
tblLandUse	LandUseSquareFeet	14,413,132.80	5,261.00
tblLandUse	LandUseSquareFeet	1,444,449.60	150,000.00
tblLandUse	LotAcreage	52.40	183.95
tblLandUse	LotAcreage	107.51	576.31
tblLandUse	LotAcreage	4.41	11.22
tblLandUse	LotAcreage	20.47	42.96
tblLandUse	LotAcreage	21.53	18.97
tblLandUse	LotAcreage	24.84	38.82
tblLandUse	LotAcreage	123.13	81.06
tblLandUse	LotAcreage	3.90	0.85
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	UsageHours	6.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblProjectCharacteristics	OperationalYear	2018	2015

Midway-Pacific Hwy Existing - San Diego County, Annual

tblTripsAndVMT	WorkerTripNumber	1,022.00	0.00
tblVehicleTrips	ST_TR	7.16	0.00
tblVehicleTrips	ST_TR	2.46	0.00
tblVehicleTrips	ST_TR	8.19	0.00
tblVehicleTrips	ST_TR	2.49	0.00
tblVehicleTrips	ST_TR	11.23	0.00
tblVehicleTrips	ST_TR	49.97	0.00
tblVehicleTrips	ST_TR	9.91	0.00
tblVehicleTrips	SU_TR	6.07	0.00
tblVehicleTrips	SU_TR	1.05	0.00
tblVehicleTrips	SU_TR	5.95	0.00
tblVehicleTrips	SU_TR	0.73	0.00
tblVehicleTrips	SU_TR	1.21	0.00
tblVehicleTrips	SU_TR	25.24	0.00
tblVehicleTrips	SU_TR	8.62	0.00
tblVehicleTrips	WD_TR	6.59	0.00
tblVehicleTrips	WD_TR	33.33	0.00
tblVehicleTrips	WD_TR	11.03	0.00
tblVehicleTrips	WD_TR	68.93	0.00
tblVehicleTrips	WD_TR	8.17	0.00
tblVehicleTrips	WD_TR	6.83	0.00
tblVehicleTrips	WD_TR	27.49	0.00
tblVehicleTrips	WD_TR	42.70	0.00
tblVehicleTrips	WD_TR	9.52	0.00

2.0 Emissions Summary

Midway-Pacific Hwy Existing - San Diego County, Annual

2.1 Overall Construction

Unmitigated Construction

[illegible]

Mitigated Construction

[illegible][illegible]

Midway-Pacific Hwy Existing - San Diego County, Annual

Acres of Grading (Site Preparation Phase): 0**Acres of Grading (Grading Phase): 0****Acres of Paving: 330.88****Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)****OffRoad Equipment**

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	0	0.00	78	0.48
Site Preparation	Tractors/Loaders/Backhoes	0	0.00	97	0.37
Site Preparation	Rubber Tired Dozers	0	0.00	247	0.40

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
Architectural Coating	0	0.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	0	0.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Midway-Pacific Hwy Existing - San Diego County, Annual

3.2 Architectural Coating - 2014

Unmitigated Construction On-Site

[illegible]

Unmitigated Construction Off-Site

[illegible]

Midway-Pacific Hwy Existing - San Diego County, Annual

3.2 Architectural Coating - 2014

Mitigated Construction On-Site

[illegible]

Mitigated Construction Off-Site

[illegible]

Midway-Pacific Hwy Existing - San Diego County, Annual

3.3 Site Preparation - 2014

Unmitigated Construction On-Site

[illegible]

Unmitigated Construction Off-Site

[illegible]

Midway-Pacific Hwy Existing - San Diego County, Annual

3.3 Site Preparation - 2014**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					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Mitigated Construction Off-Site

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

4.0 Operational Detail - Mobile

Midway-Pacific Hwy Existing - San Diego County, Annual

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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Low Rise	0.00	0.00	0.00		
Arena	0.00	0.00	0.00		
General Office Building	0.00	0.00	0.00		
Government Office Building	0.00	0.00	0.00		
Hotel	0.00	0.00	0.00		
Industrial Park	0.00	0.00	0.00		
Junior College (2Yr)	0.00	0.00	0.00		
Other Asphalt Surfaces	0.00	0.00	0.00		
Regional Shopping Center	0.00	0.00	0.00		
Single Family Housing	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

Midway-Pacific Hwy Existing - San Diego County, Annual

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Low Rise	10.80	7.30	7.50	41.60	18.80	39.60	86	11	3
Arena	9.50	7.30	7.30	0.00	81.00	19.00	66	28	6
General Office Building	9.50	7.30	7.30	33.00	48.00	19.00	77	19	4
Government Office Building	9.50	7.30	7.30	33.00	62.00	5.00	50	34	16
Hotel	9.50	7.30	7.30	19.40	61.60	19.00	58	38	4
Industrial Park	9.50	7.30	7.30	59.00	28.00	13.00	79	19	2
Junior College (2Yr)	9.50	7.30	7.30	6.40	88.60	5.00	92	7	1
Other Asphalt Surfaces	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Regional Shopping Center	9.50	7.30	7.30	16.30	64.70	19.00	54	35	11
Single Family Housing	10.80	7.30	7.50	41.60	18.80	39.60	86	11	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Regional Shopping Center	0.546319	0.051132	0.197604	0.126998	0.023152	0.005783	0.014168	0.021253	0.001850	0.002415	0.006828	0.000702	0.001795
Industrial Park	0.546319	0.051132	0.197604	0.126998	0.023152	0.005783	0.014168	0.021253	0.001850	0.002415	0.006828	0.000702	0.001795
Junior College (2Yr)	0.546319	0.051132	0.197604	0.126998	0.023152	0.005783	0.014168	0.021253	0.001850	0.002415	0.006828	0.000702	0.001795
Government Office Building	0.546319	0.051132	0.197604	0.126998	0.023152	0.005783	0.014168	0.021253	0.001850	0.002415	0.006828	0.000702	0.001795
Hotel	0.546319	0.051132	0.197604	0.126998	0.023152	0.005783	0.014168	0.021253	0.001850	0.002415	0.006828	0.000702	0.001795
General Office Building	0.546319	0.051132	0.197604	0.126998	0.023152	0.005783	0.014168	0.021253	0.001850	0.002415	0.006828	0.000702	0.001795
Apartments Low Rise	0.546319	0.051132	0.197604	0.126998	0.023152	0.005783	0.014168	0.021253	0.001850	0.002415	0.006828	0.000702	0.001795
Other Asphalt Surfaces	0.546319	0.051132	0.197604	0.126998	0.023152	0.005783	0.014168	0.021253	0.001850	0.002415	0.006828	0.000702	0.001795
Single Family Housing	0.546319	0.051132	0.197604	0.126998	0.023152	0.005783	0.014168	0.021253	0.001850	0.002415	0.006828	0.000702	0.001795
Arena	0.546319	0.051132	0.197604	0.126998	0.023152	0.005783	0.014168	0.021253	0.001850	0.002415	0.006828	0.000702	0.001795

