San Marco Commercial Center Project

SCH# 2019069103

Final Environmental Impact Report

Prepared for

City of Pittsburg

October 2020

Prepared by

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Final Environmental Impact Report

SCH# 2019069103

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1. Introduction

1. INTRODUCTION

1.1 INTRODUCTION

This Final Environmental Impact Report (EIR) has been prepared by the City of Pittsburg, as Lead Agency, in accordance with the California Environmental Quality Act (CEQA) and the CEQA Guidelines, Section 15132. The Introduction chapter of the Final EIR discusses the background of the San Marco Commercial Center Project (proposed project) Draft EIR, provides an overview of the Final EIR certification process, discusses revisions to the Draft EIR text, and indicates where the Mitigation Monitoring and Reporting Program (MMRP) that has been prepared for the proposed project can be found.

It should be noted the City of Pittsburg did not receive any public comments on the Draft EIR. As such, the Final EIR does not include any responses to comments. Revisions to text as a result of staff-initiated changes are included as Chapter 2 of the Final EIR.

1.2 BACKGROUND

The Draft EIR identified the proposed project's potential impacts and the mitigation measures that would be required to be implemented. The environmental analysis chapters contained in the San Marco Commercial Center Project Draft EIR include Air Quality and Greenhouse Gas Emissions, Recreation, and Transportation. The remaining environmental issue areas identified by Appendix G of the CEQA Guidelines are addressed in the Initial Study prepared for the proposed project and included as Appendix C of the San Marco Commercial Center Project Draft EIR.

In accordance with CEQA, the City of Pittsburg used the following methods to solicit public input on the Draft EIR:

- Notice of Preparation (NOP) for the Draft EIR was released for a 30-day public review period from June 26, 2019 to July 26, 2019. The NOP comment letters are included as Appendix B to the Draft EIR.
- On July 20, 2020, the Draft EIR was submitted to the State Clearinghouse for distribution to state agencies, resulting in a 45-day public review period from July 13, 2020 to August 27, 2020.
- On July 13, 2020, a Notice of Availability (NOA) of the Draft EIR was posted to the City's website, and mailed to local agencies and interested members of the public.
- The Draft EIR was made available for review on the City's website at http://www.ci.pittsburg.ca.us/index.aspx?page=225.

As noted above, the City of Pittsburg did not receive any public comments on the Draft EIR during the review period.

1.3 CERTIFICATION OF THE FINAL EIR

Under CEQA Guidelines Section 15132, the Final EIR shall consist of:

1. The Draft EIR or a revision of the Draft.

2. Comments and recommendations received on the Draft EIR.
3. A list of persons, organizations, and public agencies commenting on the Draft EIR.
4. The responses to significant environmental points raised in the review process.
5. Any other information added by the Lead Agency.

State law requires that the City make several types of CEQA "findings" at the time of final action on the project. Findings describe the conclusions reached regarding particular issues, including specific evidence in support of those conclusions. The Final EIR typically provides much of the substantial evidence to support these findings. The required findings for the project are as follows:

- Certification of the Final EIR (CEQA Guidelines Section 15090) – These findings support the adequacy of the Final EIR for decision-making purposes. The Lead Agency must make the following three determinations in certifying a Final EIR:

    1. The Final EIR has been completed in compliance with CEQA.
    2. The Final EIR was presented to the decision-making body of the Lead Agency, and the decision-making body reviewed and considered the information in the Final EIR prior to approving the project.
    3. The Final EIR reflects the Lead Agency's independent judgment and analysis.

- Findings Regarding Significant Impacts and Project Alternatives (CEQA Guidelines Section 15091) – These findings explain how the City chose to address each identified significant impact, including the mitigation measures adopted or an explanation of why such measures are infeasible. A discussion of the feasibility of project alternatives is also required by this section (see also CEQA Guidelines Section 15126.6[f]).

Pursuant to CEQA Guidelines, Section 15093(b), when a Lead Agency approves a project that would result in significant unavoidable impacts, the agency must state in writing the reasons supporting the action (Statement of Overriding Considerations). Because the Final EIR concluded that the proposed project would not result in any significant and unavoidable environmental impacts, adoption of a Statement of Overriding Considerations is not required. The required Findings of Fact will be provided as a separate document for consideration by the City of Pittsburg City Council.

1.4 REVISIONS TO THE DRAFT EIR TEXT

Chapter 2 of the Final EIR summarizes changes made to the Draft EIR text including clarifications, modifications, and amplifications of the analysis. Section 15088.5 of the State CEQA Guidelines states that a lead agency is required to recirculate a Draft EIR when "significant new information" is added to the document after public notice is given of the availability of the Draft EIR for public review under Section 15087 but before certification. Pursuant to this section, the term "information" can include changes in the project or environmental setting, as well as additional data or other information. However, new information added to an EIR is not considered "significant" unless the EIR is changed in a way that would result in a new or more severe adverse environmental effect of the project. "Significant new information" requiring recirculation includes any of the following:

1. A new significant environmental impact would result from the project or from a new mitigation measure proposed to be implemented.
2. A substantial increase in the severity of an environmental impact would result unless

mitigation measures are adopted that reduce the impact to a level of insignificance.

3. A feasible project alternative or mitigation measure considerably different from others previously analyzed would clearly lessen the environmental impacts of the project, but the project's proponents decline to adopt it.
4. The Draft EIR was so fundamentally and basically inadequate and conclusory in nature that meaningful public review and comment were precluded.

Recirculation is not required where the new information does not result in any new or more severe significant environmental impacts than those included in an adequate EIR. The modifications to the Draft EIR identified in Chapter 2 have been examined with these requirements and obligations in mind. The City has determined that the provisions of Section 15088.5 of the CEQA Guidelines are not triggered and recirculation of this EIR is not required. A more detailed description of this determination will be included in the CEQA Findings of Fact, described above.

1.5 MITIGATION MONITORING AND REPORTING PROGRAM

CEQA Guidelines, Section 15097, requires lead agencies to adopt a program for monitoring the mitigation measures required to avoid the significant environmental impacts of a project. The intent of the MMRP is to ensure implementation of the mitigation measures identified within the EIR and Initial Study for the proposed project. The San Marco Commercial Center Project MMRP has been prepared separate from the Final EIR and is available for viewing on the City's website at the link above.

2. Revisions to the DEIR Text

2. REVISIONS TO THE DRAFT EIR TEXT

2.1 INTRODUCTION

The Revisions to the Draft EIR Text chapter provides all corrections, additions, and revisions made to the Draft EIR. The changes represent updates to the analysis contained in the Draft EIR and do not constitute significant new information and/or increase the severity of an environmental impact that, in accordance with CEQA Guidelines Section 15088.5, would trigger the need to recirculate portions or all of the Draft EIR.

2.2 DESCRIPTION OF CHANGES

New text is double underlined and deleted text is ~~struck through~~. Text changes are presented in the page order in which they appear in the Draft EIR.

2 Executive Summary

Table 2-1 beginning on page 2-7 of Chapter 2, Executive Summary, of the Draft EIR is hereby revised as shown at the end of this chapter to reflect changes made to Mitigation Measure 4.1-5. Rather than include the entirety of Table 2-1, only the impact for which mitigation has been revised is presented at the end of this chapter. The revisions do not increase the severity of any environmental impacts and, thus, and do not change the adequacy of the Draft EIR.

4.1 Air Quality and Greenhouse Gas Emissions

Pages 4.1-47 and 4.1-48 of the Draft EIR are hereby clarified as follows:

> Mitigation Measure(s)
>
> Implementation of the following mitigation measures would reduce GHG emissions from operation of the proposed project. ~~However, unless subsequent GHG emissions analysis can be performed to show otherwise, the impact is assumed to remain *cumulatively considerable* and *significant and unavoidable*.~~ Following release of the Draft EIR, a GHG Reduction Plan for the proposed project (see Appendix G) was submitted. In June of 2020, the CARB published the most recent vehicle emission factors. The GHG Reduction Plan presents an adjusted model run with the June 2020 vehicle emissions factors, as well as implementation of several GHG reduction measures. Implementation of the GHG Reduction Plan in its entirety would fully incorporate implementation of Mitigation Measure 4.1-5, below. Based on the modeling presented within the GHG Reduction Plan, with implementation of the measures included therein, GHG emissions associated with operations of the proposed project would be reduced to below the BAAQMD's 1,100 $MTCO_2e$ threshold of significance. As such, implementation of the GHG Reduction Plan would reduce the impact to a *less-than-significant* level.
>
> *4.1-5* *Improvement Plans and building plans for the proposed project shall identify all feasible mitigation measures, as included in the GHG Reduction Plan, developed in coordination with the BAAQMD and as determined by the City of Pittsburg Community Development Department to reduce significant impacts ~~to the extent feasible~~. Mitigation Measures may include, but would not be limited to, BAAQMD's recommended mitigation measures such as the following:*

- *Orient buildings to maximize passive solar heating;*
- *Promote ridesharing, transit, bicycling, and walking for work trips through dedication of preferential parking spaces, provision of on-site bicycle parking, provision of end-of-trip facilities such as bicycle lockers and on-site showers;*
- *Subsidize employee transit passes;*
- *Install electric vehicle charging infrastructure in excess of existing CBSC requirements;*
- *Provide charging stations and preferential parking spots for electric vehicles;*
- *Install energy star appliances;*
- *Install solar water heating;*
- *Install on-site renewable energy systems;*
- *Install dedicated electrical outlets sufficient to provide power to any truck mounted refrigerated units accessing the loading docks, at all proposed loading docks and loading areas;*
- *All loading docks and loading areas shall be equipped with signage stating the following: "State regulations prohibit engine idling in excess of five minutes";*
- *Use water efficient landscapes and native/drought-tolerant vegetation;*
- *Provide outdoor electrical outlets to allow for use of electrically powered landscaping equipment;*
- *Construct on-site or fund off-site carbon sequestration projects (such as tree plantings or reforestation projects); and*
- *Purchase carbon credits to offset project annual emissions. Carbon offset credits shall be verified and registered with The Climate Registry, the Climate Action Reserve, or another source approved by CARB, BAAQMD, or the City of Pittsburg.*

If off-site mitigation measures are proposed, the applicant must be able to show that the emission reductions from identified projects are real, permanent through the duration of the project, enforceable, and are equal to the pollutant type and amount of the project impact being offset. In addition, any off-site measures shall be subject to review and approval by the City of Pittsburg Community Development Department. BAAQMD recommends that off-site mitigation projects occur within the nine-county Bay Area in order to reduce localized impacts and capture potential co-benefits. If BAAQMD has established an off-site mitigation program at the time a development application is submitted, as an off-site mitigation measure, the applicant may choose to enter into an agreement with BAAQMD and pay into the established off-site mitigation program fund, where BAAQMD would commit to reducing the type and amount of emissions identified in the agreement.

The foregoing revisions do not present significant new information or increase the severity of an environmental impact and, thus, do not affect the adequacy of the Draft EIR.

5 Statutorily Required Sections

Page 5-5 of the Draft EIR is hereby revised as follows:

5.6 SIGNIFICANT AND UNAVOIDABLE IMPACTS

According to CEQA Guidelines, an EIR must include a description of those impacts identified as significant and unavoidable should the proposed action be implemented

(CEQA Guidelines §15126.2[b]). Such impacts would be considered unavoidable when the determination is made that either mitigation is not feasible or only partial mitigation is feasible such that the impact is not reduced to a level that is less-than-significant.

Based on the analysis provided in Chapters 4.1 through 4.3 of this EIR, ~~the below listed impact was determined to be significant and unavoidable. All other~~ all impacts identified in this EIR could be eliminated or reduced to a less-than-significant level by mitigations imposed by the City. The final determination of the significance of impacts and the feasibility of mitigation measures would be made by the City as part of the City's certification action.

~~**4.1-5 Generation of a cumulatively considerable contribution to GHG emissions in excess of 1,100 $MTCO_2e$/year or 4.6 $MTCO_2e$/SP/year by the first year of project operations, 660 $MTCO_2e$/year or 2.76 $MTCO_2e$/SP/year by 2030, conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs.**~~

The foregoing revisions are for consistency with other changes and do not affect the adequacy of the analysis presented in the Draft EIR.

6 Alternatives Analysis

Page 6-3 of the Draft EIR is hereby revised as follows:

Significant Impacts Identified in the EIR

In addition to attaining the majority of project objectives, reasonable alternatives to the project must be capable of reducing the magnitude of, or avoiding, identified significant environmental impacts of the proposed project. Significant and unavoidable impacts were not identified for the proposed project. A summary of the environmental impacts identified for the proposed project are provided below.

~~**Significant and Unavoidable**~~

~~Impacts of the proposed project that have been determined to remain significant and unavoidable, even after implementation of the feasible mitigation measures set forth in this EIR, include the following:~~

- ~~***Air Quality and GHG Emissions:*** The EIR determined that the proposed project could result in significant and unavoidable impacts related to the generation of a cumulatively considerable contribution to GHG emissions in excess of State and BAAQMD standards. The EIR requires mitigation to minimize impacts as much as possible; however, despite implementation of mitigation measures, the proposed project would still result in significant and unavoidable impacts.~~

Less Than Significant with Mitigation

Significant environmental impacts of the proposed project that have been identified as requiring mitigation measures to ensure that the level of significance is ultimately less than significant include the following:

- ***Air Quality and GHG Emissions:*** The EIR determined that implementation of the proposed project could result in a significant impact related to generation of short-term construction-related criteria air pollutant emissions as well as a significant impact related to the generation of a cumulatively considerable contribution to GHG emissions in excess of State and BAAQMD standards. The EIR requires

mitigation in order to ensure that the aforementioned impacts are ~~is~~ reduced to ~~a~~ less-than-significant levels.

- ***Recreation:*** The EIR determined that implementation of the proposed project could result in substantial adverse physical impacts associated with the provisions of new or physically altered park facilities, and/or the need for new or physically altered park facilities. The EIR requires mitigation in order to ensure that the impacts are reduced to less-than-significant levels.

The foregoing revisions are for consistency with other changes and do not affect the adequacy of the analysis presented in the Draft EIR.

Page 6-8 of the Draft EIR is hereby revised as follows:

Air Quality and GHG Emissions

The No Project (No Build) Alternative would involve the continuation of the existing conditions on the project site. Because the No Project (No Build) Alternative would not involve construction, construction emissions would not occur. Thus, construction-related air quality impacts would be eliminated under the No Project (No Build) Alternative as compared to the proposed project, and Mitigation Measure 4.1-1 of this EIR would not be required.

Additionally, the No Project (No Build) Alternative would not result in operation of a shopping and dining area on the project site. Therefore, the Alternative would not result in operational GHG emissions in excess of the Bay Area Air Quality Management District's (BAAQMD) applicable threshold of significance, and ~~a conflict with the emissions reductions targets of Assembly Bill (AB) 32 and Senate Bill (SB) 32 would not occur.~~ Mitigation Measure 4.1-5 would not be required, ~~and a significant and unavoidable impact related to generation of a cumulatively considerable contribution of GHG emissions would not occur.~~ Overall, the No Project (No Build) Alternative would not result in any impacts related to air quality and GHG emissions.

The foregoing revisions are for consistency with other changes and do not affect the adequacy of the analysis presented in the Draft EIR.

Page 6-10 of the Draft EIR is hereby revised as follows:

Under the No Project (Buildout Pursuant to General Plan) Alternative, operations of a park could result in fewer trips than under the proposed project. In addition, the park would not generate emissions related to refrigeration or natural gas. Therefore, operations of a park under the No Project (Buildout Pursuant to General Plan) Alternative would have fewer impacts related to air quality.

As discussed in Chapter 4.1, Air Quality and GHG Emissions, operation of the proposed commercial shopping and dining area, in conjunction with other development in the area, could result in a cumulatively considerable contribution to GHG emissions in excess of State and BAAQMD standards without implementation of Mitigation Measure 4.1-5. Although operations of a park would result in some GHG emissions related to vehicle trips and exterior lighting, the intensity of park operations would be substantially less than that of the proposed project. Thus, impacts related to GHG emissions under the No Project (Buildout Pursuant to General Plan) Alternative would be fewer than the proposed project.

The foregoing revisions are for consistency with other changes and do not affect the adequacy of the analysis presented in the Draft EIR.

Page 6-12 of the Draft EIR is hereby revised as follows:

> As discussed in Chapter 4.1, operation of the proposed commercial shopping and dining area, in conjunction with other development in the area, could result in a cumulatively considerable contribution of GHG emissions without implementation of Mitigation Measure 4.1-5. Although operations of the store would still result in GHG emissions related to vehicle trips and store operations, the intensity of operations would be less than that of the proposed project. Thus, impacts related to GHG emissions under the Reduced Intensity Alternative would be fewer than the proposed project.
>
> Overall, the Reduced Intensity Alternative would result in fewer impacts related to air quality and GHG emissions compared to the proposed project. ~~While impacts would be fewer, the significant and unavoidable impact identified in this EIR would remain.~~

The foregoing revisions are for clarification purposes and do not affect the adequacy of the analysis presented in the Draft EIR.

Table 6-2 on Page 6-16 of the Draft EIR is hereby revised as shown at the end of this chapter. The revisions are for consistency with other changes and do not affect the adequacy of the analysis presented in the Draft EIR.