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Midway-Pacific Hwy Existing - San Diego County, Annual

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	45,709.8354	45,709.8354	1.8398	0.3807	45,869.2669
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	45,709.8354	45,709.8354	1.8398	0.3807	45,869.2669
NaturalGas Mitigated	1.1181	10.0802	7.9211	0.0610		0.7725	0.7725		0.7725	0.7725	0.0000	11,065.1109	11,065.1109	0.2121	0.2029	11,130.8653
NaturalGas Unmitigated	1.1181	10.0802	7.9211	0.0610		0.7725	0.7725		0.7725	0.7725	0.0000	11,065.1109	11,065.1109	0.2121	0.2029	11,130.8653

Midway-Pacific Hwy Existing - San Diego County, Annual

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Apartments Low Rise	2.82629e+007	0.1524	1.3023	0.5542	8.3100e-003		0.1053	0.1053		0.1053	0.1053	0.0000	1,508.2171	1,508.2171	0.0289	0.0277	1,517.1796
Arena	1.7385e+006	9.3700e-003	0.0852	0.0716	5.1000e-004		6.4800e-003	6.4800e-003		6.4800e-003	6.4800e-003	0.0000	92.7730	92.7730	1.7800e-003	1.7000e-003	93.3243
General Office Building	2.19333e+007	0.1183	1.0752	0.9031	6.4500e-003		0.0817	0.0817		0.0817	0.0817	0.0000	1,170.4463	1,170.4463	0.0224	0.0215	1,177.4017
Government Office Building	1.80715e+007	0.0974	0.8859	0.7441	5.3200e-003		0.0673	0.0673		0.0673	0.0673	0.0000	964.3638	964.3638	0.0185	0.0177	970.0946
Hotel	2.99549e+007	0.1615	1.4684	1.2334	8.8100e-003		0.1116	0.1116		0.1116	0.1116	0.0000	1,598.5089	1,598.5089	0.0306	0.0293	1,608.0081
Industrial Park	9.4924e+007	0.5118	4.6531	3.9086	0.0279		0.3536	0.3536		0.3536	0.3536	0.0000	5,065.5042	5,065.5042	0.0971	0.0929	5,095.6060
Junior College (2Yr)	7.01247e+006	0.0378	0.3438	0.2888	2.0600e-003		0.0261	0.0261		0.0261	0.0261	0.0000	374.2119	374.2119	7.1700e-003	6.8600e-003	376.4356
Other 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
Regional Shopping Center	5.11283e+006	0.0276	0.2506	0.2105	1.5000e-003		0.0191	0.0191		0.0191	0.0191	0.0000	272.8400	272.8400	5.2300e-003	5.0000e-003	274.4614
Single Family Housing	341911	1.8400e-003	0.0158	6.7000e-003	1.0000e-004		1.2700e-003	1.2700e-003		1.2700e-003	1.2700e-003	0.0000	18.2457	18.2457	3.5000e-004	3.3000e-004	18.3541
Total		1.1181	10.0802	7.9211	0.0610		0.7725	0.7725		0.7725	0.7725	0.0000	11,065.1109	11,065.1109	0.2121	0.2029	11,130.8653

Midway-Pacific Hwy Existing - San Diego County, Annual

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Apartments Low Rise	2.82629e+007	0.1524	1.3023	0.5542	8.3100e-003		0.1053	0.1053		0.1053	0.1053	0.0000	1,508.2171	1,508.2171	0.0289	0.0277	1,517.1796
Arena	1.7385e+006	9.3700e-003	0.0852	0.0716	5.1000e-004		6.4800e-003	6.4800e-003		6.4800e-003	6.4800e-003	0.0000	92.7730	92.7730	1.7800e-003	1.7000e-003	93.3243
General Office Building	2.19333e+007	0.1183	1.0752	0.9031	6.4500e-003		0.0817	0.0817		0.0817	0.0817	0.0000	1,170.4463	1,170.4463	0.0224	0.0215	1,177.4017
Government Office Building	1.80715e+007	0.0974	0.8859	0.7441	5.3200e-003		0.0673	0.0673		0.0673	0.0673	0.0000	964.3638	964.3638	0.0185	0.0177	970.0946
Hotel	2.99549e+007	0.1615	1.4684	1.2334	8.8100e-003		0.1116	0.1116		0.1116	0.1116	0.0000	1,598.5089	1,598.5089	0.0306	0.0293	1,608.0081
Industrial Park	9.4924e+007	0.5118	4.6531	3.9086	0.0279		0.3536	0.3536		0.3536	0.3536	0.0000	5,065.5042	5,065.5042	0.0971	0.0929	5,095.6060
Junior College (2Yr)	7.01247e+006	0.0378	0.3438	0.2888	2.0600e-003		0.0261	0.0261		0.0261	0.0261	0.0000	374.2119	374.2119	7.1700e-003	6.8600e-003	376.4356
Other 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
Regional Shopping Center	5.11283e+006	0.0276	0.2506	0.2105	1.5000e-003		0.0191	0.0191		0.0191	0.0191	0.0000	272.8400	272.8400	5.2300e-003	5.0000e-003	274.4614
Single Family Housing	341911	1.8400e-003	0.0158	6.7000e-003	1.0000e-004		1.2700e-003	1.2700e-003		1.2700e-003	1.2700e-003	0.0000	18.2457	18.2457	3.5000e-004	3.3000e-004	18.3541
Total		1.1181	10.0802	7.9211	0.0610		0.7725	0.7725		0.7725	0.7725	0.0000	11,065.1109	11,065.1109	0.2121	0.2029	11,130.8653