Table 2-1
Summary of Impacts and Mitigation Measures

Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation
4.1 Air Quality and Greenhouse Gas Emissions			
4.1-5 Generation of a cumulatively considerable contribution to GHG emissions in excess of 1,100 $MTCO_2e$/year or 4.6 $MTCO_2e$/SP/year by the first year of project operations, 660 $MTCO_2e$/year or 2.76 $MTCO_2e$/SP/year by 2030, conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs.	CC	*4.1-5* *Improvement Plans and building plans for the proposed project shall identify all feasible mitigation measures developed in coordination with the BAAQMD, as included in the GHG Reduction Plan, and as determined by the City of Pittsburg Community Development Department to reduce significant impacts ~~to the extent feasible~~. Mitigation Measures may include, but would not be limited to, BAAQMD's recommended mitigation measures such as the following:* • *Orient buildings to maximize passive solar heating;* • *Promote ridesharing, transit, bicycling, and walking for work trips through dedication of preferential parking spaces, provision of on-site bicycle parking, provision of end-of-trip facilities such as bicycle lockers and on-site showers;* • *Subsidize employee transit passes;* • *Install electric vehicle charging infrastructure in excess of existing CBSC requirements;* • *Provide charging stations and preferential parking spots for electric vehicles;* • *Install energy star appliances;* • *Install solar water heating;* • *Install on-site renewable energy systems;* • *Install dedicated electrical outlets sufficient to provide power to any truck mounted refrigerated units accessing the loading*	~~CC/SU~~ LCC

Table 2-1
Summary of Impacts and Mitigation Measures

Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation
		docks, at all proposed loading docks and loading areas; • *All loading docks and loading areas shall be equipped with signage stating the following: "State regulations prohibit engine idling in excess of five minutes";* • *Use water efficient landscapes and native/drought-tolerant vegetation;* • *Provide outdoor electrical outlets to allow for use of electrically powered landscaping equipment;* • *Construct on-site or fund off-site carbon sequestration projects (such as tree plantings or reforestation projects); and* • *Purchase carbon credits to offset project annual emissions. Carbon offset credits shall be verified and registered with The Climate Registry, the Climate Action Reserve, or another source approved by CARB, BAAQMD, or the City of Pittsburg.* *If off-site mitigation measures are proposed, the applicant must be able to show that the emission reductions from identified projects are real, permanent through the duration of the project, enforceable, and are equal to the pollutant type and amount of the project impact being offset. In addition, any off-site measures shall be subject to review and approval by the City of Pittsburg Community Development Department. BAAQMD recommends that off-site mitigation projects occur within the nine-county Bay Area in order to reduce localized*	

Table 2-1 Summary of Impacts and Mitigation Measures			
Impact	**Level of Significance Prior to Mitigation**	**Mitigation Measures**	**Level of Significance After Mitigation**
		impacts and capture potential co-benefits. If BAAQMD has established an off-site mitigation program at the time a development application is submitted, as an off-site mitigation measure, the applicant may choose to enter into an agreement with BAAQMD and pay into the established off-site mitigation program fund, where BAAQMD would commit to reducing the type and amount of emissions identified in the agreement.	

Table 6-2 Environmental Impacts of the Proposed Project and Project Alternatives				
Impact	**Proposed Project**	**No Project (No Build) Alternative**	**No Project (Buildout Pursuant to General Plan) Alternative**	**Reduced Intensity Alternative**
Air Quality and GHG Emissions	~~Significant and Unavoidable~~ Less-Than-Significant with Mitigation	Fewer	Fewer	Fewer~~*~~
Recreation	Less-Than-Significant with Mitigation	Fewer	Fewer	Similar
Transportation	Less-Than-Significant with Mitigation	Fewer	Similar	Greater
Other Issue Areas	Less-than-Significant with Mitigation	Fewer	Fewer	Fewer
Total Fewer:		**4**	**3**	**2**
Total Similar:		**0**	**1**	**1**
Total Greater		**0**	**0**	**1**

Less than Proposed Project = "Fewer;" Similar to Proposed Project = "Similar;" and Greater than Proposed Project = "Greater."

~~* Significant and Unavoidable impact(s) determined for the proposed project would still be expected to occur under the Alternative.~~

Appendix G

Prepared for:
Discovery Builders

Prepared By:
Ramboll US Corporation
San Francisco, California

Date
September 9, 2020

Project Number
1690017777

GREENHOUSE GAS REDUCTION PLAN

SAN MARCO COMMERCIAL CENTER

PITTSBURG, CALIFORNIA

RAMBOLL Bright ideas. Sustainable change.

CONTENTS

TABLES

APPENDICES

ACRONYMS AND ABBREVIATIONS

ACR:	American Carbon Registry
BAAQMD:	Bay Area Quality Management District
CalEEMod®:	California Emission Estimator Model
CalGreen:	California Green Building Standards
CAPCOA:	California Air Pollution Control Officers Association
CAR:	Climate Action Reserve
CARB:	California Air Resources Board
CEQA:	California Environmental Quality Act
CEUS:	Commercial End Use Survey
CO_2:	Carbon Dioxide
CO_2e:	Carbon Dioxide Equivalent
DEIR:	Draft Environmental Impact Report
DWR:	Department of Water Resources
EMFAC:	Emissions Factor Model
GHG:	Greenhouse Gas
ISO:	International Organization for Standardization
LED:	Light-emitting Diode
MM:	Mitigation Measure
MT:	Metric Ton
MWELO:	Model Water Efficient Landscape Ordinance
NOx:	Nitrogen Oxides
PDF:	Project Design Feature
PG&E:	Pacific Gas and Electric Company
RPS:	Renewable Portfolio Standard
SAFE:	Safer Affordable Fuel-Efficient Vehicles Rule
SB:	Senate Bill
SU:	Significant-and-unavoidable
TSF:	Thousand Square Feet
VMT:	vehicle miles traveled
WBCSD:	World Business Council for Sustainable Development
WRI:	World Resources Institute

1. INTRODUCTION

The City of Pittsburg released the Draft Environmental Impact Report (DEIR) under the California Environmental Quality Act (CEQA) for the San Marco Commercial Center ("Project") for public comment on July 13, 2020. The DEIR disclosed a significant-and-unavoidable (SU) greenhouse gas (GHG) impact. The Project's projected 2023 and 2030 GHG emissions were compared against projected 2030 Bay Area Quality Management District's (BAAQMD's) CEQA Thresholds of Significance for mass emissions in terms of metric tons (MT) of carbon dioxide equivalents (CO_2e) per year and for emissions per service population in terms of MT CO_2e per service population per year (MT CO_2e/SP), consistent with the statewide Senate Bill (SB) 32 GHG target of 40 percent below 1990 emissions by 2030.[1]

The DEIR set forth potential GHG mitigation measures and determined that a GHG Reduction Plan would be prepared to show how emissions would be reduced. The mitigation currently proposed by the City includes preparation of a GHG Reduction Plan that would reduce these impacts toward the City's preferred threshold of significance of 2.76 MT CO_2e/SP, though since the unmitigated emissions are 13.41 MT CO_2e/SP, the DEIR does not assume that the mitigation will succeed at reducing impacts to less than significant. The Project was also determined to be inconsistent with applicable plans and policies including the California Air Resources Board (CARB) 2017 Scoping Plan. The DEIR notes "However, unless subsequent GHG emissions analysis can be performed to show otherwise, the impact is assumed to remain cumulatively considerable and significant and unavoidable." (Page 4.1-48).

This memorandum constitutes a GHG Reduction Plan to reduce impacts as identified in the DEIR's mitigation measure 4.1-5. Accordingly, it describes refinements in analysis methodology, leading to results indicating that the project's emissions would be lower than provided in the DEIR and describes GHG reduction measures that the Project will include, including example measures described in the Mitigation Measure (MM) 4.1-5 and Scoping Plan Local Actions. It compares emissions to the City's mass emissions thresholds as presented in the DEIR rather than the service population thresholds. **This GHG Reduction Plan concludes that GHG impacts would be less than significant with mitigation.**

1.1 Project Description and Overview

The Project site is comprised of approximately 3.69 acres located southeast of the intersection of West Leland Road and San Marco Boulevard, approximately one-half mile south of State Route (SR) 4 in the city of Pittsburg, CA in Contra Costa County. The Project site is bounded by West Leland Road to the north, Ray Giacomelli Park to the east, San Marco Boulevard to the west, and vacant city-owned land to the south.

The project site is currently vacant. The Proposed Project would construct a commercial center comprised of three buildings (totaling 35,148-square feet [sf]) and a 176-stall parking lot. The buildings would include a 29,822-sf grocery store, a 3,500-sf sit-down restaurant, and a 1,826-sf restaurant with drive-thru.

[1] The Bay Area Air Quality Management District is currently in the process of updating its CEQA Guidelines and Thresholds of Significance. *See* https://www.baaqmd.gov/plans-and-climate/california-environmental-quality-act-ceqa/updated-ceqa-guidelines.

1.2 GHG Methodology

As part of this technical memorandum, Ramboll prepared an "adjusted" GHG emissions inventory for the Project (hereafter called the "Adjusted Inventory") that takes into consideration the benefits of reductions in electricity intensity for year 2030 and refinements to mobile vehicle emissions methodology that were promulgated by CARB after submittal of the DEIR. As described further below, the emissions as presented in the DEIR appear to be overly conservative, e.g., a higher-end estimate of the projected emissions than would actually occur. For example, the DEIR used conservative energy intensity assumptions in its modeling that are higher than those that are derived from available recent PG&E data and RPS standards, and did not (understandably) utilize mobile vehicle emissions methodologies that were promulgated by CARB after submittal of the DEIR. Next, Ramboll prepared an emissions inventory that accounts for further regulatory reductions and project design features (PDFs) (called the "PDF Inventory"). Finally, Ramboll prepared a mitigated emissions inventory (called the "Mitigated Inventory") that incorporates benefits of additional GHG reduction measures.

1.3 Mitigation Measure 4.1-5

The Project committed to a GHG Reduction Plan to reduce GHG emissions. The impact and requirements of MM 4.1-5 are stated below, in text from the DEIR:

> Impact 4.1-5: "Generation of a cumulatively considerable contribution to GHG emissions in excess of 1,100 MTCO2e/year or 4.6 MTCO2e/SP/year by the first year of project operations, 660 MTCO2e/year or 2.76 MTCO2e/SP/year by 2030, conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs. Based on the analysis [in the DEIR], because the proposed project would result in GHG emissions in excess [sic] thresholds, and cannot be shown to comply with the CARB's 2017 Scoping Plan at this time, even with mitigation, the impact would be *cumulatively considerable* and *significant and unavoidable.*"
>
> MM 4.1-5: "Improvement Plans and building plans for the proposed project shall identify all feasible mitigation measures developed in coordination with the BAAQMD and as determined by the City of Pittsburg Community Development Department to reduce significant impacts to the extent feasible. Mitigation Measures may include, but would not be limited to, BAAQMD's recommended mitigation measures such as the following: ..."

MM 4.1-5 lists 14 example mitigation measures that could be used to demonstrate compliance with this measure, among others. In addition, Table 4.1-16 of the DEIR illustrates the project's consistency with the Local Actions within the 2017 Scoping Plan, and thus compliance with SB 32. The table also includes a list of actions that the 2017 Scoping Plan describes as "potential actions that could be undertaken at a local level to support the State's climate goals…This appendix should be viewed as a general reference document. It should not be interpreted as official guidance or as dictating requirements for a city or county in addressing GHGs in its General Plan or for local project CEQA mitigation. It does not replace or modify existing or future laws, ordinances, regulations, or standards adopted

by a regulatory entity and may therefore include examples of local actions that are currently, or may become, mandatory."[2]

Sections 3 through **5** below quantify the benefits of measures that have been suggested in either MM 4.1-5 or are Scoping Plan Local Actions and will be part of the project. **Section 5** also describes additional measures that are not quantified but may be incorporated into the Project. **Section 6** describes performance standards for carbon offsets. Through a combination of the foregoing measures, including the purchased of qualifying carbon offsets, detailed analysis demonstrates that GHG emissions related to the project can be reduced to a level of insignificance.

[2] CARB. 2017. 2017 Scoping Plan Appendix B: Local Actions. Available at: https://ww2.arb.ca.gov/sites/default/files/classic/cc/scopingplan/2030sp_appb_localaction_final.pdfAccessed: July 1, 2020.

2. SUMMARY OF DEIR GHG EMISSIONS

Construction is anticipated to take place from 2020 through 2022, with full buildout achieved in 2023. Emissions representing 2030 were used in the DEIR GHG Analysis for comparison against the statewide 2030 emissions reduction target, while emissions representing 2023 were used for comparison against the BAAQMD's 2020 thresholds. This section describes how emissions were quantified in the DEIR. Sections 3 through 5 below indicate which categories are refined for the Adjusted, PDF, and/or Mitigated Inventories.

2.1 Summary of Existing Conditions GHG Emissions

As noted above, at the time of the Notice of Preparation of the Project DEIR, the Project site was and still remains vacant. Consistent with the DEIR, the existing land uses are not assumed to emit any GHGs in any of the refined inventories.

2.2 Proposed One-time Project GHG Emissions

2.2.1 Summary of Construction GHG Emissions

The City's consultant, Raney Planning & Management, Inc. ("Raney"), calculated construction emissions using the California Emission Estimator Model version 2016.3.2 (CalEEMod®). For inclusion in the ongoing GHG emissions inventory in the DEIR, total construction emissions were annualized over 50 years assumed operational life of the Project. Buildout GHG emissions are meant to represent the ongoing emissions for a project's lifetime; therefore, construction emissions are typically amortized over an assumed project life if added to the operational emissions. The May 2017 BAAQMD CEQA guidance requires construction emissions to be disclosed but does *not* require construction emissions to be added to operational emissions for comparison against thresholds, so the inclusion of amortized construction emissions is conservative.

2.3 Proposed Ongoing Project GHG Emissions

The Project ongoing operational emissions were estimated by Raney in the DEIR for 2023 and 2030. The land use quantities and types are shown in the CalEEMod® outputs in Appendix B and within the DEIR.

2.3.1 Methodology for GHG Emissions Inventories

Raney's analysis of Project GHG emissions in the DEIR uses CalEEMod® version 2016.3.2, which is the current version of the model.

All GHG inventories described in this GHG Reduction Plan are divided by source category to cover the following sources:

1. Area Sources
2. Purchased electricity use not related to water usage
3. Natural gas use
4. Water usage, including purchased electricity use
5. Waste
6. Mobile Sources.

Each source category is discussed separately below.

2.3.1.1 Area Sources

The proposed Project includes area sources such as architectural coatings, consumer products use, natural gas hearth, and landscaping equipment. CalEEMod® does not consider architectural coatings and consumer products to be sources of GHGs and does not assume any hearths are installed in non-residential land uses. The Project land uses will employ gasoline and diesel landscaping equipment. CalEEMod®'s emissions estimates are based on emission factors for the landscaping equipment from the California Air Resources Board (ARB) OFFROAD2011 model.

2.3.1.2 Purchased Electricity Not Related to Water Use

The Project includes operational emissions associated with purchased electricity for lighting, heating, plug-in appliances, electric vehicle charging, and other uses not associated with water supply, treatment, and distribution. CalEEMod® estimates emissions based on the electricity use and the carbon intensity of electricity.

CalEEMod® provides default electricity intensities based on the type and size of land uses associated with the Project. Version 2016.3.2 incorporates the 2016 Title 24 building energy efficiency standards, which went into effect January 1, 2017. Since the building permits will be pulled after January 1, 2020, the 2019 Title 24, Part 6 Building Energy Efficiency Standards ("Title 24") will apply to all land uses. The DEIR accounts for some improvements due to this standard.

For estimating GHG emissions from electricity use, the DEIR used default Pacific Gas and Electric Company (PG&E) Carbon Dioxide (CO_2) intensity factors as adjusted to account for some improvements due to the State's Renewables Portfolio Standard (RPS).

2.3.1.3 Natural Gas

The Project emits GHGs from on-site natural gas combustion. The DEIR estimated emissions using CalEEMod® based on the type and size of land uses associated with the Project assuming an improvement over the 2016 Title 24 energy efficiency standards as implemented in CalEEMod® 2016.3.2 due to project efficiency measures.

2.3.1.4 Water Use, Including Purchased Electricity

Electricity is required to supply, treat, and distribute water and wastewater, and as such, water use is a source of GHG emissions. The water use estimate for the Project is the CalEEMod® default for the Project land uses for Contra Costa County.

2.3.1.5 Waste

Waste generated by the Project will result in GHG emissions, which the DEIR estimated using CalEEMod® using default values.

2.3.1.6 Mobile Sources

The Project would generate vehicle trips from workers and visitors traveling to and from the site. The DEIR quantified emissions using the Project trip generation rates from the Traffic Impact Study. The DEIR mitigated CalEEMod® run reduced emissions due to project features that reduce vehicle miles traveled (VMT) over a default suburban development pattern. Features include increased transit accessibility and an improved pedestrian and bicycle network, as described in the DEIR Section 4.1.

3. ADJUSTED INVENTORY

Ramboll prepared the Adjusted Inventory for Project construction and operations in 2023 and 2030 to compare to the projected BAAQMD 2030 threshold and identify appropriate mitigation measures. The Adjusted Inventory takes into consideration the benefits of reductions in electricity intensity for years 2023 and 2030 and refinements to mobile vehicle emissions methodology that were promulgated by CARB after submittal of the DEIR. This section describes the emissions methodology used in the DEIR and any changes that were made for the Adjusted Inventory.

3.1 Proposed Ongoing Project GHG Emissions

The operational emissions reductions for the Adjusted Inventory are summarized in the tables below and the supporting tables in **Appendix A**, and CalEEMod® outputs are included in **Appendix B**.

3.1.1.1 Purchased Electricity Not Related to Water Use

To estimate GHG emissions from electricity use for the Adjusted Inventory, PG&E CO_2 intensity factors were projected for 2023 and 2030 in place of the default carbon intensity in CalEEMod®. This used the most recently-available historical PG&E data on carbon intensity and percent renewables from 2016 through 2018 to project how the carbon intensity of the electricity would change in 2023 and 2030. The intensity factors take into account the State's RPS based on SB 100 that requires 33% and 60% of electricity to be from renewable sources in 2023 and 2030, respectively.[3] The derivation of these factors is shown in **Table 1 of Appendix A**.

3.1.1.2 Water Use, Including Purchased Electricity

As with GHG emissions from purchased electricity not related to water use, Ramboll used the PG&E CO_2e intensity factors for 2023 and 2030, in place of the default energy intensity in CalEEMod®, as discussed in Section 2.3.1. This reduction is shown in **Table 1** and **2,** as derived using the CalEEMod® outputs in **Appendix B.**

3.1.1.3 Mobile Sources

CalEEMod® default emission factors for mobile sources are from CARB's Emissions Factor Model (EMFAC) 2014. The DEIR did not make any adjustments to these emission factors in order to be consistent with recent CARB model changes. In the Adjusted Inventory, Ramboll estimated updated vehicle fleet mix and emission factors for the Project operational years 2023 and 2030 using the newer version of ARB's Emission Factors Model for on-road emissions, EMFAC2017. In June 2020, CARB published on-road CO_2 emission factor adjustments in response to the "Safer Affordable Fuel-Efficient (SAFE) Vehicles Rule" adopted by the US EPA.[4] The emission factors in the Adjusted Inventory adhere to this

[3] The 33% RPS requirement must be met in the compliance window from 2020 through 2023. In 2018, PG&E sourced 39% of its electricity from RPS-eligible renewables. Therefore, by 2023 the electricity from renewables will likely be higher than assumed in this analysis, but since that is not a regulatory requirement, a conservative approach of assuming 33% RPS was used.

[4] ARB. 2020. EMFAC Off-Model Adjustment Factors for Carbon Dioxide Emissions to Account for the SAFE Vehicle Rule Part One and the Final SAFE Rule. June. Available at: https://ww3.arb.ca.gov/msei/emfac_off_model_co2_adjustment_factors_06262020-final.pdf

guidance as well. The updated vehicle fleet mixes and emission factors are presented in **Table 2 of Appendix A.**

3.1.2 Summary of DEIR and Adjusted GHG Analysis Emissions

Table 1 shows the DEIR and Adjusted GHG inventories for 2023 by source category.
Table 2 shows the DEIR and Adjusted GHG inventories for 2030 by source category.

Table 1: Full Buildout DEIR Project and Adjusted Inventory Operational Greenhouse Gas Emissions for 2023

Source Category	DEIR, Unmitigated [a]	DEIR Mitigated [a]	Adjusted Inventory [b]	Reduction from DEIR Mitigated to Adjusted Inventory
	(MT CO_2e/year)			
Area	0.0041	0.0041	0.0041	0
Purchased Electricity	168	163	154	-8.7
Natural Gas	95	82	82	0
Water Use	10.7	10.7	10.5	-0.2
Waste Disposed	116	116	116	0
Traffic	1,234	959	843	-115
Annualized Construction	23	23	23	0
Total	**1,647**	**1,354**	**1,230**	**-124**
BAAQMD Significance Threshold [c]	1,100			--
Exceed?	Yes	Yes	Yes	--
Further Reductions Needed	**547**	**254**	**130**	**--**

Notes:
a. Emissions estimated using CalEEMod® version 2016.3.2. Note that the "Unmitigated" Emissions provided in Tables 4.1-14 and 4.1-15 of the DEIR actually represent the mitigated CalEEMod output rather than the unmitigated output. The DEIR mitigated CalEEMod outputs incorporate benefits due to a 25% increase in transit accessibility, improved pedestrian network at the Project Site and connecting off-site locations, and a 30% decrease in Title 24 energy use rates.
b. The Adjusted Project includes model refinements to account for the Renewable Portfolio Standard (RPS) requirements for 2023 and 2030 and updates to use the CARB's most current approved mobile emissions model EMFAC2017 including USEPA SAFE adjustment factors. Appendix A Table 1 shows the derivation for the electricity intensity factors, while Appendix A Table 2 shows the mobile vehicle emission factors used in the analysis.
c. Thresholds of Significance from Section 4.1.4 of the DEIR (which is based on BAAQMD guidance for 2020 and a conservative estimate of 2030 thresholds derived by reducing the 2020 threshold by 40% consistent with the State's target to reduce emissions by 40% by 2030).

Table 2: Full Buildout DEIR Project and Adjusted GHG Analysis Operational Greenhouse Gas Emissions for 2030

Source Category	DEIR, Unmitigated [a]	DEIR Mitigated [a]	Adjusted Inventory [b]	Reduction from DEIR Unmitigated to Adjusted Inventory
	(MT CO_2e/year)			
Area	0.0041	0.0041	0.0041	0
Purchased Electricity	115	111	93	-18
Natural Gas	95	82	82	0
Water Use	9.6	9.6	9.2	-0.4
Waste Disposed	116	116	116	0
Traffic	1,044	815	715	-100
Annualized Construction	23	23	23	0
Total	**1,403**	**1,157**	**1,038**	**-119**
BAAQMD Significance Threshold [c]	660			--
Exceed?	Yes	Yes	Yes	--
Further Reductions Needed	**743**	**497**	**378**	**--**

Notes:

a. Emissions estimated using CalEEMod® version 2016.3.2. Note that the "Unmitigated" Emissions provided in Tables 4.1-14 and 4.1-15 of the DEIR actually represent the mitigated CalEEMod output rather than the unmitigated output. The DEIR mitigated CalEEMod outputs incorporate benefits due to a 25% increase in transit accessibility, improved pedestrian network at the Project Site and connecting off-site locations, and a 30% decrease in Title 24 energy use rates.

b. The Adjusted Project includes model refinements to account for the Renewable Portfolio Standard (RPS) requirements for 2023 and 2030 and updates to use the CARB's most current approved mobile emissions model EMFAC2017 including USEPA SAFE adjustment factors. Appendix A Table 1 shows the derivation for the electricity intensity factors, while Appendix A Table 2 shows the mobile vehicle emission factors used in the analysis.

c. Thresholds of Significance from Section 4.1.4 of the DEIR (which is based on BAAQMD guidance for 2020 and a conservative estimate of 2030 thresholds derived by reducing the 2020 threshold by 40% consistent with the State's target to reduce emissions by 40% by 2030).

4. PROJECT DESIGN FEATURES INVENTORY

Ramboll prepared the PDF Inventory that includes regulatory changes and project design features that were conservatively not included in the DEIR GHG emissions inventory. The quantified reductions from project design features and regulatory compliance are summarized in **Table 3** and shown in more detail in **Appendix A Table 3**. The GHG inventory estimated in the DEIR included some reductions due to building energy efficiency measures, transit accessibility, and the pedestrian and bicycle network. However, there are other rules and regulations that the Project will comply with that can be quantified as an explicit reduction.

4.1 Compliance with Title 24, Part 6 Building Energy Efficiency Standards

The GHG emissions inventory in the DEIR incorporated lower energy usage rates as part of compliance with the 2019 Title 24 building code as an estimated 30% reduction in Title 24 electricity and Title 24 natural gas use for the commercial component; and no reductions for the lighting electricity or processes not assumed by CalEEMod® to be covered by Title 24. The 2019 Title 24 building code has additional requirements that the project will comply with that can be quantified for a further reduction in GHG emissions.

High-Efficiency Lighting

2019 Title 24 also updates the baseline lighting intensity for all land use subtypes to rely on high-efficiency (e.g., light-emitting diode or LED) lightbulbs. The CalEEMod® default assumption for lighting electricity usage assumes some high-efficiency lighting consistent with the amount of high-efficiency lighting used during the 2002 Commercial End Use Survey (CEUS), but the costs and proliferation of LEDs have increased substantially since that time. LED lightbulbs consume 75 percent less electricity than incandescent bulbs.[5] In addition, the current Title 24 imposes additional lighting control requirements such as occupancy controls, dimming, and daylighting requirements. While the GHG inventory from the DEIR includes a reduction in building electricity usage from non-lighting sources, Ramboll a conservatively assumed a 50 percent reduction for lighting.

Applying this scaling factor to the CalEEMod® default energy usage rates for lighting end uses, Ramboll estimated a reduction using the lighting electricity use rates shown in **Table 4 of Appendix A** from the high-efficiency lighting requirement of 2019 Title 24.

4.2 Compliance with AB341 Waste Diversion

California AB341 requires that 75% of all waste generated in the state be diverted away from landfills and towards recycling or compost facilities by 2020.[6] To meet this target, the City of Pittsburg's Municipal Code, Chapter 8.04, requires that all property owners maintain a subscription for refuse collection The City requires all commercial accounts to have recycling

[5] US Department of Energy. Lighting Choices to Save You Money. Available at: https://www.energy.gov/energysaver/save-electricity-and-fuel/lighting-choices-save-you-money. Accessed: July 2020.

[6] California State Assembly. 2011. Assembly Bill No. 341. Available at: https://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=201120120AB341. Accessed: July 13, 2020.

service with a minimum of weekly pickup. Effective July 1, 2020, businesses are required to provide both recycling and composting to customers.[7]

By default, CalEEMod® assumes approximately 50% waste diversion based on historical data. Because the Project will be built after 2020 and because of the City of Pittsburg's refuse policy, Ramboll estimates that an additional 50% of the waste modeled in CalEEMod® will be diverted as part of the regulatory compliance, for a total of 75% waste diversion. This results in an estimated emissions reduction of 50% of the solid waste emissions shown in **Tables 1** and **2** above**.**

4.3 Water Reduction Requirements

CalEEMod® water use rates are based on defaults from data preceding California's recent droughts. Several regulatory requirements will effectively reduce water use, as described below.

Low-Flow Fixtures

The California Green Building Standards Code (Part 11 of Title 24) is commonly referred to as CalGreen Building Standard (CalGreen), and establishes voluntary and mandatory standards pertaining to the planning and design of sustainable site development, energy efficiency, water conservation, material conservation, and interior air quality. Like Part 6 of Title 24, the CalGreen standards are periodically updated, with increasing energy savings and efficiencies associated with each code update. CalEEMod® defaults from 2008 have not been updated to incorporate the CalGreen requirements from 2010, 2013, 2016, or 2019. The Project will comply with the CalGreen Standards, which will require a 20 percent reduction in indoor potable water use through the use of water saving fixtures and or flow restrictors.[8] This reduction is shown in **Appendix A Table 5.**

Water Efficient/Drought Tolerant Landscaping

The California Department of Water Resources (DWR) implements the Model Water Efficient Landscape Ordinance (MWELO) to save water by efficient landscape design, installation, and maintenance. The statewide MWELO was updated in 2015 to improve landscape irrigation water savings.[9] Section 18.84.310 of the Pittsburg Municipal Code adopts the current MWELO. This is estimated to reduce outdoor water use by 20 percent compared to CalEEMod® defaults.[10] This reduction is included in **Appendix A Table 6.**

4.3.1 Summary of GHG Reductions

Table 3 shows the reductions in GHG emissions from project design features and regulatory compliance by measure. **Table 3**of **Appendix A** shows further details on the background,

[7] Mount Diablo Resource Recovery. Available at: https://mdrr.com/pittsburg/pittsburg-commercial/. Accessed: August 20, 2020.

[8] CSBC. 2010. 2010 California Green Building Standards. 4.303.1. Available at: https://www.ladbs.org/docs/default-source/publications/misc-publications/2010-ca-green-building-standards-code.pdf?sfvrsn=11. Accessed: July 1, 2020.

[9] CA DWR. 2020. MWELO. Available at: https://water.ca.gov/Programs/Water-Use-And-Efficiency/Urban-Water-Use-Efficiency/Model-Water-Efficient-Landscape-Ordinance. Accessed: July 1, 2020.

[10] Hartin, J.S., et al. 2018. UC ANR research and education influences landscape water conservation and public policy. Available at: https://www.researchgate.net/publication/331334650_UC_ANR_research_and_education_influences_landscape_water_conservation_and_public_policy. DOI: 10.3733/ca.2018a0041. Accessed: July 13, 2020.

assumptions, and specifies which of these measures are examples listed in MM 4.1-5 and/or are Scoping Plan Local Actions.

Table 3: GHG Reductions from Additional Regulatory and Project Design Features

Source Category	Reduction Description	Reduction, 2023	Reduction, 2030
		(MT CO_2e/year)	
Energy	High-Efficiency Lighting [a]	14	9
Waste	Institute Recycling & Composting Services [a]	58	58
Water	Water Efficient/Drought Tolerant Landscaping [a]	0.02	0.01
Water	Low-Flow Fixtures [a]	0.6	0.4
Total Reduction from Regulatory Compliance and Project Design Features		**73**	**67**
PDF Inventory Emissions [b]		**1,156**	**971**
Further Reductions Needed [b]		**56**	**311**

Notes:
a. Calculations are shown in Appendix A.
b. This is the remaining emissions and reductions needed to reach the thresholds shown in Tables 1 and 2 after applying the reductions from regulatory compliance and project design features to the Adjusted Inventory.

5. MITIGATED INVENTORY

Mitigation Measure 2.1-5 recommends the Project adopt mitigation measures to reduce its GHG emissions. The DEIR assumes that GHG impacts will remain significant and unavoidable after implementation of all feasible mitigation. However, this GHG Reduction Plan demonstrates that the Project will achieve the mass emissions thresholds specified in the DEIR. As shown in Tables 1 and 2, respectively, the Project needs to achieve emissions reductions of 547 MT CO_2e per year and 743 MT CO_2e per year from the unmitigated DEIR emissions at full buildout and 2030, respectively, to achieve the mass emissions thresholds of 1,100 MT CO_2e per year and 660 MT CO_2e per year, respectively. As shown in **Table 3**, an additional reduction of 56 MT CO_2e/year is needed for full buildout and 311 MT CO_2e/year is needed for 2030 to achieve the thresholds after implementation of existing Project Design Features into the PDF Inventory. This section describes the reduction measures that are proposed to achieve the emissions reductions targeted by Mitigation Measure GHG-1.

5.1 GHG Reduction Measures for Implementation

As discussed below and summarized in **Table 4**, the applicant will commit to a menu of feasible measures that cumulatively would accomplish the required reduction. This GHG Reduction Plan requires the project applicant to implement any mix or fraction of the measures listed in **Table 4**, provided that the mix results in the total required reduction. **Appendix A Table 7** shows further details on the background and assumptions, and also specifies which of these measures are examples listed in MM 4.1-5 and/or are Scoping Plan Local Actions. This plan incorporates on-site and off-site mitigation measures, where off-site measures have been identified to the extent on-site measures are not feasible. Table 4 shows one combination of activities to meet the required GHG reduction. Other combinations of measures will also meet these reductions. Substitute measures that can be used are further described below in Section 5.2.

Table 4: Summary of Mitigation Measures That Would Achieve the DEIR Mitigation Measure 4.1-5 Target

Source Category	Mitigation Measure	Reduction, 2023	Reduction, 2030
		(MT CO_2e/year)	
Electricity	Use ENERGY STAR Appliances [a]	13.6	8.2
On-Road Exhaust	Install Level 2 electric vehicle charging outlets for 4 parking spaces [a]	35	30
On-Road Exhaust	Bicycle Parking [b]	--	--
Landscaping	Enable Use of Electric Landscaping equipment [a]	<0.01	<0.01
Construction	Use Renewable Diesel to Fuel Construction Fleets	17	17
Vegetation	Plant trees [a]	1.8	1.8
Offsets	Purchase verified carbon offsets [c]	0	255
Reductions from Mitigation Measures		67	311
Total Reductions [d]		558	743
Required Reduction to Meet Thresholds		547	743
Meets Requirement?		**Yes**	**Yes**

Notes
a. Calculations are shown in Appendix A.
b. No GHG emissions reductions were quantified to avoid double-counting or speculative assumptions. Secure bicycle parking will be provided, but the GHG benefits of bicycle parking are included as part of the reductions due to pedestrian network in the DEIR Mitigated Inventory.
c. Performance standards and compliance details are described in Section 6.
d. Includes reductions from the DEIR Mitigated Project, Adjusted Inventory, regulatory and project design features, and mitigation measures.

Quantified measures in **Table 4** are described in detail below. Measures that are not quantified are described further in **Appendix A Table 7** and in the footnotes above**.**

- **ENERGY STAR Appliances:** ENERGY STAR appliances reduce electricity use compared to conventional appliances. This calculation assumes that the supermarket uses ENERGY STAR refrigerators, dishwashers, and ceiling fans and that the restaurant(s) use ENERGY STAR refrigerators. Further details are shown in **Appendix A Table 8.**

- **Electric Vehicle Charging Outlets:** The Project will install electric vehicle charging outlets to encourage electric vehicle adoption and use. This commitment is to install dedicated circuits that support Level 2 charging (e.g., 30-40 amp, 220 volt circuit) with an outlet or a charging station pedestal, so that a visitor or worker with an electric vehicle could charge the vehicle. It does not require installation of a pedestal or advanced capabilities (e.g., Wi-Fi, credit card reading). This is in addition to the EV-Capable requirements in CalGreen, which may require additional conduits and panel capacity to install additional future charging outlets. Gasoline and diesel cars emit GHGs through fuel combustion, while electric vehicle charging results in indirect GHG emissions from fossil fuels used to generate electricity. The difference between the indirect electricity GHG emissions and the fossil fuel combustion emissions for the miles assumed to be provided by the charging stations is the GHG benefit due to this measure. This calculation is shown in **Table 9** of **Appendix A.** Electric vehicles also reduce criteria air pollutant and toxic air contaminant emissions.
- **Electric Landscaping Equipment:** The Project will install exterior electrical outlets that enable the use of electric landscaping equipment. Electric landscaping equipment reduces both GHG and criteria air pollutant emissions, but CalEEMod® does not assume substantial landscaping use for supermarkets or restaurants so the benefit is small. This conservatively assumes that 10 percent of landscaping equipment used is electric, as shown in **Appendix A Table 7.**
- **Renewable Diesel:** The Project will use Neste or other renewable diesel instead of conventional diesel for off-road construction equipment. Renewable diesel is made from 100 percent renewable and sustainable raw materials including cooking and vegetable oil residues and waste animal fats from the food processing industry and is classified as a hydrotreated vegetable oil. In the manufacturing process, the raw materials are transformed into a pure hydrocarbon fuel that can be used interchangeably with conventional diesel but provides performance benefits.[11] This GHG reduction is calculated by summing the GHG emissions from off-road equipment from the CalEEMod® outputs in the DEIR**.**
- **Sequestration:** The Project will plant net new trees as described in the landscaping plan. Trees sequester carbon during their growing period of up to 20 years, as described further in the CalEEMod® Users Guide. This calculation is based on a minimum of 75 net new trees, although the actual number of trees planted may be higher, as shown in **Appendix A Table 7.**

5.2 Potential Alternative GHG Reduction Measures

5.2.1 Quantified

Any of the measures from **Table 4** can be replaced at the applicant's election by the alternative measures in **Appendix A Table 10** if the measures in Table 4 prove infeasible or less favorable than these alternative measures, provided that the total GHG reduction remains at least 574 and 743 MT CO_2e/year for 2023 and 2030, respectively, including the reductions calculated as shown in the DEIR Mitigated, Adjusted, PDF, and Mitigated Inventories. Assumptions and calculations for these alternative measures are described in

[11] Neste MY Renewable Diesel – high-performing low-carbon biofuel. Available at: https://www.neste.com/companies/products/renewable-road-transport/neste-my-renewable-diesel. Accessed: July 9, 2020.