Midway-Pacific Hwy Existing - San Diego County, Annual

5.3 Energy by Land Use - Electricity**Unmitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Low Rise	8.93659e+006	2,920.5559	0.1176	0.0243	2,930.7425
Arena	1.2675e+006	414.2301	0.0167	3.4500e-003	415.6749
General Office Building	1.48891e+007	4,865.8988	0.1959	0.0405	4,882.8706
Government Office Building	1.22676e+007	4,009.1516	0.1614	0.0334	4,023.1351
Hotel	6.79237e+006	2,219.8070	0.0894	0.0185	2,227.5495
Industrial Park	6.44378e+007	21,058.8305	0.8476	0.1754	21,132.2817
Junior College (2Yr)	1.75071e+006	572.1488	0.0230	4.7600e-003	574.1444
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	2.94216e+007	9,615.2344	0.3870	0.0801	9,648.7714
Single Family Housing	103970	33.9784	1.3700e-003	2.8000e-004	34.0969
Total		45,709.8354	1.8398	0.3807	45,869.2669

Midway-Pacific Hwy Existing - San Diego County, Annual

5.3 Energy by Land Use - Electricity**Mitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Low Rise	8.93659e+006	2,920.5559	0.1176	0.0243	2,930.7425
Arena	1.2675e+006	414.2301	0.0167	3.4500e-003	415.6749
General Office Building	1.48891e+007	4,865.8988	0.1959	0.0405	4,882.8706
Government Office Building	1.22676e+007	4,009.1516	0.1614	0.0334	4,023.1351
Hotel	6.79237e+006	2,219.8070	0.0894	0.0185	2,227.5495
Industrial Park	6.44378e+007	21,058.8305	0.8476	0.1754	21,132.2817
Junior College (2Yr)	1.75071e+006	572.1488	0.0230	4.7600e-003	574.1444
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	2.94216e+007	9,615.2344	0.3870	0.0801	9,648.7714
Single Family Housing	103970	33.9784	1.3700e-003	2.8000e-004	34.0969
Total		45,709.8354	1.8398	0.3807	45,869.2669

6.0 Area Detail**6.1 Mitigation Measures Area**

Midway-Pacific Hwy Existing - San Diego County, Annual

[illegible]

6.2 Area by SubCategory

Unmitigated

[illegible]

Midway-Pacific Hwy Existing - San Diego County, Annual

6.2 Area by SubCategory**Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	12.5933					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	46.0226					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	124.3630	2.4287	153.5126	0.2781		21.5239	21.5239		21.5239	21.5239	2,047.322 2	858.6171	2,905.939 2	1.8893	0.1610	3,001.161 8
Landscaping																
Total																

7.0 Water Detail**7.1 Mitigation Measures Water**

Midway-Pacific Hwy Existing - San Diego County, Annual

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	9,891.334 7	59.7131	1.4787	11,824.80 54
Unmitigated	9,891.334 7	59.7131	1.4787	11,824.80 54

Midway-Pacific Hwy Existing - San Diego County, Annual

7.2 Water by Land Use**Unmitigated**

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Low Rise	128.353 / 80.9185	880.7153	4.2162	0.1058	1,017.6342
Arena	44.6386 / 2.84927	214.4609	1.4626	0.0360	261.7580
General Office Building	192.319 / 117.873	1,307.3793	6.3169	0.1584	1,512.4893
Government Office Building	177.113 / 108.553	1,204.0124	5.8174	0.1458	1,392.9055
Hotel	16.3869 / 1.82077	81.5423	0.5370	0.0132	98.9151
Industrial Park	1082.94 / 0	4,951.8808	35.4731	0.8716	6,098.4423
Junior College (2Yr)	9.42624 / 14.7436	96.6345	0.3109	8.0300e-003	106.8013
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	169.071 / 103.624	1,149.3444	5.5533	0.1392	1,329.6609
Single Family Housing	0.781848 / 0.492904	5.3648	0.0257	6.4000e-004	6.1988
Total		9,891.3347	59.7131	1.4787	11,824.8054

Midway-Pacific Hwy Existing - San Diego County, Annual

7.2 Water by Land Use**Mitigated**

	Indoor/Out door Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Low Rise	128.353 / 80.9185	880.7153	4.2162	0.1058	1,017.634 2
Arena	44.6386 / 2.84927	214.4609	1.4626	0.0360	261.7580
General Office Building	192.319 / 117.873	1,307.379 3	6.3169	0.1584	1,512.489 3
Government Office Building	177.113 / 108.553	1,204.012 4	5.8174	0.1458	1,392.905 5
Hotel	16.3869 / 1.82077	81.5423	0.5370	0.0132	98.9151
Industrial Park	1082.94 / 0	4,951.880 8	35.4731	0.8716	6,098.442 3
Junior College (2Yr)	9.42624 / 14.7436	96.6345	0.3109	8.0300e- 003	106.8013
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	169.071 / 103.624	1,149.344 4	5.5533	0.1392	1,329.660 9
Single Family Housing	0.781848 / 0.492904	5.3648	0.0257	6.4000e- 004	6.1988
Total		9,891.334 7	59.7131	1.4787	11,824.80 54

8.0 Waste Detail**8.1 Mitigation Measures Waste**

Midway-Pacific Hwy Existing - San Diego County, Annual

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	2,347.692 0	138.7446	0.0000	5,816.307 5
Unmitigated	2,347.692 0	138.7446	0.0000	5,816.307 5

Midway-Pacific Hwy Existing - San Diego County, Annual

8.2 Waste by Land Use**Unmitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Low Rise	906.2	183.9504	10.8712	0.0000	455.7294
Arena	2.85	0.5785	0.0342	0.0000	1.4333
General Office Building	1006.32	204.2739	12.0722	0.0000	506.0799
Government Office Building	829.13	168.3059	9.9466	0.0000	416.9707
Hotel	353.69	71.7959	4.2430	0.0000	177.8712
Industrial Park	5806.9	1,178.748 2	69.6620	0.0000	2,920.298 8
Junior College (2Yr)	249.83	50.7132	2.9971	0.0000	125.6399
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	2396.64	486.4963	28.7511	0.0000	1,205.273 9
Single Family Housing	13.94	2.8297	0.1672	0.0000	7.0105
Total		2,347.692 0	138.7446	0.0000	5,816.307 5

Midway-Pacific Hwy Existing - San Diego County, Annual

8.2 Waste by Land Use**Mitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Low Rise	906.2	183.9504	10.8712	0.0000	455.7294
Arena	2.85	0.5785	0.0342	0.0000	1.4333
General Office Building	1006.32	204.2739	12.0722	0.0000	506.0799
Government Office Building	829.13	168.3059	9.9466	0.0000	416.9707
Hotel	353.69	71.7959	4.2430	0.0000	177.8712
Industrial Park	5806.9	1,178.748 2	69.6620	0.0000	2,920.298 8
Junior College (2Yr)	249.83	50.7132	2.9971	0.0000	125.6399
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	2396.64	486.4963	28.7511	0.0000	1,205.273 9
Single Family Housing	13.94	2.8297	0.1672	0.0000	7.0105
Total		2,347.692 0	138.7446	0.0000	5,816.307 5

9.0 Operational Offroad

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

Midway-Pacific Hwy Existing - San Diego County, Annual

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

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

User Defined Equipment

Equipment Type	Number
----------------	--------

11.0 Vegetation

Mobile Source Emissions: Midway - Pacific Hwy Alt 3B 2035

Alternative 3B (2035)

Total VMT	Total # Auto Trips	Avg Trip Length
835,997	313,558	2.7

Vehicle Class	Fuel	Daily VMT (mi)	Emission Factors (g/mile)							Emissions (lb/day)							MT/day
			ROG	CO	NOx	SOx	PM10	PM2.5	CO2	ROG	CO	NOx	SOx	PM10	PM2.5	CO2	
All Other Buses	DSL	354.97	0.05	0.26	1.31	0.01	0.15	0.06	1,176.02	0.04	0.20	1.03	0.01	0.11	0.05	0.42	
LDA	GAS	436,159.13	0.01	0.44	0.05	0.00	0.05	0.02	205.72	11.91	425.19	46.05	1.98	44.02	17.98	89.73	
LDA	DSL	5,991.87	0.00	0.15	0.01	0.00	0.05	0.02	202.59	0.07	1.97	0.14	0.03	0.60	0.25	1.21	
LDA	ELEC	74,182.56	-	-	-	-	0.04	0.02	-	-	-	-	-	7.32	2.90	-	
LDT1	GAS	30,442.42	0.01	0.42	0.04	0.00	0.05	0.02	232.93	0.51	28.44	2.39	0.16	3.08	1.26	7.09	
LDT1	DSL	16.89	0.02	0.19	0.09	0.00	0.05	0.02	230.08	0.00	0.01	0.00	0.00	0.00	0.00	0.00	
LDT1	ELEC	13.35	-	-	-	-	0.04	0.02	-	-	-	-	-	0.00	0.00	-	
LDT2	GAS	147,567.54	0.01	0.40	0.03	0.00	0.05	0.02	258.15	1.92	129.03	9.71	0.84	14.90	6.09	38.10	
LDT2	DSL	323.63	0.01	0.15	0.03	0.00	0.05	0.02	253.02	0.01	0.10	0.02	0.00	0.03	0.02	0.08	
LHD1	GAS	3,109.67	0.01	0.29	0.11	0.01	0.09	0.04	794.00	0.10	1.96	0.74	0.05	0.59	0.25	2.47	
LHD1	DSL	6,370.66	0.13	0.63	0.56	0.00	0.10	0.05	522.40	1.89	8.80	7.90	0.07	1.42	0.67	3.33	
LHD2	GAS	1,278.76	0.01	0.16	0.05	0.01	0.10	0.04	880.36	0.02	0.44	0.13	0.02	0.28	0.12	1.13	
LHD2	DSL	3,137.15	0.12	0.54	0.16	0.01	0.11	0.05	577.98	0.84	3.76	1.08	0.04	0.77	0.35	1.81	
MCY	GAS	4,637.87	2.31	18.30	1.14	0.00	0.02	0.01	184.90	23.64	187.12	11.67	0.02	0.19	0.08	0.86	
MDV	GAS	78,763.33	0.01	0.49	0.04	0.00	0.05	0.02	344.08	1.49	84.58	7.46	0.60	7.96	3.26	27.10	
MDV	DSL	2,192.13	0.01	0.17	0.01	0.00	0.05	0.02	332.50	0.03	0.81	0.06	0.02	0.22	0.09	0.73	
MH	GAS	461.79	0.02	0.37	0.16	0.01	0.14	0.06	1,228.45	0.02	0.37	0.17	0.01	0.15	0.06	0.57	
MH	DSL	130.72	0.09	0.28	3.02	0.01	0.19	0.10	1,019.32	0.03	0.08	0.87	0.00	0.05	0.03	0.13	
Motor Coach	DSL	356.12	0.08	0.46	1.57	0.02	0.15	0.06	1,609.34	0.06	0.36	1.23	0.01	0.12	0.05	0.57	
OBUS	GAS	914.03	0.01	0.24	0.10	0.01	0.14	0.06	1,215.04	0.03	0.48	0.21	0.02	0.29	0.12	1.11	
PTO	DSL	366.24	0.20	1.18	4.13	0.02	0.01	0.01	1,842.98	0.16	0.95	3.34	0.01	0.00	0.00	0.67	
SBUS	GAS	245.71	0.01	0.22	0.10	0.01	0.75	0.32	633.48	0.01	0.12	0.05	0.00	0.41	0.17	0.16	
SBUS	DSL	423.33	0.07	0.32	1.69	0.01	0.76	0.33	1,249.73	0.06	0.30	1.58	0.01	0.71	0.31	0.53	
T6 Ag	DSL	35.40	0.05	0.28	1.57	0.01	0.15	0.06	1,192.54	0.00	0.02	0.12	0.00	0.01	0.00	0.04	