Appendix A Table 10, and the calculations avoid double-counting and are additive with the measures shown in **Table 4**.

5.2.2 Not Quantified

The Project could further reduce emissions by implementing other measures not quantified in this analysis, however, as these measures are not quantifiable currently, they are not eligible for additional GHG reductions at this time. However, should they become quantifiable in the future with supporting substantial evidence, this GHG Reduction Plan may be amended subject to City approval. For example, the Project will likely be consistent with many other suggested Scoping Plan Local Actions or MM 4.1-5 measures through compliance with 2019 Title 24 as follows; however, it is uncertain which of the specific measures will be used to demonstrate compliance. This includes measures such as installing energy-conserving appliances; orient buildings to maximize passive solar heating; equip buildings with energy efficient AC units and heating systems with programmable thermostats/timers; and require the use of energy-efficient lighting for all street, parking, and area lighting.

5.2.3 Demonstration of Consistency with the Scoping Plan

Table 5 shows a list of mitigation measures or project design features that the project will adopt that were suggested either as potential measures from within MM 2.1-5 or are Scoping Plan Local Actions. **As shown in Table 5, the Project will include many of the suggested Local Actions from the 2017 Scoping Plan (and more than assumed in the DEIR). Importantly, the measures listed in Appendix B of the CARB Scoping Plan constitute an illustrative list of greenhouse gas reductions strategies for local agencies to consult and consider, and expressly is not to be interpreted as an exhaustive list of requirements. In fact, the Project would implement a majority of the DEIR's "Suggested Measures" and therefore, when combined with achieving the mass emissions threshold target for 2030, substantial evidence demonstrates that implementation of this GHG Reduction Plan would achieve consistency with the 2017 Scoping Plan.**

Table 5: Project GHG Reduction Measures from Scoping Plan Examples

Description [a,b]	Measures this Addresses	
	Scoping Plan Local Action	MM 4.1-5 Example
Enforce idling time restrictions for construction vehicles.	X	
Minimize tree removal, and mitigate indirect GHG emissions increases that occur due to vegetation removal, loss of sequestration, and soil disturbance.	X	X
Increase use of electric and renewable fuel powered construction equipment and require renewable diesel where commercially available.	X	

Table 5: Project GHG Reduction Measures from Scoping Plan Examples

Description [a,b]	Measures this Addresses	
	Scoping Plan Local Action	MM 4.1-5 Example
Comply with lead agency's standards for mitigating transportation impacts under SB 743	X	
Require on-site EV charging capabilities for parking spaces serving the project to meet jurisdiction-wide EV proliferation goals.	X	X
Allow for new construction to install fewer on-site parking spaces than required by local municipal building code, if appropriate.	X	
Provde adequate, safe, convenient, and secure on-site bicycle parking and storage in multi-family residential projects and in non-residential projects.	X	X
Provide on- and off-site safety improvements for bike, pedestrian and transit connections, and implement relevant improvements identified in an applicable bicycle and/or pedestrian master plan.	X	
Require solar-ready roofs.	X	
Require low-water landscaping in new developments. Require water efficient landscape maintenance to conserve water and reduce landscape waste.	X	X
Require the design of bike lanes to connect to the regional bicycle network.	X	
Expand urban forestry and green infrastructure in new land development.	X	
Require each residential and commercial building to utilize low flow water fixtures such as low flow toilets and faucets.	X	
Require the landscaping design for parking lots to utilize tree cover and compost/mulch.	X	X
Incorporate water retention in the design of parking lots and landscaping, including using compost/mulch.	X	
Improve onsite pedestrian access.		X
Provide outdoor electrical outlets to allow for use of electrically powered landscaping equipment		X

Table 5: Project GHG Reduction Measures from Scoping Plan Examples

Description [a,b]	Measures this Addresses	
	Scoping Plan Local Action	MM 4.1-5 Example
Purchase verified carbon offsets	X	X

Notes:
a. For measures not explicitly described in this GHG Reduction Plan, the reason for consistency is described in the DEIR, Table 4.1-16.
b. The Project will likely be consistent with many other suggested measures through compliance with 2019 Title 24 as follows; however, it is uncertain which of the specific measures will be used to demonstrate compliance, e.g., energy-conserving appliances; orient buildings to maximize passive solar heating; equip buildings with energy efficient AC units and heating systems with programmable thermostats/timers; and require the use of energy-efficient lighting for all street, parking, and area lighting.

6. CARBON OFFSETS STANDARDS

6.1 Overview and Summary

The purpose of this Carbon Offset Plan is to clarify and further set forth performance standards governing the use of carbon offsets to satisfy the portion of Mitigation Measure 4.1-5 that is not satisfied by local measures listed above.

This Carbon Offset Plan is organized as follows:

- Section 6.2 defines terms used throughout this Carbon Offset Plan.
- Section 6.3 outlines the Approved Registries available to the Project Applicant when implementing this Carbon Offset Plan.
- Section 6.4 describes the applicability to project construction and operational emissions.
- Section 6.5 sets forth performance standards applicable to carbon offsets used for the implementation of this Carbon Offset Plan.
- Section 6.6 describes the compliance demonstration process for this Carbon Offset Plan.

The mitigation measures applicable to the Project shall reduce the Overall Project Emissions to meet the target identified in the DEIR. The reduction of Overall Project Emissions will be achieved through the implementation of various Project site-specific measures described in Sections 3 through 5 above, as well as the purchase of carbon offsets. The Project Applicant may obtain and retire carbon offsets that have been issued by an Approved Registry, as provided for in Section 6.3, below. All GHG emission reductions used for compliance with this Carbon Offset Plan will comply with performance standards established in this Carbon Offset Plan. The performance standards are set forth in Section 6.5 and are based on established performance standards in established carbon offset programs and climate change regulations, including California's cap-and-trade program for GHG emissions. The performance standards include both environmental integrity criteria and procedural review requirements, and adherence to the performance standards will ensure that the implementation of the Carbon Offset Plan will satisfy CEQA.

Consistent with the goals of the State of California, the majority of the GHG reductions and the substantial majority of the investment associated with such GHG reductions will occur within Contra Costa County. **Table 6** shows the proportion of emissions reductions that occur locally and the remainder that may occur offsite.

Table 6: Summary of Local and Offsite GHG Reductions

Scenario	2023	2030
	(MT CO_2e/year)	
DEIR, 2030 Unmitigated [a]	1,647	1,403
Reductions Needed to Meet BAAQMD Threshold [b]	547	743
Mitigated Project Emissions (Local Measures Only) [c]	1,089	915
Local GHG Reductions Achieved	558	489
	100%	66%
Further Reductions from Carbon Offsets or Alternative Measures [d]	--	255
	--	34%
Total Reductions	558	743

Notes:
a. Emissions estimated using CalEEMod® version 2016.3.2.
b. As shown in the DEIR Mitigation Measure 4.1-5.
c. The mitigated project includes the GHG reductions due to emission factors updates, regulatory requirements, project design features, and quantified mitigation measures.
d. Note that local reductions exceed the required reduction to meet the mass emissions BAAQMD Threshold for 2023. No further mitigation measures, included offsets, are required.

Because the Project will facilitate the phased development of a planned community to be built over the next six years, and because the regulatory and technological frameworks for GHG emissions are rapidly evolving and are expected to continue to do so over the next decade during the development of the Project, minor modifications to this Carbon Offset Plan may be made by the Project Applicant upon receipt of written approval from the City of Pittsburg Planning Director provided that such modifications are environmentally equivalent to this Carbon Offset Plan. The Planning Director shall determine the adequacy of any minor modifications by evaluating whether the Project Applicant's proposed minor modifications result in equivalent or more beneficial GHG reductions and environmental effects, as compared to the original provisions of this Carbon Offset Plan. The minor modifications cannot result in the creation of new or substantially more severe environmental effects and must be consistent with the Carbon Offset Plan. The Planning Director shall approve that the proposed minor modifications are environmentally equivalent based on supporting materials submitted by the Project Applicant.

6.2 DEFINED TERMS

The following definitions apply to this Carbon Offset Plan.

"**ACR**" shall mean the American Carbon Registry.

"**Approved Registry**" shall mean any of the following: (i) the Climate Action Reserve, the American Carbon Registry and the Verra; (ii) any entity approved at any time by CARB to act as an "offset project registry" under the state's cap-and-trade program; and if no Approved Registry is in existence as identified by the preceding options (i) or (ii), then (iii) any other entity that issues carbon offsets satisfying the performance standards set forth in Section 6.5.

"**CAR**" shall mean the Climate Action Reserve.

"**CARB**" shall mean the California Air Resources Board.

"**Carbon Offset**" shall mean an instrument issued by an Approved Registry that satisfies the performance standards set forth in Section 6.5 and shall represent the past reduction or sequestration of one metric tonne of carbon dioxide equivalent achieved by a GHG emission reduction project or activity that is not otherwise required (CEQA Guidelines § 15126.4(c)(3)).

"**GHG**" shall mean greenhouse gas.

"**Carbon Offset Plan**" shall mean this Carbon Offset Plan.

"**ISO**" shall mean the International Organization for Standardization.

"**MM**" shall mean Mitigation Measure, as identified in the CEQA Documentation.

"**MT CO_2e**" shall mean a metric tonne of carbon dioxide equivalent.

"**Overall Project Emissions**" shall mean "Total Annual Emissions" that are "Unmitigated" from the Project as set forth in DEIR.

"Project" shall mean the Bridle Gate Project.

"**Project Applicant**" shall mean Discovery Builders or its designee.

"**TSF**" shall mean thousand square feet.

"**WRI/WBCSD**" shall mean the World Resources Institute/World Business Council for Sustainable Development.

6.3 Approved Registries

The Carbon Offset Plan is tiered from established carbon offset programs implemented by Approved Registries. Three Approved Registries currently recognized by the State of California are:

Climate Action Reserve: The California Legislature established CAR in 2001 to encourage actions to reduce GHG emissions. CAR began as the California Climate Registry and developed protocols to track GHG emissions and reductions, and have those emissions verified and publicly reported. The California Climate Registry was renamed as CAR and expanded in 2008, and now plays a leading role in the carbon market. CAR has developed over 15 separate protocols for quantification and verification of GHG emissions reductions, and issued over 60 million carbon offsets known as "Climate Reserve Tonnes" or "CRTs."

CAR is based in Los Angeles and has been approved by CARB as an official offset project registry for the state's Cap-and-Trade program.

American Carbon Registry: ACR was founded in 1996 as a non-profit enterprise of Winrock International, a non-profit organization. ACR is a CARB-approved offset project registry for the state's Cap-and-Trade program and has also developed its own carbon offset methodologies, such as methodologies for degraded wetlands and for avoided conversion of grasslands to crop production.

Verra: Verra was founded in 2005 by the Climate Group, the International Emissions Trading Association and the World Economic Forum. Project developers are able to list projects on the Verra registry using a variety of protocols, including CAR protocols. Verra is a CARB-approved offset project registry for the state's Cap-and-Trade program and has also developed its own carbon offset quantification methodologies.

Carbon offsets may be used from any registry that is an Approved Registry for Cap-and-Trade offsets[12] (though as described below, offsets do not need to be purchased from Cap-and-Trade-approved Protocols), or from other registries provided they meet the performance standards described below.

6.4 Project Emissions

As described in the DEIR, there are two general sources of GHG emissions that will result from the Project: (i) the construction emissions, which include emissions associated with grading and all horizontal (e.g., infrastructure) and vertical (buildings) construction; and (ii) the operational emissions, which include all emissions associated with the use of the Project, including emissions from vehicles, electricity use, building operations and other sources, estimated over the 30-year Project life.

As shown in **Table 4**, in order to reduce the Overall Project Emissions to achieve the GHG target, the Project Applicant shall use a combination of on-site mitigation measures and carbon offsets. These can be implemented as follows:

- Prior to obtaining a residential and/or commercial building permit from the City of Pittsburg, the Project Applicant shall purchase and retire carbon offsets in the quantity needed to fulfill the requirements of MM 4.1-5 over a 30-year operational project lifetime. This quantity shall be 7,395 MT CO_2e based on the GHG reduction quantities calculated in **Table 4** of this GHG Reduction Plan multiplied by 29; as shown in Table 4, no further reductions are needed for the first year of operations. If the Project Applicant implements one or more of the Alternative GHG Measures from **Appendix A Table 10** of the GHG Reduction Plan, they shall prepare a simple calculation table that shows the reduction in carbon offsets required.

6.5 Performance standards for Carbon Offsets

6.5.1 Accounting, Quantification and Reporting Performance Standards

Approved Registries and the independent third parties, acting under the oversight of Approved Registries, shall account for and quantify emission reductions and sequestration achieved by Direct Reduction Activities by drawing upon established standards and

[12] CARB. 2020. Offset Project Registries. Available at: https://ww2.arb.ca.gov/our-work/programs/compliance-offset-program/offset-project-registries. Accessed: July 10, 2020.

incorporating principles of GHG emissions reduction accounting, including those set forth in the ISO 14064 and the WRI/WBCSD Greenhouse Gas Protocol for Project Accounting.[13]

For the purposes of this Carbon Offset Plan, it has been determined that the existing program-level accounting and quantification standards adopted by the CAR, Verra, and ACR comply with these performance standards. These Approved Registries have incorporated the ISO Standards discussed above and/or the WRI/WBCSD Greenhouse Gas Protocol for Project Accounting into their existing carbon offset issuance programs.[14]

Such standards, consistent with the ISO and WRI/WBCSD, are generally as follows:[15]

- **Transparency and Monitoring.** Approved Registries and independent third parties shall use clear information sufficient for reviewers to assess credibility of GHG emission reductions. Upon request by the City of Pittsburg, any governmental entity or any stakeholder, the Approved Registry shall provide the following information within a reasonable time period: the carbon offsets by the Project Applicant, the applicable quantification protocol, all third-party confirmation reports issued in connection with a carbon offset and information about the issuance and retirement of carbon offsets. Such information shall be sufficient to monitor compliance by the Project Applicant with this Carbon Offset Plan.[16]
- **Relevance.** Approved Registries and independent third parties shall use data, methods, criteria and assumptions that are appropriate for the applicable carbon offset projects.
- **Completeness.** Approved Registries and independent third parties shall consider all relevant information that may affect the accounting and quantification of GHG emission reductions.
- **Consistency.** Approved Registries and independent third parties shall use data, methods, criteria and assumptions that are applied in the same manner across different carbon offset projects to allow meaningful and valid comparisons across projects.
- **Accuracy.** Approved Registries and independent third parties shall reduce uncertainty as much as practicable, erring on the side of conservativeness.
- **Conservativeness.** Approved Registries and independent third parties shall use conservative assumptions, values and procedures to ensure that GHG reductions or sequestration are not over-estimated, especially when uncertainty is high.

6.5.2 Eligibility Performance Standards

All carbon offsets used by the Project Applicant shall represent the past reduction or sequestration of GHG emissions (measured in MT CO_2e) achieved by a GHG emission reduction project or activity that is not otherwise required by law (CEQA Guidelines §

[13] ISO, *ISO 14064, Part 2*: *"Specification with guidance at the project level for quantification, monitoring, and reporting of greenhouse gas emission reductions or removal enhancements"* (2019); WRI/WBCSD, "*The GHG Protocol for Project Accounting*" (2005).

[14] *See*, *e.g.*, Climate Action Reserve, *Program Manual* (2015) at 4-5; American Carbon Registry, "Carbon Accounting," *available at* http://americancarbonregistry.org/carbon-accounting/carbon-accounting~~.~~, ~~A~~accessed: Mar. 1, 2017; Verified Carbon Standard, *VCS Program Guide version 3.6* (2016) at 8.

[15] *See*, *e.g.*, WRI/WBCSD, "*The GHG Protocol for Project Accounting*" (2005) at 43-44.

[16] Accreditation for independent third party reviewers will be consistent with existing recognized accreditation standards, as applied by an Approved Registry.

15126.4(c)(3)). In addition, carbon offsets shall be real, additional, quantifiable, permanent, verifiable and enforceable.[17]

For the purposes of this Carbon Offset Plan, it has been determined that the existing program-level environmental integrity standards adopted by the registries approved by CARB (currently CAR, Verra, and ACR) comply with these performance standards.

6.5.3 Procedural Performance Standards

In order to ensure that carbon offsets satisfy the Accounting, Quantification and Reporting Performance Standards and Eligibility Performance Standards set forth above, the rules and protocols of an Approved Registry that issues carbon offsets shall require that a carbon offset project follow procedural steps substantially similar or equivalent to the following to offset GHG emissions. For the purposes of this Carbon Offset Plan, it has been determined that the existing program-level procedural standards adopted by the CAR, Verra, and ACR comply with these performance standards.

- **Listing or Registration.** The project proponent shall apply to list or register the proposed GHG emission reduction project with the Approved Registry, and the Approved Registry shall review the application and accept it only if it complies with the applicable Approved Registry requirements.
- **Independent, Qualified Third-Party Verification of Reduction or Sequestration.** Once a GHG emission reduction project has begun, the Approved Registry shall require the project proponent to retain an independent, qualified third party to verify the reduction or sequestration achieved by the project. Each Approved Registry shall adopt stringent requirements applicable to the accreditation of third parties and only such third parties shall be qualified to verify and audit GHG emission reduction projects under the applicable Approved Registry rules. This process will typically take place on an annual basis, depending on the specific project type. Approved Registry rules and protocols shall require "boots on the ground" audits, except that in certain instances documentation reviews may be sufficient, depending on the specific project type.
- **Issuance of Carbon Offsets.** Approved Registry rules and protocols shall require the project proponent to apply for issuance and to provide the verification report prepared by the independent, qualified third- party. The Approved Registry shall review a verification report and, to the extent that the Approved Registry finds that the report complies with the applicable Approved Registry requirements, the Approved Registry shall issue the Carbon Offsets to the account of the recipient.
- **Carbon Offset Retirement.** Each Approved Registry shall adopt rules and procedures governing the retirement or cancellation of carbon offsets. These rules or procedures involve the transfer of the carbon offset serial numbers from an Approved Registry account and will ensure that once a carbon offset has been retired, the retirement is permanent and the carbon offset cannot be further used in any manner.