T6 CAIRP heavy	DSL	24.09	0.04	0.22	1.04	0.01	0.15	0.06	1,129.66	0.00	0.01	0.06	0.00	0.01	0.00	0.03	
T6 CAIRP small	DSL	73.96	0.04	0.21	0.95	0.01	0.14	0.06	1,156.58	0.01	0.03	0.16	0.00	0.02	0.01	0.09	
T6 instate construction heavy	DSL	405.13	0.05	0.25	1.28	0.01	0.15	0.06	1,167.89	0.04	0.23	1.14	0.01	0.13	0.06	0.47	
T6 instate construction small	DSL	1,088.34	0.04	0.23	1.11	0.01	0.15	0.06	1,161.87	0.11	0.55	2.67	0.03	0.35	0.15	1.26	
T6 instate heavy	DSL	3,306.53	0.05	0.25	1.23	0.01	0.15	0.06	1,137.72	0.34	1.79	8.99	0.08	1.06	0.45	3.76	
T6 instate small	DSL	8,328.65	0.04	0.23	1.10	0.01	0.15	0.06	1,162.05	0.80	4.22	20.28	0.20	2.67	1.13	9.68	
T6 OOS heavy	DSL	13.80	0.04	0.22	1.04	0.01	0.15	0.06	1,129.70	0.00	0.01	0.03	0.00	0.00	0.00	0.02	
T6 OOS small	DSL	42.37	0.04	0.21	0.95	0.01	0.14	0.06	1,156.58	0.00	0.02	0.09	0.00	0.01	0.01	0.05	
T6 Public	DSL	368.84	0.04	0.19	1.17	0.01	0.15	0.06	1,167.09	0.03	0.15	0.95	0.01	0.12	0.05	0.43	
T6 utility	DSL	52.51	0.03	0.17	0.70	0.01	0.14	0.06	1,157.40	0.00	0.02	0.08	0.00	0.02	0.01	0.06	
T6TS	GAS	1,663.31	0.01	0.24	0.10	0.01	0.14	0.06	1,213.89	0.05	0.90	0.38	0.04	0.53	0.22	2.02	
T7 Ag	DSL	26.33	0.09	0.55	2.25	0.02	0.10	0.04	1,577.65	0.01	0.03	0.13	0.00	0.01	0.00	0.04	
T7 CAIRP	DSL	3,685.43	0.08	0.46	1.35	0.01	0.10	0.04	1,424.21	0.63	3.70	10.94	0.11	0.84	0.33	5.25	
T7 CAIRP construction	DSL	287.40	0.08	0.47	1.38	0.01	0.10	0.04	1,462.25	0.05	0.30	0.87	0.01	0.07	0.03	0.42	
T7 NNOOS	DSL	4,569.94	0.07	0.40	1.10	0.01	0.10	0.04	1,420.49	0.68	4.01	11.05	0.14	1.03	0.40	6.49	
T7 NOOS	DSL	1,455.74	0.08	0.46	1.35	0.01	0.10	0.04	1,424.36	0.25	1.46	4.33	0.04	0.33	0.13	2.07	
T7 other port	DSL	1,061.82	0.08	0.50	1.49	0.01	0.10	0.04	1,459.55	0.20	1.16	3.49	0.03	0.24	0.10	1.55	
T7 POLA	DSL	644.08	0.08	0.50	1.55	0.01	0.10	0.04	1,473.32	0.12	0.71	2.20	0.02	0.15	0.06	0.95	
T7 Public	DSL	277.91	0.07	0.33	2.93	0.01	0.11	0.05	1,540.93	0.04	0.20	1.79	0.01	0.07	0.03	0.43	
T7 Single	DSL	1,844.45	0.07	0.39	1.14	0.01	0.10	0.04	1,486.22	0.27	1.57	4.64	0.06	0.42	0.16	2.74	
T7 single construction	DSL	743.46	0.07	0.39	1.14	0.01	0.10	0.04	1,484.17	0.11	0.63	1.87	0.02	0.17	0.07	1.10	
T7 SWCV	DSL	799.21	0.09	13.53	1.76	0.00	0.10	0.04	3,204.90	0.15	23.84	3.10	0.01	0.18	0.07	2.56	
T7 tractor	DSL	5,589.31	0.08	0.47	1.46	0.01	0.10	0.04	1,433.70	0.99	5.82	18.00	0.17	1.27	0.50	8.01	
T7 tractor construction	DSL	554.30	0.08	0.49	1.51	0.01	0.10	0.04	1,475.63	0.10	0.59	1.85	0.02	0.13	0.05	0.82	
T7 utility	DSL	26.98	0.05	0.29	0.71	0.01	0.10	0.04	1,472.48	0.00	0.02	0.04	0.00	0.01	0.00	0.04	
T7IS	GAS	223.72	0.31	29.60	2.99	0.02	0.08	0.03	1,609.21	0.15	14.60	1.47	0.01	0.04	0.02	0.36	
UBUS	GAS	647.97	0.04	0.70	0.43	0.02	0.14	0.06	1,621.31	0.05	0.99	0.61	0.02	0.21	0.09	1.05	
UBUS	DSL	716.19	0.22	8.50	2.97	0.00	0.90	0.40	1,860.82	0.35	13.42	4.68	0.00	1.41	0.64	1.33	
Total (lbs/day)										48.35	956.09	201.87	4.97	94.73	38.88	230.93	

Mobile Source Emissions: Midway - Pacific Hwy Adopted Community Plan 2035

Adopted CP (2035) Total VMT 832,025 Total # Auto Trips 311,502 Avg Trip Length 2.7

Vehicle Class	Fuel	Daily VMT (mi)	Emission Factors (g/mile)							Emissions (lb/day)							MT/day
			ROG	CO	NOx	SOx	PM10	PM2.5	CO2	ROG	CO	NOx	SOx	PM10	PM2.5	CO2	
All Other Buses	DSL	353.28	0.05	0.26	1.31	0.01	0.15	0.06	1176.02	0.04	0.20	1.02	0.01	0.11	0.05	0.42	
LDA	GAS	434,086.84	0.01	0.44	0.05	0.00	0.05	0.02	205.72	11.85	423.17	45.83	1.97	43.81	17.89	89.30	
LDA	DSL	5,963.40	0.00	0.15	0.01	0.00	0.05	0.02	202.59	0.07	1.96	0.14	0.03	0.60	0.25	1.21	
LDA	ELEC	73,830.10	0.00	0.00	0.00	0.00	0.04	0.02	0.00	0.00	0.00	0.00	0.00	7.28	2.89	0.00	
LDT1	GAS	30,297.78	0.01	0.42	0.04	0.00	0.05	0.02	232.93	0.50	28.31	2.38	0.16	3.07	1.26	7.06	
LDT1	DSL	16.81	0.02	0.19	0.09	0.00	0.05	0.02	230.08	0.00	0.01	0.00	0.00	0.00	0.00	0.00	
LDT1	ELEC	13.28	0.00	0.00	0.00	0.00	0.04	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
LDT2	GAS	146,866.41	0.01	0.40	0.03	0.00	0.05	0.02	258.15	1.92	128.42	9.67	0.84	14.83	6.06	37.91	
LDT2	DSL	322.09	0.01	0.15	0.03	0.00	0.05	0.02	253.02	0.01	0.10	0.02	0.00	0.03	0.02	0.08	
LHD1	GAS	3,094.89	0.01	0.29	0.11	0.01	0.09	0.04	794.00	0.10	1.95	0.74	0.05	0.59	0.25	2.46	
LHD1	DSL	6,340.40	0.13	0.63	0.56	0.00	0.10	0.05	522.40	1.88	8.76	7.86	0.07	1.41	0.67	3.31	
LHD2	GAS	1,272.69	0.01	0.16	0.05	0.01	0.10	0.04	880.36	0.02	0.44	0.13	0.02	0.28	0.12	1.12	
LHD2	DSL	3,122.25	0.12	0.54	0.16	0.01	0.11	0.05	577.98	0.84	3.74	1.07	0.04	0.77	0.35	1.80	
MCY	GAS	4,615.83	2.31	18.30	1.14	0.00	0.02	0.01	184.90	23.53	186.23	11.61	0.02	0.19	0.08	0.85	
MDV	GAS	78,389.11	0.01	0.49	0.04	0.00	0.05	0.02	344.08	1.48	84.18	7.42	0.59	7.92	3.24	26.97	
MDV	DSL	2,181.71	0.01	0.17	0.01	0.00	0.05	0.02	332.50	0.03	0.80	0.06	0.02	0.22	0.09	0.73	
MH	GAS	459.59	0.02	0.37	0.16	0.01	0.14	0.06	1228.45	0.02	0.37	0.17	0.01	0.15	0.06	0.56	
MH	DSL	130.10	0.09	0.28	3.02	0.01	0.19	0.10	1019.32	0.03	0.08	0.87	0.00	0.05	0.03	0.13	
Motor Coach	DSL	354.42	0.08	0.46	1.57	0.02	0.15	0.06	1609.34	0.06	0.36	1.22	0.01	0.11	0.05	0.57	
OBUS	GAS	909.69	0.01	0.24	0.10	0.01	0.14	0.06	1215.04	0.03	0.48	0.21	0.02	0.29	0.12	1.11	
PTO	DSL	364.50	0.20	1.18	4.13	0.02	0.01	0.01	1842.98	0.16	0.95	3.32	0.01	0.00	0.00	0.67	
SBUS	GAS	244.54	0.01	0.22	0.10	0.01	0.75	0.32	633.48	0.01	0.12	0.05	0.00	0.41	0.17	0.15	
SBUS	DSL	421.32	0.07	0.32	1.69	0.01	0.76	0.33	1249.73	0.06	0.30	1.57	0.01	0.71	0.30	0.53	
T6 Ag	DSL	35.23	0.05	0.28	1.57	0.01	0.15	0.06	1192.54	0.00	0.02	0.12	0.00	0.01	0.00	0.04	
T6 CAIRP heavy	DSL	23.98	0.04	0.22	1.04	0.01	0.15	0.06	1129.66	0.00	0.01	0.05	0.00	0.01	0.00	0.03	
T6 CAIRP small	DSL	73.61	0.04	0.21	0.95	0.01	0.14	0.06	1156.58	0.01	0.03	0.15	0.00	0.02	0.01	0.09	
T6 instate construction heavy	DSL	403.21	0.05	0.25	1.28	0.01	0.15	0.06	1167.89	0.04	0.22	1.14	0.01	0.13	0.06	0.47	
T6 instate construction small	DSL	1,083.17	0.04	0.23	1.11	0.01	0.15	0.06	1161.87	0.10	0.55	2.65	0.03	0.35	0.15	1.26	
T6 instate heavy	DSL	3,290.82	0.05	0.25	1.23	0.01	0.15	0.06	1137.72	0.34	1.78	8.95	0.08	1.06	0.45	3.74	
T6 instate small	DSL	8,289.08	0.04	0.23	1.10	0.01	0.15	0.06	1162.05	0.80	4.20	20.18	0.20	2.66	1.13	9.63	
T6 OOS heavy	DSL	13.74	0.04	0.22	1.04	0.01	0.15	0.06	1129.70	0.00	0.01	0.03	0.00	0.00	0.00	0.02	
T6 OOS small	DSL	42.17	0.04	0.21	0.95	0.01	0.14	0.06	1156.58	0.00	0.02	0.09	0.00	0.01	0.01	0.05	
T6 Public	DSL	367.09	0.04	0.19	1.17	0.01	0.15	0.06	1167.09	0.03	0.15	0.95	0.01	0.12	0.05	0.43	
T6 utility	DSL	52.26	0.03	0.17	0.70	0.01	0.14	0.06	1157.40	0.00	0.02	0.08	0.00	0.02	0.01	0.06	
T6TS	GAS	1,655.40	0.01	0.24	0.10	0.01	0.14	0.06	1213.89	0.05	0.89	0.38	0.04	0.52	0.22	2.01	
T7 Ag	DSL	26.20	0.09	0.55	2.25	0.02	0.10	0.04	1577.65	0.01	0.03	0.13	0.00	0.01	0.00	0.04	
T7 CAIRP	DSL	3,667.92	0.08	0.46	1.35	0.01	0.10	0.04	1424.21	0.62	3.68	10.89	0.11	0.83	0.33	5.22	
T7 CAIRP construction	DSL	286.03	0.08	0.47	1.38	0.01	0.10	0.04	1462.25	0.05	0.29	0.87	0.01	0.07	0.03	0.42	
T7 NNOOS	DSL	4,548.23	0.07	0.40	1.10	0.01	0.10	0.04	1420.49	0.68	3.99	11.00	0.14	1.03	0.40	6.46	
T7 NOOS	DSL	1,448.83	0.08	0.46	1.35	0.01	0.10	0.04	1424.36	0.25	1.45	4.31	0.04	0.33	0.13	2.06	
T7 other port	DSL	1,056.77	0.08	0.50	1.49	0.01	0.10	0.04	1459.55	0.20	1.16	3.48	0.03	0.24	0.10	1.54	
T7 POLA	DSL	641.02	0.08	0.50	1.55	0.01	0.10	0.04	1473.32	0.12	0.70	2.19	0.02	0.15	0.06	0.94	
T7 Public	DSL	276.59	0.07	0.33	2.93	0.01	0.11	0.05	1540.93	0.04	0.20	1.79	0.01	0.07	0.03	0.43	
T7 Single	DSL	1,835.68	0.07	0.39	1.14	0.01	0.10	0.04	1486.22	0.27	1.57	4.62	0.06	0.41	0.16	2.73	
T7 single construction	DSL	739.92	0.07	0.39	1.14	0.01	0.10	0.04	1484.17	0.11	0.63	1.86	0.02	0.17	0.06	1.10	
T7 SWCV	DSL	795.42	0.09	13.53	1.76	0.00	0.10	0.04	3204.90	0.15	23.73	3.08	0.01	0.18	0.07	2.55	
T7 tractor	DSL	5,562.76	0.08	0.47	1.46	0.01	0.10	0.04	1433.70	0.98	5.79	17.92	0.17	1.27	0.50	7.98	
T7 tractor construction	DSL	551.67	0.08	0.49	1.51	0.01	0.10	0.04	1475.63	0.10	0.59	1.84	0.02	0.13	0.05	0.81	
T7 utility	DSL	26.85	0.05	0.29	0.71	0.01	0.10	0.04	1472.48	0.00	0.02	0.04	0.00	0.01	0.00	0.04	
T7IS	GAS	222.66	0.31	29.60	2.99	0.02	0.08	0.03	1609.21	0.15	14.53	1.47	0.01	0.04	0.02	0.36	
UBUS	GAS	644.90	0.04	0.70	0.43	0.02	0.14	0.06	1621.31	0.05	0.99	0.61	0.02	0.21	0.09	1.05	
UBUS	DSL	712.78	0.22	8.50	2.97	0.00	0.90	0.40	1860.82	0.35	13.36	4.66	0.00	1.41	0.63	1.33	