6.5.4 Locational Performance Standards

This GHG Reduction Plan demonstrates that implementation of GHG reduction measures will reduce the Overall Project Emissions to the target. As shown in **Table 6**, the project's Overall Project Emissions are estimated to be 1,647 MT CO_2e/year and 1,403 MT CO_2e/year

[17] Cal. Health & Safety Code Section 38562(d)(1).

in 2023 and 2030, respectively, and the required emissions reductions are 547 and 743 MT CO_2e/year, respectively. As shown in **Table 6**, the implementation of Local Measures reduce the Overall Project Emissions by 100% and 66% or 558 $MTCO_2e$/year and 489 MT CO_2e/year, respectively. The remaining reductions are achieved through the purchase of carbon offsets governed by this Carbon Offsets Plan or through alternative local measures shown in **Appendix A Table 12**.

The project applicant shall implement this Carbon Offsets Plan so that, in the aggregate and taking into account all onsite and offsite reductions of the Overall Project Emissions, the project shall meet, at full buildout, the Locational Performance Standards set forth below.

The project applicant shall be deemed to achieve 66% of the Overall Project Emissions reduction by implementing the Local Measures and shall be deemed to achieve the remaining 34% of the Overall Project Emissions reduction by purchasing carbon offsets or implementing alternative local measures. Taking into account the combination of all onsite and offsite reductions, the project, at full buildout, shall meet the following Locational Performance Standards:

- Contra Costa County Locational Performance Standard – at least 66% of the Overall Project Emissions reductions shall be achieved within Contra Costa County through a combination of the Local Measures and purchase of offsets.
- United States Locational Performance Standard – 100% of the Overall Project Emissions reductions shall be achieved within the United States through a combination of the Local Measures and purchase of offsets.

6.6 Demonstrating Compliance and Enforcement

To demonstrate compliance, the Project Applicant shall provide the following documentary evidence to the City of Pittsburg Department of Planning:

An attestation from an Approved Registry will verify that the Project Applicant has retired a sufficient quantity of carbon offsets to mitigate the emissions and that such carbon offsets were issued in accordance with the applicable rules of a Registry. For example, if the applicable Registry issues notices of cancellation, the Coordinating Registry will review such notices to confirm they are valid.

If the Department of Planning determines following submission that the distribution of retired carbon offsets is not consistent with the Performance Standards identified above, the Department of Planning shall issue a written notice of non-consistency to the project applicant that the Performance Standards have not been met. If the Department of Planning does not issue a notice on non-consistency within 30 days, the project applicant shall be deemed to be in compliance with the Performance Standards.

The review of the shall be limited to this consistency determination. The Department of Planning shall not impose additional conditions or mitigation measures on the Project in connection with the consistency review or determination. The notice of non-consistency shall provide in reasonable written detail the basis of the finding of non-consistency. Upon a finding of non-consistency, the project applicant may submit a revised Report to the Department of Regional Planning addressing the issues of non-consistency for additional review by the Department of Regional Planning.

7. SUMMARY AND IMPLEMENTATION

This plan demonstrates that the San Marco Commercial Center Project will achieve the GHG reduction targets from MM 4.1-5. Following submission of this GHG Reduction Plan to the City of Pittsburg, the City must approve the plan.

APPENDIX A
SUPPORTING CALCULATIONS

Appendix A Table 1
PG&E Electricity Intensity Factor Derivation
San Marco Commercial Center Project
City of Pittsburg, CA

Historic Electricty Intensity

Annual Electricity Data	2016[1,2]	2017[1,3]	2018[1,4]	Average[5]	Units
CO_2 Intensity Factor per Total Energy Delivered	294	210	206	237	lbs CO_2/MWh delivered
% of Total Energy From RPS-Eligible Renewables	32.8%	33.0%	39%	34.9%	[-]
CO_2 Intensity Factor per Total Non-RPS-Eligible/Non-Renewable Energy[6]	437	314	338	364	lbs CO_2/MWh delivered

Estimated Intensity Factor for Total Energy Delivered[7,8]

Model Year		Average[5]	Units
2023 RPS (33%)[9]	-	244	lbs CO_2/MWh delivered
		246	lbs CO_2e/MWh delivered
2030 RPS (60%)[9]		145	lbs CO_2/MWh delivered
		148	lbs CO_2e/MWh delivered

Notes:

1. Total CO_2 intensity factors from The Climate Registry. Available at: https://www.theclimateregistry.org/our-members/cris-public-reports/. Accessed: June 2020.
2. Percent of total energy from eligible renewables is from the PGE 2017 Corporate Responsibility Report. Available at: http://www.pgecorp.com/corp_responsibility/reports/2017/assets/PGE_CRSR_2017_Environment.pdf.
3. Percent of total energy from eligible renewables is from the PGE 2018 Corporate Responsibility Report. Available at: http://www.pgecorp.com/corp_responsibility/reports/2018/assets/PGE_CRSR_2018_Environment.pdf.
4. Percent of total energy from eligible renewables is from the PGE 2019 Corporate Responsibility Report. Available at: http://www.pgecorp.com/corp_responsibility/reports/2019/assets/PGE_CRSR_2019_Executive_Summary.pdf.
5. This average uses the most recent three years of data.
6. The emissions metric presented here is calculated based on the total CO_2 intensity factor divided by the percent of energy delivered from non-RPS-eligible/non-renewable
7. The intensity factor for total energy delivered is estimated by multiplying the percentage of energy delivered from non-RPS-eligible/non-renewable energy by the CO_2 emissions per total non-RPS-eligible/non-renewable energy metric calculated above. The estimate provided here and the energy reports issued by PGE assume that renewable energy sources do not result in any CO_2 emissions.
8. Global Warming Potentials (GWP) are based on the IPCC Fourth Assessment Report. CH_4 and N_2O emission factors are from the CalEEMod® version 2016.3.2 defaults for PGE, and are conservatively assumed not to change from these estimates. As more renewable energy is integrated into the electricity grid, these intensity factors will also decrease.
9. Emission factor for 2023 reflects 33% RPS, consistent with the RPS requirement 100 for years 2020 through 2023. Emission factor for 2030 is 60% projected RPS for 2030 consistent with SB 100. Available at: https://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=201720180SB100.

Abbreviations:

CARB - California Air Resources Board
CO_2 - carbon dioxide
CO_2e - carbon dioxide equivalent
GHG - greenhouse gases
IPCC- Intergovernmental Panel on Climate Change
lbs - pounds
MWh - megawatt-hour
RPS - Renewables Portfolio Standard
PGE - Pacific Gas & Electric
SB - Senate Bill
USEPA - US Environmental Protection Agency

Appendix A Table 2
Mobile Vehicle Emission Factors Inputs
San Marco Commercial Center Project
City of Pittsburg, CA

2023 Emission Factors

Season	Variable	Vehicle Type[1]												
		LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
A	Fleet Mix (%)	0.5635	0.0557	0.1826	0.1149	0.0236	0.0058	0.0179	0.0254	0.0018	0.0016	0.0057	0.0008	0.0008
	Pollutant	**Emission Factor (g/mile or g/trip[2])**												
A	CH4_IDLEX	0	0	0	0	0.0051	0.0032	0.0033	0.025	0.0076	0	0	0.045	0
A	CH4_RUNEX	0.0021	0.0042	0.0031	0.0038	0.0089	0.0071	0.0018	0.048	0.0052	1.2	0.34	0.0053	0.010
A	CH4_STREX	0.049	0.066	0.067	0.079	0.015	0.0086	0.0088	4.4E-07	0.019	0.0059	0.26	0.0040	0.023
A	CO2_NBIO_IDLEX	0	0	0	0	9.0	14	78	1,062	93	0	0	337	0
A	CO2_NBIO_RUNEX	247	295	316	384	793	776	1,080	1,432	1,388	1,668	215	1,038	1,531
A	CO2_NBIO_STREX	52	63	68	82	12	8.0	8.7	0.069	17	4.7	62	3.4	18

2030 Emission Factors

Season	Variable	Vehicle Type[1]												
		LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
A	Fleet Mix (%)	0.5674	0.0565	0.1778	0.1131	0.0225	0.0059	0.0190	0.0273	0.0016	0.0016	0.0055	0.0009	0.0008
	Pollutant	**Emission Factor (g/mile or g/trip[2])**												
A	CH4_IDLEX	0	0	0	0	0.0041	0.0026	0.0032	0.024	0.0073	0	0	0.057	0
A	CH4_RUNEX	0.0010	0.0017	0.0017	0.0018	0.0055	0.0054	9.4E-04	0.046	0.0025	1.8	0.33	0.0034	0.0051
A	CH4_STREX	0.030	0.036	0.042	0.045	0.0091	0.0050	0.0070	3.8E-07	0.016	0.0050	0.25	0.0049	0.019
A	CO2_NBIO_IDLEX	0	0	0	0	8.3	13	70	920	103	0	0	316	0
A	CO2_NBIO_RUNEX	207	250	257	311	702	686	968	1,226	1,220	1,631	214	937	1,352
A	CO2_NBIO_STREX	44	53	55	65	10	6.6	7.1	0.057	14	4.0	60	4.0	15

Notes:

1. Emission factors for each fleet mix are based on EMFAC2017 for San Francisco Bay Area, aggregated across model years, speeds, and fuel types. Due to the introduction of the SAFE Vehicle Rule, adjustment factors provided by CARB have been applied to certain EMFAC2017 emission factors on a per pollutant basis. Emissions impacted by the SAFE Vehicle Rule include CO_2 for gasoline light duty vehicles only. As a result, mobile emission factors were increased compared to the EMFAC2017 after applying the adjustment factors provided by CARB.

2. RUNEX emission factors are in units of g/mile. IDLEX and STREX emission factors are in units of g/trip.

Abbreviations:

A - Annual
CARB - California Air Resources Board
CH_4 - methane
CO_2 NBIO - carbon dioxide, non-biogenic
EMFAC - On-Road Emission Factor Model
g- gram
HHD - heavy-heavy duty trucks
IDLEX - idle exhaust emissions
LDA - light-duty automobiles
LDT - light-duty trucks
LHD1 - light-heavy-duty trucks, 8,501-10,000 lbs
LHD2 - light-heavy-duty trucks, 10,001-14,000 lbs
MCY - motorcycles
MHD - medium-heavy duty trucks
OBUS - other buses
RUNEX - running exhaust emissions
SAFE - Safer Affordable Fuel-Efficient Vehicles
SBUS - school buses
STREX - start exhaust tailpipe emisions
UBUS - urban buses

References:

California Air Resources Board. EMFAC2017. Available online at: https://ww2.arb.ca.gov/our-work/programs/mobile-source-emissions-inventory/msei-road-documentation

California Air Resources Board. EMFAC Off-Model Adjustment Factors for Carbon Dioxide (CO2) Emissions to Account for the SAFE Vehicles Rule Part One and the Final SAFE Rules. June 26, 2020. Available online at: https://ww3.arb.ca.gov/msei/emfac_off_model_co2_adjustment_factors_06262020-final.pdf

Appendix A Table 3
Details on GHG Reductions from Regulatory and Project Design Features (PDF Inventory)
San Marco Commercial Center Project
City of Pittsburg, CA

Category	Description	Assumptions	2023	2030	Notes	Measures this Addresses
			(MT CO_2e/yr)			
Energy	High-Efficiency Lighting[1]	All lighting is high-efficiency (e.g. LED bulbs) for non-residential buildings	14	9	2019 Title 24 requirement.	Regulatory compliance and Project data not incorporated into DEIR
Waste	Institute Recycling & Composting Services[2]	Divert additional solid waste from landfills	58	58	Additional 50% diversion from CalEEMod default rates, which are based on Statewide historical data with a target 50% diversion rate. AB 341 requires 75% diversion by 2020. Chapter 8.04 of the City's Municipal Code requires that all property owners maintain a subscription for refuse collection. The City requires all commercial accounts to have recycling service with a minimum of weekly pickup. Effective July 1, 2020, businesses are required to provide both recycling and composting to customers.	Regulatory compliance not incorporated into DEIR; also Scoping Plan Local Action
Water	Water Efficient/Drought Tolerant Landscaping[3]	Reduce outdoor water consumption	0.02	0.01	Landscaping within the project site would be required to comply with the CALGreen code and all water efficiency measures therein, including the MWELO regulations adopted by the City if Pittsburg in Section 18.84.310 of the Pittsburg Municipal Code. This assumes a 20% reduction in outdoor water consumption.	Regulatory compliance not incorporated into DEIR; also MM 4.1-5 example
Water	Low-Flow Fixtures[4]	Use low-flow for all interior water fixtures (toilets, kitchen and bathroom sink faucets)	0.6	0.4	The Project would be required to comply with the water efficiency regulations within CALGreen. This assumes a 20% reduction in indoor water consumption.	Scoping Plan Local Action
		Adjusted Project Emissions	1,230	1,038		
		Emissions Reductions from PDF Inventory	73	67		
		Remaining Emissions	1,156	971		
		Remaining Reductions Needed to Achieve BAAQMD Threshold	**56**	**311**		

Notes:
1. Calculated using CalEEMod® inputs and outputs in Excel, as shown in Appendix A Table 4.
2. Quantified using CalEEMod® version 2016.3.2. CalEEMod outputs are included in Appendix B.
3. Calculated using CalEEMod® methodology in Excel, as shown in Appendix A Table 6.
4. Calculated using CalEEMod® methodology in Excel, as shown in Appendix A Table 5.

Abbreviations:
CalEEMod - California Emissions Estimator Model
CALGreen - California Green Building Standards Code
CO2e - carbon dioxide equivalents
DEIR - Draft Environmental Impact Report
GHG - greenhouse gas
LED - light-emitting diode
MM - Mitigation Measure
MT - metric tons
MWELO - model water efficient landscape ordinance
yr - year

References:
CalEEMod® 2016.3.2. Available Online at: http://www.caleemod.com
Mount Diablo Resource Recovery. Available at: https://mdrr.com/pittsburg/pittsburg-commercial/
Pittsburg Municipal Code. Available at: http://www.ci.pittsburg.ca.us/index.aspx?page=439

Appendix A Table 4
Building Energy GHG Emissions and Reductions
San Marco Commercial Center Project
City of Pittsburg, CA

Land Uses			Total Energy Consumed[1]					Emissions[2]		
Land Use Subtype	Size		T24 Electricity (KWhr/yr)	Non-T24 Electricity (KWhr/yr)	Lighting (KWhr/yr)	T24 NG (KBTU/yr)	Non-T24 NG (KBTU/yr)	2023 Electricity, 33% RPS (MT CO_2e/yr)	2030 Electricity, 60% RPS (MT CO_2e/yr)	NG (MT CO_2e/yr)
Fast Food Restaurant with Drive Thru	1,826	sqft	6,480	40,720	9,769	77,216	269,280	6.4	3.8	19
High Turnover (Sit Down Restaurant)	3,500	sqft	12,422	78,050	18,725	148,005	516,145	12	7.3	36
Parking Lot	71,600	sqft	0	0	25,060	0	0	2.8	1.7	0
Supermarket	29,822	sqft	85,172	898,537	203,386	348,410	172,669	133	80	28
Total Energy Use			**104,074**	**1,017,307**	**256,940**	**573,631**	**958,095**	**154**	**93**	**82**
			1,378,320			**1,531,726**				

Notes:

1. Energy use rates, consistent with the DEIR, incorporate 2019 Title 24.
2. This table recalculates emissions using the electricity intensity factors derived in Appendix A Table 1 and is consistent with the CalEEMod® outputs in Appendix B for the Adjusted Inventory. These energy use rates and emissions are used to calculate the GHG emissions reductions due to features such as high efficiency lighting. Note that natural gas emission factor, and thus natural gas emissions, is assumed to be constant from year to year.

Abbreviations:

CO2e - carbon dioxide equivalent
DEIR - Draft Environmental Impact Report
DU - dwelling unit
GHG - greenhouse gas
kBTU - 1,000 British Thermal Units
kWhr - kilowatt-hour
MT - metric ton
NG - natural gas
RPS - Renewables Portfolio Standard
sqft - square foot
yr - year

Appendix A Table 5
Reductions from Reduced Indoor Water Consumption
San Marco Commercial Center Project
City of Pittsburg, CA

Category		2023	2030
Total Indoor Water Use (Mgal/yr)[1]		5.3	
Reduction due to CalGreen (Low-Flow Fixtures)[2]		20%	
Electricity Intensity Factors (kWh/Mgal)[3]	Supply	2,117	
	Treat	111	
	Distribute	1,272	
	Treat Wastewater	1,911	
Reduction in Total Annual Energy Use (kWh/yr)[4]		5,729	
Electricity Intensity Factor[5]	lbs CO_2e/MWh	246	148
Total GHG Emissions Reduction (MT CO_2e/yr)[6]		0.64	0.38

Notes:

[1] Indoor water usage is from the CalEEMod outputs.

[2] CalEEMod® is meant to assume reductions ranging from 20% to 35%, but due to an error within the CalEEMod programming, it does not calculate any reductions due to this measure; therefore, this has been conservatively calculated here.

[3] CalEEMod® default assumptions are used for average embodied energy for the supply, treatment and distribution of water, as well as treatment of wastewater, for Northern California.

[4] For potable water, the water use is multiplied by the sum of the electricity intensity factors to supply, treat and distribute the water and treat the resulting wastewater.

[5] California emission factors presented here are 33% RPS for 2023 and 60% projected RPS for 2030, consistent with SB 100. Available at: https://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=201720180SB100

[6] GHG emissions reductions were calculated by multiplying the annual energy use by the electricity intensity factor and then by the reduction due to CalGreen. This calculation conservatively excludes the direct GHG emissions reductions that would result from less wastewater treatment.