Total	48.12	951.55	200.91	4.94	94.28	38.70	229.83
-------	-------	--------	--------	------	-------	-------	--------

Midway - Pacific Hwy Existing

Existing (2015)

Population 4,672 Total VMT 730,121 Total # Auto Trips 294,796 Avg Trip Length 2.5

Vehicle Class	Fuel	Daily VMT (mi)	Emission Factors (g/mile)							Emissions (lb/day)							MT/day
			ROG	CO	NOx	SOx	PM10	PM2.5	CO2	ROG	CO	NOx	SOx	PM10	PM2.5	CO2	
All Other Buses	DSL	377.59	0.237772	0.604855684	5.789813281	0.01187	0.22041031	0.133553	1244.207	0.19793	0.503505	4.819658	0.009881	0.183478	0.111175	0.469805	
LDA	GAS	392688.31	0.0364325	1.128423015	0.123208318	0.003346	0.04646627	0.01933112	333.29	31.54017	976.8927	106.6633	2.896678	40.22655	16.73524	130.8791	
LDA	DSL	3733.77	0.041585	0.376999848	0.26850492	0.003115	0.07215295	0.04396751	326.3447	0.342303	3.103243	2.210176	0.025645	0.593921	0.361915	1.218496	
LDA	ELEC	2456.70	0	0	0	0	0.04475001	0.01775001	0	0	0	0	0	0.242366	0.096134	0	
LD1	GAS	37273.87	0.0915749	2.802600206	0.285724618	0.003932	0.04867629	0.02137505	389.1226	7.525022	230.2993	23.47897	0.323074	3.999898	1.756461	14.50411	
LD1	DSL	47.08	0.2242975	1.47156993	1.328031754	0.003995	0.2204567	0.1858557	418.4712	0.023282	0.152746	0.137847	0.000415	0.022883	0.019291	0.019703	
LD1	ELEC	11.57	0	0	0	0	0.04475001	0.01775001	0	0	0	0	0	0.001141	0.000453	0	
LD2	GAS	144070.64	0.0361897	1.377019224	0.176884236	0.00453	0.04646886	0.01933372	451.459	11.49443	437.3634	56.18127	1.4389	14.75926	6.140701	65.05496	
LD2	DSL	203.94	0.0240221	0.184203933	0.118012039	0.003897	0.05630628	0.02880635	408.1602	0.0108	0.082818	0.053058	0.001752	0.025315	0.012951	0.08324	
LHD1	GAS	8975.12	0.1405601	2.648434154	0.538874512	0.008584	0.08763712	0.03770334	855.2638	2.781179	52.403	10.66239	0.169856	1.734024	0.746014	7.676091	
LHD1	DSL	7928.42	0.218419	1.022333012	4.5909391	0.005655	0.13296896	0.07836265	592.3574	3.817716	17.86923	80.24443	0.098843	2.324147	1.36969	4.696455	
LHD2	GAS	1529.11	0.0869461	1.622447862	0.391403415	0.009607	0.0994478	0.0423063	959.4889	0.293101	5.46937	1.319445	0.032384	0.335245	0.142617	1.467167	
LHD2	DSL	2693.30	0.1849268	0.832076517	3.326716594	0.006334	0.1360242	0.07455684	663.4866	1.098025	4.940554	19.75278	0.037609	0.80766	0.44269	1.786971	
MCY	GAS	4985.38	2.6689367	24.8744208	1.195131889	0.002243	0.01743088	0.00761801	176.1771	29.33347	273.3871	13.13533	0.024649	0.191577	0.083727	0.87831	
MDV	GAS	91738.80	0.0597029	1.974373825	0.272554548	0.005868	0.04655844	0.01947139	584.5645	12.07467	399.3093	55.12308	1.186852	9.41626	3.927091	53.62724	
MDV	DSL	985.25	0.0196572	0.234571716	0.097141215	0.005096	0.05527244	0.02781724	533.7659	0.042697	0.509506	0.210997	0.011068	0.120056	0.060421	0.525893	
MH	GAS	1064.26	0.4097291	11.5384429	1.166798618	0.013272	0.14670896	0.06292213	1309.918	0.961328	27.0721	2.737605	0.031139	0.344216	0.147631	1.394094	
MH	DSL	246.55	0.1626126	0.624871929	6.857922213	0.010236	0.33171322	0.23721403	1072.212	0.088386	0.339642	3.727548	0.005564	0.180299	0.128935	0.264353	
Motor Coach	DSL	246.75	0.3396019	1.03385087	8.741964848	0.017169	0.23501626	0.1475271	1799.64	0.184734	0.562385	4.755376	0.00934	0.127842	0.08025	0.444053	
OBUS	GAS	726.67	0.1325949	3.12583411	0.802330679	0.013049	0.14332326	0.0597658	1301.851	0.212418	5.007618	1.285342	0.020905	0.229605	0.095745	0.946018	
PTO	DSL	252.60	0.894633	3.103635848	12.67539231	0.021149	0.31352845	0.29996535	2216.743	0.498206	1.728361	7.058077	0.011777	0.174599	0.167046	0.559954	
SBUS	GAS	117.31	0.3800043	9.239365787	1.668144806	0.006902	0.75626116	0.32438231	675.2758	0.098276	2.389462	0.431412	0.001785	0.195582	0.083991	0.079216	
SBUS	DSL	395.49	0.2201882	0.565568082	9.565731121	0.012566	0.85292087	0.41416261	1317.119	0.191982	0.493119	8.340371	0.010956	0.743663	0.361109	0.520913	
T6 Ag	DSL	37.74	1.4623579	3.744428911	12.87464415	0.011659	0.86634811	0.75154782	1222.109	0.121681	0.280782	1.071284	0.00097	0.072088	0.062535	0.146717	
T6 CAIRP heavy	DSL	16.69	0.1632376	0.463674335	3.60914672	0.01159	0.20131954	0.11528809	1214.808	0.006007	0.017064	0.13282	0.000427	0.007409	0.004243	0.020279	
T6 CAIRP small	DSL	51.24	0.3124879	0.840949465	4.313530552	0.011716	0.30179361	0.2114157	1227.982	0.035302	0.095007	0.487298	0.001323	0.034094	0.023884	0.062926	