Abbreviations:

CalEEMod® - CALifornia Emissions Estimator MODel
CH_4 - methane
CO_2 - carbon dioxide
CO_2e - carbon dioxide equivalents
GHG - greenhouse gases
kWh - kilowatt-hour
lb - pound
Mgal - million gallons
MWh - megawatt-hour
MT - metric tonnes
RPS - Renewables Portfolio Standard
SB - Senate Bill
yr - year

Appendix A Table 6
Reductions from Reduced Outdoor Water Consumption
San Marco Commercial Center Project
City of Pittsburg, CA

Category		2023	2030
Total Outdoor Water Use (Mgal/yr)[1]		0.22	
Reduction due to Landscaping Efficiency Ordinance[2]		20%	
Electricity Intensity Factors (kWh/Mgal)[3]	Supply	2,117	
	Treat	111	
	Distribute	1,272	
Reduction in Total Annual Energy Use (kWh/yr)[4]		152	
Electricity Intensity Factor[5]	lbs CO_2e/MWh	246	148
Total GHG Emissions Reduction (MT CO_2e/yr)[6]		0.02	0.01

Notes:

[1] Outdoor water usage is from the CalEEMod outputs.

[2] Landscaping within the project site would be required to comply with the CALGreen code and all water efficiency measures therein, including the MWELO regulations adopted by the City if Pittsburg in Section 18.84.310 of the Pittsburg Municipal Code. This assumes a 20% reduction in outdoor water consumption.

[3] CalEEMod® default assumptions are used for average embodied energy for the supply, treatment and distribution of water for Northern California.

[4] For outdoor water, the water use is multiplied by the sum of the electricity intensity factors to supply, treat and distribute the water.

[5] California emission factors presented here are 33% RPS for 2023 and 60% projected RPS for 2030, consistent with SB 100. Available at: https://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=201720180SB100

[6] GHG emissions reductions were calculated by multiplying the annual energy use by the electricity intensity factor and then by the reduction due to CalGreen. This calculation conservatively excludes the direct GHG emissions reductions that would result from less wastewater treatment.

Abbreviations:

CalEEMod® - CALifornia Emissions Estimator MODel
CH_4 - methane
CO_2 - carbon dioxide
CO_2e - carbon dioxide equivalents
GHG - greenhouse gases
kWh - kilowatt-hour
lb - pound
Mgal - million gallons
MWh - megawatt-hour
MT - metric tonnes
RPS - Renewables Portfolio Standard
SB - Senate Bill
yr - year

Appendix A Table 7
Details on GHG Reductions from Mitigation Measures (Mitigated Inventory)
San Marco Commercial Center Project
City of Pittsburg, CA

#	Category	Description	Assumptions	2023 (MT CO_2e/yr)	2030 (MT CO_2e/yr)	Notes	Measures this Addresses
1	Energy	ENERGY STAR Appliances	Use ENERGY STAR appliances.	13.6	8.2	Calculations are shown in Appendix A Table 8.	MM 4.1-5 example
2	Mobile	EV Charging	Install electric vehicle charging station outlets for 4 parking spaces.	35	30	This assumes 4 chargers, used on average 4 hrs/day. Assumes Level 2 charging (standard 30-40A 220/230V). Details are shown in Appendix A Table 9.	MM 4.1-5 example, Scoping Plan Local Action
3	Mobile	Bicycle Parking	Incorporate short- and long-term bicycle parking infrastructure	-	-	Conservatively, no GHG benefit has been quantified, because this measure is expected to support other VMT-reducing measures such as the bicycle network that were already quantified.	MM 4.1-5 example, Scoping Plan Local Action
4	Area	Electrify landscaping equipment	Provide outdoor electrical outlets to allow for use of electrically powered landscaping equipment within the project site.	4.1E-04	4.1E-04	Quantified using CalEEMod and assuming a reduction of 10% in landscaping energy emissions to account for the use of outside electrical outlets.	MM 4.1-5 example, Scoping Plan Local Action
5	Construction	Renewable Diesel	Use renewable diesel to fuel construction fleets	17	17	100% of off-road construction emissions, 50-year amortized	Scoping Plan Local Action
6	Vegetation	Urban Forestry/Sequestration	Plant trees throughout the Project site	1.8	1.8	Assumes a minimum of 75 net new trees will be planted. Calculated using CalEEMod methodology.	MM 4.1-5 example, Scoping Plan Local Action
7	Offsets	Purchase verified carbon offsets	Any amount can be purchased.	0	255	Performance standards and compliance for carbon offsets are included in the Carbon Offsets Plan.	MM 4.1-5 example, Scoping Plan Local Action
			PDF Inventory Emissions	1,156	971		
			Emissions Reductions from Mitigation Measures	67	311		
			Mitigated Inventory Emissions	1,089	660		
			Remaining Reductions Needed to Achieve BAAQMD Threshold	**-11**	**0**		

Abbreviations:

BAAQMD - Bay Area Air Quality Management District
CalEEMod - California Emissions Estimator Model
CAPCOA - California Air Pollution Control Officers Association
CO2e - carbon dioxide equivalents
DEIR - Draft Environmental Impact Report
GHG - greenhouse gas
MM - Mitigation Measure
MT - metric tons
NOx - nitrogen oxides
PDF - Project Design Features
yr - year

References:

CalEEMod® 2016.3.2 Available Online at: http://www.caleemod.com

Appendix A Table 8
ENERGY STAR Electricity Reductions
San Marco Commercial Center Project
City of Pittsburg, CA

Reduction in Electricity Emissions due to use of ENERGY STAR Appliances in Supermarket Land Use

Year	Mitigated Electricity Emissions (MT CO_2e)		Emissions Reduction due to ENERGY STAR Appliances (MT CO_2e)
	Adjusted Project Electricity Emissions by Land Use[1]	Adjusted Project Emissions + ENERGY STAR Appliances Mitigation Measure[2]	
2023	133	119	13
2030	80	72	7.9

Reduction in Electricity Emissions due to use of ENERGY STAR Refrigerators in Restaurant Land Uses

Land Use	Year	Adjusted Project Electricity Emissions by Land Use[3] (MT CO_2e)	Refrigeration Percent of Total Electricity Use[4] (%)	Adjusted Project Refrigeration Emissions by Land Use (MT CO_2e)	Decrease in Electricity Use[5] (%)	Emissions Reduction due to ENERGY STAR Refrigeration (MT CO_2e)
Fast Food Restaurant with Drive Thru	2023	6.4	27%	1.7	9%	0.16
	2030	3.8		1.1		0.095
High Turnover (Sit Down Restaurant)	2023	12.2		3.3		0.30
	2030	7.3		2.0		0.18

Total Reduction in Electricity Emissions due to ENERGY STAR Appliances

Year	Emissions Reduction from Adjusted Project due to ENERGY STAR Appliances (MT CO_2e)
2023	14
2030	8.2

Notes:

1. The adjusted project accounts for updates to the electricity emission factors based on the Renewable Portfolio Standards for the operational year, as well as 2019 T24 electricity use reductions, as shown in Appendix B.
2. The Adjusted Project scenario was run with ENERGY STAR CalEEMod defaults for the Supermarket land use. CalEEMod assumes default energy use reductions of 30%, 15%, 15%, and 50% for Clothes Washers, Refrigerators, Dishwashers, and Ceiling Fans, respectively. Note, that due to an error within CalEEMod, it does not calculate any reductions for the Fast Food Resaurant with Drive Thru or High Turnover (Sit Down Restaurant) land uses. These reductions are calculated separately in the second table above.
3. Electricity emissions by land use and year from Adjusted Project CalEEMod outputs (see Appendix B).
4. Due to an error in CalEEMod, ENERGY STAR reductions for the two restaurant land uses had to be calculated separately. Percentage of electricity used for refrigeration estimated using data from California Commercial End Use Survey for PG&E for Restaurant Electricity.
5. Decrease in energy use associated with ENERGY STAR Refrigerators obtained from the USEPA. This was conservatively used to calculate the benefits for the restaurants in place of the CalEEMod default value of 15%.

Abbreviations:

CalEEMod - California Emissions Estimator Model
CO_2e - carbon dioxide equivalents
MT - metric ton
PG&E - Pacific Gas & Electric
USEPA - US Environmental Protection Agency

References:

CalEEMod® 2016.3.1 Available Online at: http://www.caleemod.com
California Commercial End Use Survey, Annual Summary Statistics. Accessed August 2020. Available online at http://capabilities.itron.com/CeusWeb/Chart.aspx
ENERGY STAR. Refrigerators - Specifications. September 15, 2014. Available Online at: https://www.energystar.gov/products/appliances/refrigerators

Appendix A Table 9
Reductions from Non-Residential Electric Vehicle Charging Stations
San Marco Commercial Center Project
City of Pittsburg, CA

Estimating GHG Emissions Reduction from Replacement of Gasoline Vehicle with Electric Vehicle			
	2023	**2030**	
PG&E Electricity Emission Factor[1]	0.11	0.07	(MT CO_2/MWh)
Fuel Economy of Electric Vehicle[2]	0.25		(kWh/mile)
Gasoline/Diesel CO_2 Emission while Running[3]	266	221	(gms/mile)
Charge Rate[4]	6.25		(kW)
Number of Hours of Charging per Station per Day[4]	4		(hours)
Total Electricity per Year	9,125		(kWh)
Miles of Charge per kWh	4		(mile/kWh)
Annual VMT Reduction per Parking Spot[4]	36,500		(miles/charging station/year)
Number of On-Site Parking Spots Provided Chargers[5]	4		-
Annual VMT Reduction All Stations (Based on Charge)	146,000		(miles/year)
Estimated Benefit from Installing Electric Vehicle Charging Stations in Non-Residential Development Areas			
GHG Emissions of Gasoline/Diesel Vehicle[6]	39	32	(MT CO_2/year)
GHG Emissions of Electric Vehicle[7]	4	2	(MT CO_2/year)
GHG Emissions Reduction[8]	35	30	(MT CO_2/year)
GHG Reduction per Parking Space with Charging per Year	8.7	7.5	(MT CO2/year)

Notes:

1. 2023 and 2030 CO_2e weighted intensity factors for PG&E account for emissions rates consistent with 33% RPS and 60% RPS, respectively.
2. National Renewable Energy Laboratory (NREL). 2018. California Plug-In Electric Vehicle Infrastructure Projections: 2017-2025 (Table C.1). Available at: https://www.nrel.gov/docs/fy18osti/70893.pdf. Accessed: May 2020.
3. CalEEMod 2016.3.2 EMFAC2017 with SAFE Adjustment, running exhaust emission rate for CO_2 for light duty gasoline- and diesel-powered vehicles in SF Bay Area, aggregated for all models and speeds, averaged over all seasons for 2030. Emission rate includes reductions for Advanced Clean Cars (ACC) and Pavley. Conservatively excludes benefits from starting and idling.
4. Multiplied by the fuel economy in miles per kWh.
5. Assumes 4 EV charging spaces throughout the Project site. Assumes on average, each charger is used 4 hours per day (e.g., provides 100 miles of range), but chargers could be used between 0 and 24 hours per day.
6. GHG emissions calculated using annual VMT reduction at all stations and CO_2 emission rate. The emissions inventory includes a small amount of methane and nitrous oxide, so when it is excluded from reductions benefits, it is conservative.
7. GHG emissions calculated using annual VMT reduction at all stations, fuel economy of electric vehicles, along with PG&E electricity CO_2 emission factor.
8. GHG emissions reduction is a difference of GHG emissions of gasoline vehicles and GHG emissions of electric vehicles.

Abbreviations:

CalEEMod - California Emissions Estimator Model
CO_2 - carbon dioxide
CO_2e - carbon dioxide equivalents
EV - electric vehicle
GHG - greenhouse gases
gms - grams
kW - kilowatt
kWh - kilowatt-hour
MT - metric tonnes
MWh - megawatt-hour
PG&E - Pacific Gas & Electric
VMT - vehicle miles traveled

Appendix A Table 10
Details on GHG Reductions from Alternative Mitigation Measures
San Marco Commercial Center Project
City of Pittsburg, CA

#	Category	Description	Assumptions	2023 (MT CO_2e/yr)	2030 (MT CO_2e/yr)	Notes	Measures this Addresses
1 [1]	Energy	Zero Net Electricity - Non-Residential	Project produces enough renewable electricity on annual basis to offset all electricity used by non-residential land uses.	126	76	Removes the non-residential electricity emissions that remain after regulatory and project design features are implemented. Equivalent reduction could be achieved by purchasing 100% renewable electricity.	MM 4.1-5 example, Scoping Plan Local Action
2 [2]	Mobile	Additional EV Charging	Additional Level 2 EV charging station for multifamily homes or commercial land uses within Contra Costa County	8.7	7.5	Assumes 1 charger used 4 hours per day. Scales linearly.	MM 4.1-5 example, Scoping Plan Local Action
3	Vegetation	Urban Forestry	Additional tree planting	2.4	2.4	Per 100 trees. Calculated using CalEEMod methodology.	MM 4.1-5 example, Scoping Plan Local Action

Notes:

1. Calculated using CalEEMod® inputs and outputs in Excel, as shown in Appendix A Table 4.
2. As shown in Appendix A Table 9.

Abbreviations

CalEEMod - California Emissions Estimator Model
CO2e - carbon dioxide equivalents
EV - electric vehicle
GHG - greenhouse gas
MM - Mitigation Measure
MT - metric tons
yr - year

APPENDIX B
CALEEMOD® OUTPUT FILES

Discovery Builders San Marco - Adjusted Project 2023

Bay Area AQMD Air District, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Parking Lot	179.00	Space	1.61	71,600.00	0
Fast Food Restaurant with Drive Thru	1.83	1000sqft	0.04	1,826.00	0
High Turnover (Sit Down Restaurant)	3.50	1000sqft	0.08	3,500.00	0
Supermarket	29.82	1000sqft	0.68	29,822.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	64
Climate Zone	4			**Operational Year**	2023
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	243.71	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - CO2 Intensity Factor updated to account for 2023 RPS (33%)

Land Use - Land uses consistent with DEIR CalEEMod output

Vehicle Trips - Trip rates consistent with DEIR CalEEMod output

Vehicle Emission Factors - Vehicle EFs and Fleet Mix based on EMFAC2017 + SAFE Adjustments for BAAQMD 2023.

Vehicle Emission Factors - Vehicle EFs and Fleet Mix based on EMFAC2017 + SAFE Adjustments for BAAQMD 2023.

Vehicle Emission Factors - Vehicle EFs and Fleet Mix based on EMFAC2017 + SAFE Adjustments for BAAQMD 2023.

Energy Use - Energy use rates updated to account for 30% exceedance of Title 24.

Mobile Land Use Mitigation - Traffic mitigation measures consistent with DEIR CalEEMod output

Table Name	Column Name	Default Value	New Value
tblEnergyUse	T24E	5.07	3.55
tblEnergyUse	T24E	5.07	3.55
tblEnergyUse	T24E	4.08	2.86
tblEnergyUse	T24NG	60.41	42.29
tblEnergyUse	T24NG	60.41	42.29
tblEnergyUse	T24NG	16.69	11.68
tblFleetMix	HHD	0.03	0.03
tblFleetMix	HHD	0.03	0.03
tblFleetMix	HHD	0.03	0.03
tblFleetMix	HHD	0.03	0.03
tblFleetMix	LDA	0.58	0.56
tblFleetMix	LDA	0.58	0.56
tblFleetMix	LDA	0.58	0.56
tblFleetMix	LDA	0.58	0.56
tblFleetMix	LDT1	0.04	0.06
tblFleetMix	LDT1	0.04	0.06
tblFleetMix	LDT1	0.04	0.06
tblFleetMix	LDT1	0.04	0.06
tblFleetMix	LDT2	0.19	0.18
tblFleetMix	LDT2	0.19	0.18
tblFleetMix	LDT2	0.19	0.18
tblFleetMix	LDT2	0.19	0.18
tblFleetMix	LHD1	0.02	0.02
tblFleetMix	LHD1	0.02	0.02
tblFleetMix	LHD1	0.02	0.02
tblFleetMix	LHD1	0.02	0.02
tblFleetMix	LHD2	5.3410e-003	5.7740e-003

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tblFleetMix	LHD2	5.3410e-003	5.7740e-003
tblFleetMix	LHD2	5.3410e-003	5.7740e-003
tblFleetMix	MCY	5.8320e-003	5.6756e-003
tblFleetMix	MCY	5.8320e-003	5.6756e-003
tblFleetMix	MCY	5.8320e-003	5.6756e-003
tblFleetMix	MCY	5.8320e-003	5.6756e-003
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tblFleetMix	MDV	0.11	0.11
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tblFleetMix	MDV	0.11	0.11
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tblFleetMix	MHD	0.02	0.02
tblFleetMix	MHD	0.02	0.02
tblFleetMix	MHD	0.02	0.02
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tblFleetMix	OBUS	2.6410e-003	1.7794e-003
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tblFleetMix	UBUS	2.2000e-003	1.6497e-003

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tblProjectCharacteristics	CO2IntensityFactor	641.35	243.71
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tblVehicleEF	HHD	0.06	0.05
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tblVehicleEF	HHD	0.04	0.04
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tblVehicleEF	HHD	8.4000e-005	1.0000e-006
tblVehicleEF	HHD	7.8000e-005	3.0000e-006
tblVehicleEF	HHD	4.3800e-003	1.3400e-004

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tblVehicleEF	HHD	3.7100e-004	6.6000e-005
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tblVehicleEF	HHD	0.04	0.04

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tblVehicleEF	HHD	8.4000e-005	1.0000e-006
tblVehicleEF	HHD	3.7000e-005	3.0000e-006
tblVehicleEF	HHD	4.5660e-003	1.3400e-004
tblVehicleEF	HHD	0.45	0.43
tblVehicleEF	HHD	2.4000e-005	2.0000e-006
tblVehicleEF	HHD	0.09	0.03
tblVehicleEF	HHD	4.1400e-004	6.6000e-005
tblVehicleEF	HHD	0.09	2.0000e-006
tblVehicleEF	HHD	0.04	9.8880e-003
tblVehicleEF	HHD	0.01	0.01
tblVehicleEF	HHD	1.5700e-004	1.0000e-006
tblVehicleEF	HHD	3.7000e-005	3.0000e-006
tblVehicleEF	HHD	4.5660e-003	1.3400e-004
tblVehicleEF	HHD	0.52	0.49
tblVehicleEF	HHD	2.4000e-005	2.0000e-006

tblVehicleEF	HHD	0.16	0.08
tblVehicleEF	HHD	4.1400e-004	6.6000e-005
tblVehicleEF	HHD	0.09	3.0000e-006
tblVehicleEF	LDA	3.5890e-003	2.0520e-003
tblVehicleEF	LDA	5.1560e-003	0.05
tblVehicleEF	LDA	0.51	0.56
tblVehicleEF	LDA	1.16	2.22
tblVehicleEF	LDA	239.89	247.20
tblVehicleEF	LDA	55.27	52.15
tblVehicleEF	LDA	0.04	0.03
tblVehicleEF	LDA	0.07	0.18
tblVehicleEF	LDA	1.7180e-003	1.4220e-003
tblVehicleEF	LDA	2.2600e-003	1.7710e-003
tblVehicleEF	LDA	1.5840e-003	1.3100e-003
tblVehicleEF	LDA	2.0780e-003	1.6290e-003
tblVehicleEF	LDA	0.03	0.04
tblVehicleEF	LDA	0.10	0.10
tblVehicleEF	LDA	0.03	0.04
tblVehicleEF	LDA	9.0570e-003	7.9200e-003
tblVehicleEF	LDA	0.04	0.03
tblVehicleEF	LDA	0.07	0.22
tblVehicleEF	LDA	2.4020e-003	2.4350e-003
tblVehicleEF	LDA	5.7200e-004	5.1400e-004
tblVehicleEF	LDA	0.03	0.04
tblVehicleEF	LDA	0.10	0.10
tblVehicleEF	LDA	0.03	0.04
tblVehicleEF	LDA	0.01	0.01
tblVehicleEF	LDA	0.04	0.03
tblVehicleEF	LDA	0.08	0.24
tblVehicleEF	LDA	3.9990e-003	2.0520e-003

tblVehicleEF	LDA	4.2380e-003	0.05
tblVehicleEF	LDA	0.60	0.56
tblVehicleEF	LDA	0.90	2.22
tblVehicleEF	LDA	258.78	247.20
tblVehicleEF	LDA	55.27	52.15
tblVehicleEF	LDA	0.04	0.03
tblVehicleEF	LDA	0.06	0.18
tblVehicleEF	LDA	1.7180e-003	1.4220e-003
tblVehicleEF	LDA	2.2600e-003	1.7710e-003
tblVehicleEF	LDA	1.5840e-003	1.3100e-003
tblVehicleEF	LDA	2.0780e-003	1.6290e-003
tblVehicleEF	LDA	0.07	0.04
tblVehicleEF	LDA	0.11	0.10
tblVehicleEF	LDA	0.05	0.04
tblVehicleEF	LDA	0.01	7.9200e-003
tblVehicleEF	LDA	0.04	0.03
tblVehicleEF	LDA	0.06	0.22
tblVehicleEF	LDA	2.5920e-003	2.4350e-003
tblVehicleEF	LDA	5.6800e-004	5.1400e-004
tblVehicleEF	LDA	0.07	0.04
tblVehicleEF	LDA	0.11	0.10
tblVehicleEF	LDA	0.05	0.04
tblVehicleEF	LDA	0.01	0.01
tblVehicleEF	LDA	0.04	0.03
tblVehicleEF	LDA	0.06	0.24
tblVehicleEF	LDA	3.5020e-003	2.0520e-003
tblVehicleEF	LDA	5.8340e-003	0.05
tblVehicleEF	LDA	0.50	0.56
tblVehicleEF	LDA	1.35	2.22
tblVehicleEF	LDA	237.53	247.20

tblVehicleEF	LDA	55.27	52.15
tblVehicleEF	LDA	0.05	0.03
tblVehicleEF	LDA	0.07	0.18
tblVehicleEF	LDA	1.7180e-003	1.4220e-003
tblVehicleEF	LDA	2.2600e-003	1.7710e-003
tblVehicleEF	LDA	1.5840e-003	1.3100e-003
tblVehicleEF	LDA	2.0780e-003	1.6290e-003
tblVehicleEF	LDA	0.01	0.04
tblVehicleEF	LDA	0.10	0.10
tblVehicleEF	LDA	0.01	0.04
tblVehicleEF	LDA	8.8430e-003	7.9200e-003
tblVehicleEF	LDA	0.04	0.03
tblVehicleEF	LDA	0.08	0.22
tblVehicleEF	LDA	2.3780e-003	2.4350e-003
tblVehicleEF	LDA	5.7500e-004	5.1400e-004
tblVehicleEF	LDA	0.01	0.04
tblVehicleEF	LDA	0.10	0.10
tblVehicleEF	LDA	0.01	0.04
tblVehicleEF	LDA	0.01	0.01
tblVehicleEF	LDA	0.04	0.03
tblVehicleEF	LDA	0.09	0.24
tblVehicleEF	LDT1	7.4660e-003	4.1690e-003
tblVehicleEF	LDT1	0.01	0.07
tblVehicleEF	LDT1	0.94	0.92
tblVehicleEF	LDT1	2.40	2.41
tblVehicleEF	LDT1	296.77	294.80
tblVehicleEF	LDT1	68.29	62.87
tblVehicleEF	LDT1	0.09	0.08
tblVehicleEF	LDT1	0.13	0.24
tblVehicleEF	LDT1	2.1910e-003	1.7960e-003

tblVehicleEF	LDT1	2.9610e-003	2.2910e-003
tblVehicleEF	LDT1	2.0170e-003	1.6530e-003
tblVehicleEF	LDT1	2.7230e-003	2.1060e-003
tblVehicleEF	LDT1	0.08	0.08
tblVehicleEF	LDT1	0.21	0.17
tblVehicleEF	LDT1	0.06	0.07
tblVehicleEF	LDT1	0.02	0.02
tblVehicleEF	LDT1	0.15	0.09
tblVehicleEF	LDT1	0.16	0.32
tblVehicleEF	LDT1	2.9780e-003	2.9050e-003
tblVehicleEF	LDT1	7.2400e-004	6.2000e-004
tblVehicleEF	LDT1	0.08	0.08
tblVehicleEF	LDT1	0.21	0.17
tblVehicleEF	LDT1	0.06	0.07
tblVehicleEF	LDT1	0.03	0.03
tblVehicleEF	LDT1	0.15	0.09
tblVehicleEF	LDT1	0.17	0.36
tblVehicleEF	LDT1	8.2390e-003	4.1690e-003
tblVehicleEF	LDT1	9.4700e-003	0.07
tblVehicleEF	LDT1	1.09	0.92
tblVehicleEF	LDT1	1.85	2.41
tblVehicleEF	LDT1	319.11	294.80
tblVehicleEF	LDT1	68.29	62.87
tblVehicleEF	LDT1	0.08	0.08
tblVehicleEF	LDT1	0.12	0.24
tblVehicleEF	LDT1	2.1910e-003	1.7960e-003
tblVehicleEF	LDT1	2.9610e-003	2.2910e-003
tblVehicleEF	LDT1	2.0170e-003	1.6530e-003
tblVehicleEF	LDT1	2.7230e-003	2.1060e-003
tblVehicleEF	LDT1	0.19	0.08

tblVehicleEF	LDT1	0.24	0.17
tblVehicleEF	LDT1	0.14	0.07
tblVehicleEF	LDT1	0.02	0.02
tblVehicleEF	LDT1	0.13	0.09
tblVehicleEF	LDT1	0.13	0.32
tblVehicleEF	LDT1	3.2030e-003	2.9050e-003
tblVehicleEF	LDT1	7.1500e-004	6.2000e-004
tblVehicleEF	LDT1	0.19	0.08
tblVehicleEF	LDT1	0.24	0.17
tblVehicleEF	LDT1	0.14	0.07
tblVehicleEF	LDT1	0.03	0.03
tblVehicleEF	LDT1	0.13	0.09
tblVehicleEF	LDT1	0.14	0.36
tblVehicleEF	LDT1	7.3320e-003	4.1690e-003
tblVehicleEF	LDT1	0.01	0.07
tblVehicleEF	LDT1	0.93	0.92
tblVehicleEF	LDT1	2.81	2.41
tblVehicleEF	LDT1	294.08	294.80
tblVehicleEF	LDT1	68.29	62.87
tblVehicleEF	LDT1	0.10	0.08
tblVehicleEF	LDT1	0.15	0.24
tblVehicleEF	LDT1	2.1910e-003	1.7960e-003
tblVehicleEF	LDT1	2.9610e-003	2.2910e-003
tblVehicleEF	LDT1	2.0170e-003	1.6530e-003
tblVehicleEF	LDT1	2.7230e-003	2.1060e-003
tblVehicleEF	LDT1	0.03	0.08
tblVehicleEF	LDT1	0.23	0.17
tblVehicleEF	LDT1	0.03	0.07
tblVehicleEF	LDT1	0.02	0.02
tblVehicleEF	LDT1	0.18	0.09

tblVehicleEF	LDT1	0.18	0.32
tblVehicleEF	LDT1	2.9510e-003	2.9050e-003
tblVehicleEF	LDT1	7.3200e-004	6.2000e-004
tblVehicleEF	LDT1	0.03	0.08
tblVehicleEF	LDT1	0.23	0.17
tblVehicleEF	LDT1	0.03	0.07
tblVehicleEF	LDT1	0.03	0.03
tblVehicleEF	LDT1	0.18	0.09
tblVehicleEF	LDT1	0.20	0.36
tblVehicleEF	LDT2	4.8520e-003	3.1500e-003
tblVehicleEF	LDT2	6.3910e-003	0.07
tblVehicleEF	LDT2	0.65	0.75
tblVehicleEF	LDT2	1.42	2.81
tblVehicleEF	LDT2	335.50	316.23
tblVehicleEF	LDT2	76.92	67.83
tblVehicleEF	LDT2	0.07	0.06
tblVehicleEF	LDT2	0.11	0.27
tblVehicleEF	LDT2	1.7050e-003	1.4300e-003
tblVehicleEF	LDT2	2.3080e-003	1.7670e-003
tblVehicleEF	LDT2	1.5680e-003	1.3170e-003
tblVehicleEF	LDT2	2.1230e-003	1.6250e-003
tblVehicleEF	LDT2	0.04	0.06
tblVehicleEF	LDT2	0.10	0.12
tblVehicleEF	LDT2	0.04	0.06
tblVehicleEF	LDT2	0.01	0.01
tblVehicleEF	LDT2	0.06	0.06
tblVehicleEF	LDT2	0.09	0.31
tblVehicleEF	LDT2	3.3590e-003	3.1150e-003
tblVehicleEF	LDT2	7.9300e-004	6.6800e-004
tblVehicleEF	LDT2	0.04	0.06

tblVehicleEF	LDT2	0.10	0.12
tblVehicleEF	LDT2	0.04	0.06
tblVehicleEF	LDT2	0.02	0.02
tblVehicleEF	LDT2	0.06	0.06
tblVehicleEF	LDT2	0.09	0.34
tblVehicleEF	LDT2	5.3950e-003	3.1500e-003
tblVehicleEF	LDT2	5.2630e-003	0.07
tblVehicleEF	LDT2	0.76	0.75
tblVehicleEF	LDT2	1.11	2.81
tblVehicleEF	LDT2	361.07	316.23
tblVehicleEF	LDT2	76.92	67.83
tblVehicleEF	LDT2	0.06	0.06
tblVehicleEF	LDT2	0.09	0.27
tblVehicleEF	LDT2	1.7050e-003	1.4300e-003
tblVehicleEF	LDT2	2.3080e-003	1.7670e-003
tblVehicleEF	LDT2	1.5680e-003	1.3170e-003
tblVehicleEF	LDT2	2.1230e-003	1.6250e-003
tblVehicleEF	LDT2	0.08	0.06
tblVehicleEF	LDT2	0.11	0.12
tblVehicleEF	LDT2	0.07	0.06
tblVehicleEF	LDT2	0.01	0.01
tblVehicleEF	LDT2	0.06	0.06
tblVehicleEF	LDT2	0.07	0.31
tblVehicleEF	LDT2	3.6160e-003	3.1150e-003
tblVehicleEF	LDT2	7.8800e-004	6.6800e-004
tblVehicleEF	LDT2	0.08	0.06
tblVehicleEF	LDT2	0.11	0.12
tblVehicleEF	LDT2	0.07	0.06
tblVehicleEF	LDT2	0.02	0.02
tblVehicleEF	LDT2	0.06	0.06

tblVehicleEF	LDT2	0.08	0.34
tblVehicleEF	LDT2	4.7340e-003	3.1500e-003
tblVehicleEF	LDT2	7.2230e-003	0.07
tblVehicleEF	LDT2	0.64	0.75
tblVehicleEF	LDT2	1.66	2.81
tblVehicleEF	LDT2	332.43	316.23
tblVehicleEF	LDT2	76.92	67.83
tblVehicleEF	LDT2	0.07	0.06
tblVehicleEF	LDT2	0.11	0.27
tblVehicleEF	LDT2	1.7050e-003	1.4300e-003
tblVehicleEF	LDT2	2.3080e-003	1.7670e-003
tblVehicleEF	LDT2	1.5680e-003	1.3170e-003
tblVehicleEF	LDT2	2.1230e-003	1.6250e-003
tblVehicleEF	LDT2	0.02	0.06
tblVehicleEF	LDT2	0.11	0.12
tblVehicleEF	LDT2	0.02	0.06
tblVehicleEF	LDT2	0.01	0.01
tblVehicleEF	LDT2	0.08	0.06
tblVehicleEF	LDT2	0.10	0.31
tblVehicleEF	LDT2	3.3280e-003	3.1150e-003
tblVehicleEF	LDT2	7.9700e-004	6.6800e-004
tblVehicleEF	LDT2	0.02	0.06
tblVehicleEF	LDT2	0.11	0.12
tblVehicleEF	LDT2	0.02	0.06
tblVehicleEF	LDT2	0.02	0.02
tblVehicleEF	LDT2	0.08	0.06
tblVehicleEF	LDT2	0.11	0.34
tblVehicleEF	LHD1	5.2200e-003	5.0660e-003
tblVehicleEF	LHD1	0.02	8.8900e-003
tblVehicleEF	LHD1	0.02	0.01

tblVehicleEF	LHD1	0.15	0.18
tblVehicleEF	LHD1	1.05	0.81
tblVehicleEF	LHD1	2.52	1.06
tblVehicleEF	LHD1	9.07	9.04
tblVehicleEF	LHD1	688.05	793.45
tblVehicleEF	LHD1	31.35	11.54
tblVehicleEF	LHD1	0.08	0.06
tblVehicleEF	LHD1	1.30	0.87
tblVehicleEF	LHD1	0.98	0.32
tblVehicleEF	LHD1	9.0800e-004	8.6500e-004
tblVehicleEF	LHD1	0.01	9.7960e-003
tblVehicleEF	LHD1	0.02	0.01
tblVehicleEF	LHD1	9.1900e-004	2.5200e-004
tblVehicleEF	LHD1	8.6900e-004	8.2700e-004
tblVehicleEF	LHD1	2.5320e-003	2.4490e-003
tblVehicleEF	LHD1	0.02	0.01
tblVehicleEF	LHD1	8.4500e-004	2.3200e-004
tblVehicleEF	LHD1	2.3230e-003	1.8120e-003
tblVehicleEF	LHD1	0.10	0.07
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	1.2760e-003	9.9100e-004
tblVehicleEF	LHD1	0.13	0.10
tblVehicleEF	LHD1	0.32	0.21
tblVehicleEF	LHD1	0.25	0.07
tblVehicleEF	LHD1	9.1000e-005	8.8000e-005
tblVehicleEF	LHD1	6.7500e-003	7.7440e-003
tblVehicleEF	LHD1	3.6100e-004	1.1400e-004
tblVehicleEF	LHD1	2.3230e-003	1.8120e-003
tblVehicleEF	LHD1	0.10	0.07
tblVehicleEF	LHD1	0.02	0.03

tblVehicleEF	LHD1	1.2760e-003	9.9100e-004
tblVehicleEF	LHD1	0.15	0.12
tblVehicleEF	LHD1	0.32	0.21
tblVehicleEF	LHD1	0.28	0.08
tblVehicleEF	LHD1	5.2200e-003	5.0660e-003
tblVehicleEF	LHD1	0.02	8.8900e-003
tblVehicleEF	LHD1	0.02	0.01
tblVehicleEF	LHD1	0.15	0.18
tblVehicleEF	LHD1	1.08	0.81
tblVehicleEF	LHD1	2.32	1.06
tblVehicleEF	LHD1	9.07	9.04
tblVehicleEF	LHD1	688.05	793.45
tblVehicleEF	LHD1	31.35	11.54
tblVehicleEF	LHD1	0.08	0.06
tblVehicleEF	LHD1	1.24	0.87
tblVehicleEF	LHD1	0.91	0.32
tblVehicleEF	LHD1	9.0800e-004	8.6500e-004
tblVehicleEF	LHD1	0.01	9.7960e-003
tblVehicleEF	LHD1	0.02	0.01
tblVehicleEF	LHD1	9.1900e-004	2.5200e-004
tblVehicleEF	LHD1	8.6900e-004	8.2700e-004
tblVehicleEF	LHD1	2.5320e-003	2.4490e-003
tblVehicleEF	LHD1	0.02	0.01
tblVehicleEF	LHD1	8.4500e-004	2.3200e-004
tblVehicleEF	LHD1	5.4840e-003	1.8120e-003
tblVehicleEF	LHD1	0.11	0.07
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	2.6910e-003	9.9100e-004
tblVehicleEF	LHD1	0.13	0.10
tblVehicleEF	LHD1	0.30	0.21