T6 instate construction heavy	DSL	366.88	0.4192887	1.039411964	7.262099777	0.011683	0.32609439	0.23466524	1224.54	0.339127	0.840693	5.873703	0.009449	0.26375	0.189801	0.449258	
T6 instate construction small	DSL	985.58	0.3882285	1.012919503	5.201034953	0.01172	0.3295502	0.23797155	1228.455	0.843541	2.200867	11.30079	0.025465	0.716045	0.517064	1.210741	
T6 instate heavy	DSL	2039.64	0.2138498	4.333423464	0.011594	0.21948459	0.13266733	0.1215.226	0.96159	2.567131	19.48552	0.052132	0.986927	0.596547	2.478626		
T6 instate small	DSL	5220.49	0.4460293	1.152353882	5.676216838	0.011672	0.36254712	0.26954103	1223.377	5.133355	13.26245	65.32762	0.134328	4.127558	3.10215	6.386623	
T6 QOS heavy	DSL	9.56	0.0968777	0.30581251	3.235031232	0.01163	0.16616244	0.08165187	1219.024	0.002043	0.006448	0.068212	0.000245	0.003504	0.001722	0.011659	
T6 QOS small	DSL	29.36	0.3124879	0.84099465	4.313530552	0.011716	0.30179361	0.2114157	1227.982	0.020227	0.054435	0.279204	0.000758	0.019534	0.013684	0.036054	
T6 Public	DSL	330.17	0.0803657	0.21660391	6.894937518	0.011804	0.17729569	0.0923035	1237.219	0.058498	0.157665	5.018806	0.008592	0.129053	0.067187	0.408498	
T6 utility	DSL	46.08	0.0554148	0.191715678	2.548827094	0.011963	0.15283838	0.06890421	1253.898	0.005629	0.019474	0.258904	0.001215	0.015525	0.006999	0.057774	
T6TS	GAS	1211.18	0.3160669	7.503181798	1.553893431	0.013124	0.14456809	0.06091881	1301.724	0.843944	20.03458	4.149121	0.035044	0.386018	0.162662	1.57662	
T7 Ag	DSL	28.08	1.8336471	7.244099719	19.32669036	0.016985	1.14588705	1.03826465	1780.295	0.113494	0.448376	1.196233	0.001051	0.070925	0.064264	0.049983	
T7 CAIRP	DSL	2553.55	0.2526738	0.912784667	6.298195454	0.015994	0.17129543	0.10583343	1676.404	1.422434	5.138548	35.45588	0.090037	0.964313	0.595792	4.28079	
T7 CAIRP construction	DSL	260.26	0.3456385	1.170172517	8.464050341	0.016545	0.22601296	0.15818391	1734.155	0.198316	0.671408	4.856401	0.009493	0.129679	0.090761	0.451333	
T7 NNOOS	DSL	3166.41	0.1157841	0.512249478	3.682115753	0.015375	0.1180533	0.05489454	1611.557	0.808245	3.575821	25.70346	0.107327	0.824086	0.383198	5.102851	
T7 NOOS	DSL	1008.65	0.1908481	0.713053285	5.908001	0.015987	0.140045	0.07593489	1675.67	0.424382	1.58559	13.1374	0.035549	0.311413	0.168854	1.69017	
T7 other port	DSL	664.72	0.190961	0.621995572	6.076439093	0.016535	0.12599903	0.06249654	1733.158	0.279842	0.911497	8.904652	0.024231	0.184644	0.091585	1.15207	
T7 POLA	DSL	269.05	0.2031593	0.64626004	6.516363429	0.016635	0.12843348	0.06482567	1743.606	0.120502	0.383322	3.865111	0.009867	0.076179	0.038451	0.469114	
T7 Public	DSL	288.48	0.11803	0.453216145	12.0769753	0.017008	0.16293783	0.09783738	1782.705	0.075066	0.28824	7.680806	0.010817	0.103626	0.062223	0.514282	
T7 Single	DSL	1272.15	0.437561	1.599554597	10.13432078	0.016513	0.31724248	0.24546688	1730.854	1.227172	4.486067	28.42244	0.046312	0.88973	0.68843	2.201913	
T7 single construction	DSL	673.26	0.3629631	1.27782152	9.24254655	0.016384	0.25371402	0.18468663	1717.287	0.538732	1.896622	13.71836	0.024318	0.376578	0.274123	1.156183	
T7 SWCV	DSL	617.16	0.3046909	4.339698271	14.20541511	0.029255	0.1159251	0.0528584	4303.022	0.414554	5.904471	19.32749	0.039803	0.157724	0.071918	2.655633	
T7 tractor	DSL	3791.34	0.3347825	1.16220724	7.863074825	0.016087	0.20163306	0.13485867	1686.2	2.798226	9.714126	65.72227	0.134462	1.685318	1.127195	6.392964	
T7 tractor construction	DSL	501.97	0.5153164	1.783077715	10.16881635	0.016458	0.31411523	0.24247491	1725.11	0.570263	1.973202	11.25309	0.018213	0.347608	0.268329	0.865947	
T7 utility	DSL	23.67	0.0823073	0.31770835	4.636807958	0.016459	0.11427486	0.05127955	1725.144	0.004295	0.016578	0.241915	0.000859	0.005963	0.002676	0.040833	
T7IS	GAS	146.00	0.9761156	39.01647899	4.572335912	0.01898	0.08304599	0.03267395	1836.158	0.314171	12.55778	1.471645	0.006109	0.026729	0.010516	0.26807	
UBUS	GAS	465.30	0.3801803	5.041564553	1.009576053	0.017369	0.14423543	0.06061755	1730.614	0.389989	5.17164	1.035624	0.017817	0.147957	0.062182	0.80526	
UBUS	DSL	1297.84	1.254368	13.36949608	18.419111001	0.011391	1.15274716	0.64977041	2247.395	3.588993	38.25275	52.70068	0.032591	3.29822	1.85912	2.916756	
Total (lbs/day)										124.47	2,572.39	810.48	7.23	93.39	43.68	330.86	