tblVehicleEF	LHD1	0.24	0.07
tblVehicleEF	LHD1	9.1000e-005	8.8000e-005
tblVehicleEF	LHD1	6.7500e-003	7.7440e-003
tblVehicleEF	LHD1	3.5700e-004	1.1400e-004
tblVehicleEF	LHD1	5.4840e-003	1.8120e-003
tblVehicleEF	LHD1	0.11	0.07
tblVehicleEF	LHD1	0.02	0.03
tblVehicleEF	LHD1	2.6910e-003	9.9100e-004
tblVehicleEF	LHD1	0.16	0.12
tblVehicleEF	LHD1	0.30	0.21
tblVehicleEF	LHD1	0.26	0.08
tblVehicleEF	LHD1	5.2200e-003	5.0660e-003
tblVehicleEF	LHD1	0.02	8.8900e-003
tblVehicleEF	LHD1	0.02	0.01
tblVehicleEF	LHD1	0.15	0.18
tblVehicleEF	LHD1	1.04	0.81
tblVehicleEF	LHD1	2.71	1.06
tblVehicleEF	LHD1	9.07	9.04
tblVehicleEF	LHD1	688.05	793.45
tblVehicleEF	LHD1	31.35	11.54
tblVehicleEF	LHD1	0.08	0.06
tblVehicleEF	LHD1	1.33	0.87
tblVehicleEF	LHD1	1.04	0.32
tblVehicleEF	LHD1	9.0800e-004	8.6500e-004
tblVehicleEF	LHD1	0.01	9.7960e-003
tblVehicleEF	LHD1	0.02	0.01
tblVehicleEF	LHD1	9.1900e-004	2.5200e-004
tblVehicleEF	LHD1	8.6900e-004	8.2700e-004
tblVehicleEF	LHD1	2.5320e-003	2.4490e-003
tblVehicleEF	LHD1	0.02	0.01

tblVehicleEF	LHD1	8.4500e-004	2.3200e-004
tblVehicleEF	LHD1	1.0320e-003	1.8120e-003
tblVehicleEF	LHD1	0.11	0.07
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	6.0700e-004	9.9100e-004
tblVehicleEF	LHD1	0.13	0.10
tblVehicleEF	LHD1	0.35	0.21
tblVehicleEF	LHD1	0.27	0.07
tblVehicleEF	LHD1	9.1000e-005	8.8000e-005
tblVehicleEF	LHD1	6.7500e-003	7.7440e-003
tblVehicleEF	LHD1	3.6400e-004	1.1400e-004
tblVehicleEF	LHD1	1.0320e-003	1.8120e-003
tblVehicleEF	LHD1	0.11	0.07
tblVehicleEF	LHD1	0.02	0.03
tblVehicleEF	LHD1	6.0700e-004	9.9100e-004
tblVehicleEF	LHD1	0.15	0.12
tblVehicleEF	LHD1	0.35	0.21
tblVehicleEF	LHD1	0.29	0.08
tblVehicleEF	LHD2	3.4060e-003	3.2490e-003
tblVehicleEF	LHD2	7.6340e-003	7.0750e-003
tblVehicleEF	LHD2	6.7820e-003	8.5800e-003
tblVehicleEF	LHD2	0.12	0.14
tblVehicleEF	LHD2	0.57	0.63
tblVehicleEF	LHD2	1.16	0.64
tblVehicleEF	LHD2	14.00	14.02
tblVehicleEF	LHD2	708.40	776.24
tblVehicleEF	LHD2	24.27	8.00
tblVehicleEF	LHD2	0.10	0.10
tblVehicleEF	LHD2	0.76	0.92
tblVehicleEF	LHD2	0.46	0.19

tblVehicleEF	LHD2	1.2380e-003	1.3980e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	0.01	0.02
tblVehicleEF	LHD2	4.0300e-004	1.2900e-004
tblVehicleEF	LHD2	1.1840e-003	1.3380e-003
tblVehicleEF	LHD2	2.6880e-003	2.6820e-003
tblVehicleEF	LHD2	0.01	0.02
tblVehicleEF	LHD2	3.7100e-004	1.1900e-004
tblVehicleEF	LHD2	7.3300e-004	9.4800e-004
tblVehicleEF	LHD2	0.03	0.04
tblVehicleEF	LHD2	0.01	0.02
tblVehicleEF	LHD2	4.2900e-004	5.3000e-004
tblVehicleEF	LHD2	0.11	0.11
tblVehicleEF	LHD2	0.07	0.10
tblVehicleEF	LHD2	0.09	0.04
tblVehicleEF	LHD2	1.3700e-004	1.3400e-004
tblVehicleEF	LHD2	6.8900e-003	7.4980e-003
tblVehicleEF	LHD2	2.6400e-004	7.9000e-005
tblVehicleEF	LHD2	7.3300e-004	9.4800e-004
tblVehicleEF	LHD2	0.03	0.04
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	4.2900e-004	5.3000e-004
tblVehicleEF	LHD2	0.12	0.13
tblVehicleEF	LHD2	0.07	0.10
tblVehicleEF	LHD2	0.10	0.05
tblVehicleEF	LHD2	3.4060e-003	3.2490e-003
tblVehicleEF	LHD2	7.7500e-003	7.0750e-003
tblVehicleEF	LHD2	6.3980e-003	8.5800e-003
tblVehicleEF	LHD2	0.12	0.14
tblVehicleEF	LHD2	0.57	0.63

tblVehicleEF	LHD2	1.08	0.64
tblVehicleEF	LHD2	14.00	14.02
tblVehicleEF	LHD2	708.40	776.24
tblVehicleEF	LHD2	24.27	8.00
tblVehicleEF	LHD2	0.10	0.10
tblVehicleEF	LHD2	0.73	0.92
tblVehicleEF	LHD2	0.43	0.19
tblVehicleEF	LHD2	1.2380e-003	1.3980e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	0.01	0.02
tblVehicleEF	LHD2	4.0300e-004	1.2900e-004
tblVehicleEF	LHD2	1.1840e-003	1.3380e-003
tblVehicleEF	LHD2	2.6880e-003	2.6820e-003
tblVehicleEF	LHD2	0.01	0.02
tblVehicleEF	LHD2	3.7100e-004	1.1900e-004
tblVehicleEF	LHD2	1.7170e-003	9.4800e-004
tblVehicleEF	LHD2	0.03	0.04
tblVehicleEF	LHD2	0.01	0.02
tblVehicleEF	LHD2	8.9700e-004	5.3000e-004
tblVehicleEF	LHD2	0.11	0.11
tblVehicleEF	LHD2	0.07	0.10
tblVehicleEF	LHD2	0.09	0.04
tblVehicleEF	LHD2	1.3700e-004	1.3400e-004
tblVehicleEF	LHD2	6.8900e-003	7.4980e-003
tblVehicleEF	LHD2	2.6200e-004	7.9000e-005
tblVehicleEF	LHD2	1.7170e-003	9.4800e-004
tblVehicleEF	LHD2	0.03	0.04
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	8.9700e-004	5.3000e-004
tblVehicleEF	LHD2	0.12	0.13

tblVehicleEF	LHD2	0.07	0.10
tblVehicleEF	LHD2	0.09	0.05
tblVehicleEF	LHD2	3.4060e-003	3.2490e-003
tblVehicleEF	LHD2	7.5480e-003	7.0750e-003
tblVehicleEF	LHD2	7.1000e-003	8.5800e-003
tblVehicleEF	LHD2	0.12	0.14
tblVehicleEF	LHD2	0.56	0.63
tblVehicleEF	LHD2	1.25	0.64
tblVehicleEF	LHD2	14.00	14.02
tblVehicleEF	LHD2	708.40	776.24
tblVehicleEF	LHD2	24.27	8.00
tblVehicleEF	LHD2	0.10	0.10
tblVehicleEF	LHD2	0.77	0.92
tblVehicleEF	LHD2	0.48	0.19
tblVehicleEF	LHD2	1.2380e-003	1.3980e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	0.01	0.02
tblVehicleEF	LHD2	4.0300e-004	1.2900e-004
tblVehicleEF	LHD2	1.1840e-003	1.3380e-003
tblVehicleEF	LHD2	2.6880e-003	2.6820e-003
tblVehicleEF	LHD2	0.01	0.02
tblVehicleEF	LHD2	3.7100e-004	1.1900e-004
tblVehicleEF	LHD2	3.4400e-004	9.4800e-004
tblVehicleEF	LHD2	0.03	0.04
tblVehicleEF	LHD2	0.01	0.02
tblVehicleEF	LHD2	2.0700e-004	5.3000e-004
tblVehicleEF	LHD2	0.11	0.11
tblVehicleEF	LHD2	0.08	0.10
tblVehicleEF	LHD2	0.10	0.04
tblVehicleEF	LHD2	1.3700e-004	1.3400e-004

tblVehicleEF	LHD2	6.8900e-003	7.4980e-003
tblVehicleEF	LHD2	2.6500e-004	7.9000e-005
tblVehicleEF	LHD2	3.4400e-004	9.4800e-004
tblVehicleEF	LHD2	0.03	0.04
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	2.0700e-004	5.3000e-004
tblVehicleEF	LHD2	0.12	0.13
tblVehicleEF	LHD2	0.08	0.10
tblVehicleEF	LHD2	0.10	0.05
tblVehicleEF	MCY	0.46	0.34
tblVehicleEF	MCY	0.16	0.26
tblVehicleEF	MCY	19.66	19.91
tblVehicleEF	MCY	10.25	9.10
tblVehicleEF	MCY	173.82	214.56
tblVehicleEF	MCY	45.53	61.71
tblVehicleEF	MCY	1.16	1.17
tblVehicleEF	MCY	0.32	0.27
tblVehicleEF	MCY	2.0990e-003	2.0530e-003
tblVehicleEF	MCY	3.9180e-003	3.1710e-003
tblVehicleEF	MCY	1.9630e-003	1.9200e-003
tblVehicleEF	MCY	3.6930e-003	2.9860e-003
tblVehicleEF	MCY	0.82	0.83
tblVehicleEF	MCY	0.72	0.72
tblVehicleEF	MCY	0.48	0.49
tblVehicleEF	MCY	2.30	2.32
tblVehicleEF	MCY	0.62	0.57
tblVehicleEF	MCY	2.24	1.99
tblVehicleEF	MCY	2.1270e-003	2.1230e-003
tblVehicleEF	MCY	6.8900e-004	6.1100e-004
tblVehicleEF	MCY	0.82	0.83

tblVehicleEF	MCY	0.72	0.72
tblVehicleEF	MCY	0.48	0.49
tblVehicleEF	MCY	2.84	2.86
tblVehicleEF	MCY	0.62	0.57
tblVehicleEF	MCY	2.44	2.16
tblVehicleEF	MCY	0.45	0.34
tblVehicleEF	MCY	0.14	0.26
tblVehicleEF	MCY	18.71	19.91
tblVehicleEF	MCY	8.92	9.10
tblVehicleEF	MCY	173.82	214.56
tblVehicleEF	MCY	45.53	61.71
tblVehicleEF	MCY	1.02	1.17
tblVehicleEF	MCY	0.29	0.27
tblVehicleEF	MCY	2.0990e-003	2.0530e-003
tblVehicleEF	MCY	3.9180e-003	3.1710e-003
tblVehicleEF	MCY	1.9630e-003	1.9200e-003
tblVehicleEF	MCY	3.6930e-003	2.9860e-003
tblVehicleEF	MCY	2.28	0.83
tblVehicleEF	MCY	0.94	0.72
tblVehicleEF	MCY	1.36	0.49
tblVehicleEF	MCY	2.21	2.32
tblVehicleEF	MCY	0.58	0.57
tblVehicleEF	MCY	1.86	1.99
tblVehicleEF	MCY	2.1090e-003	2.1230e-003
tblVehicleEF	MCY	6.5500e-004	6.1100e-004
tblVehicleEF	MCY	2.28	0.83
tblVehicleEF	MCY	0.94	0.72
tblVehicleEF	MCY	1.36	0.49
tblVehicleEF	MCY	2.73	2.86
tblVehicleEF	MCY	0.58	0.57

tblVehicleEF	MCY	2.02	2.16
tblVehicleEF	MCY	0.48	0.34
tblVehicleEF	MCY	0.19	0.26
tblVehicleEF	MCY	21.26	19.91
tblVehicleEF	MCY	11.67	9.10
tblVehicleEF	MCY	173.82	214.56
tblVehicleEF	MCY	45.53	61.71
tblVehicleEF	MCY	1.25	1.17
tblVehicleEF	MCY	0.34	0.27
tblVehicleEF	MCY	2.0990e-003	2.0530e-003
tblVehicleEF	MCY	3.9180e-003	3.1710e-003
tblVehicleEF	MCY	1.9630e-003	1.9200e-003
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tblVehicleEF	MCY	0.27	0.83
tblVehicleEF	MCY	0.86	0.72
tblVehicleEF	MCY	0.17	0.49
tblVehicleEF	MCY	2.39	2.32
tblVehicleEF	MCY	0.73	0.57
tblVehicleEF	MCY	2.59	1.99
tblVehicleEF	MCY	2.1560e-003	2.1230e-003
tblVehicleEF	MCY	7.2300e-004	6.1100e-004
tblVehicleEF	MCY	0.27	0.83
tblVehicleEF	MCY	0.86	0.72
tblVehicleEF	MCY	0.17	0.49
tblVehicleEF	MCY	2.96	2.86
tblVehicleEF	MCY	0.73	0.57
tblVehicleEF	MCY	2.82	2.16
tblVehicleEF	MDV	8.9950e-003	3.8140e-003
tblVehicleEF	MDV	0.01	0.08
tblVehicleEF	MDV	1.00	0.83

tblVehicleEF	MDV	2.69	3.17
tblVehicleEF	MDV	450.81	383.60
tblVehicleEF	MDV	101.77	81.60
tblVehicleEF	MDV	0.12	0.08
tblVehicleEF	MDV	0.23	0.33
tblVehicleEF	MDV	1.8230e-003	1.5450e-003
tblVehicleEF	MDV	2.4650e-003	1.9120e-003
tblVehicleEF	MDV	1.6800e-003	1.4250e-003
tblVehicleEF	MDV	2.2670e-003	1.7580e-003
tblVehicleEF	MDV	0.06	0.07
tblVehicleEF	MDV	0.16	0.14
tblVehicleEF	MDV	0.06	0.07
tblVehicleEF	MDV	0.02	0.02
tblVehicleEF	MDV	0.10	0.06
tblVehicleEF	MDV	0.20	0.39
tblVehicleEF	MDV	4.5120e-003	3.7760e-003
tblVehicleEF	MDV	1.0650e-003	8.0400e-004
tblVehicleEF	MDV	0.06	0.07
tblVehicleEF	MDV	0.16	0.14
tblVehicleEF	MDV	0.06	0.07
tblVehicleEF	MDV	0.03	0.02
tblVehicleEF	MDV	0.10	0.06
tblVehicleEF	MDV	0.22	0.42
tblVehicleEF	MDV	9.9870e-003	3.8140e-003
tblVehicleEF	MDV	0.01	0.08
tblVehicleEF	MDV	1.17	0.83
tblVehicleEF	MDV	2.10	3.17
tblVehicleEF	MDV	484.48	383.60
tblVehicleEF	MDV	101.77	81.60
tblVehicleEF	MDV	0.11	0.08

tblVehicleEF	MDV	0.21	0.33
tblVehicleEF	MDV	1.8230e-003	1.5450e-003
tblVehicleEF	MDV	2.4650e-003	1.9120e-003
tblVehicleEF	MDV	1.6800e-003	1.4250e-003
tblVehicleEF	MDV	2.2670e-003	1.7580e-003
tblVehicleEF	MDV	0.13	0.07
tblVehicleEF	MDV	0.18	0.14
tblVehicleEF	MDV	0.11	0.07
tblVehicleEF	MDV	0.03	0.02
tblVehicleEF	MDV	0.09	0.06
tblVehicleEF	MDV	0.17	0.39
tblVehicleEF	MDV	4.8510e-003	3.7760e-003
tblVehicleEF	MDV	1.0540e-003	8.0400e-004
tblVehicleEF	MDV	0.13	0.07
tblVehicleEF	MDV	0.18	0.14
tblVehicleEF	MDV	0.11	0.07
tblVehicleEF	MDV	0.04	0.02
tblVehicleEF	MDV	0.09	0.06
tblVehicleEF	MDV	0.18	0.42
tblVehicleEF	MDV	8.8030e-003	3.8140e-003
tblVehicleEF	MDV	0.02	0.08
tblVehicleEF	MDV	0.99	0.83
tblVehicleEF	MDV	3.15	3.17
tblVehicleEF	MDV	446.68	383.60
tblVehicleEF	MDV	101.77	81.60
tblVehicleEF	MDV	0.14	0.08
tblVehicleEF	MDV	0.25	0.33
tblVehicleEF	MDV	1.8230e-003	1.5450e-003
tblVehicleEF	MDV	2.4650e-003	1.9120e-003
tblVehicleEF	MDV	1.6800e-003	1.4250e-003

tblVehicleEF	MDV	2.2670e-003	1.7580e-003
tblVehicleEF	MDV	0.03	0.07
tblVehicleEF	MDV	0.17	0.14
tblVehicleEF	MDV	0.03	0.07
tblVehicleEF	MDV	0.02	0.02
tblVehicleEF	MDV	0.12	0.06
tblVehicleEF	MDV	0.23	0.39
tblVehicleEF	MDV	4.4710e-003	3.7760e-003
tblVehicleEF	MDV	1.0730e-003	8.0400e-004
tblVehicleEF	MDV	0.03	0.07
tblVehicleEF	MDV	0.17	0.14
tblVehicleEF	MDV	0.03	0.07
tblVehicleEF	MDV	0.03	0.02
tblVehicleEF	MDV	0.12	0.06
tblVehicleEF	MDV	0.25	0.42
tblVehicleEF	MH	0.03	0.01
tblVehicleEF	MH	0.02	0.02
tblVehicleEF	MH	1.89	1.04
tblVehicleEF	MH	5.50	2.10
tblVehicleEF	MH	1,212.10	1,530.69
tblVehicleEF	MH	58.61	18.46
tblVehicleEF	MH	1.30	1.40
tblVehicleEF	MH	0.81	0.24
tblVehicleEF	MH	0.01	0.01
tblVehicleEF	MH	0.02	0.03
tblVehicleEF	MH	1.0950e-003	2.6400e-004
tblVehicleEF	MH	3.2210e-003	3.2800e-003
tblVehicleEF	MH	0.02	0.02
tblVehicleEF	MH	1.0070e-003	2.4200e-004
tblVehicleEF	MH	0.72	0.62

tblVehicleEF	MH	0.07	0.06
tblVehicleEF	MH	0.27	0.23
tblVehicleEF	MH	0.09	0.07
tblVehicleEF	MH	0.02	0.01
tblVehicleEF	MH	0.32	0.10
tblVehicleEF	MH	0.01	0.02
tblVehicleEF	MH	6.8200e-004	1.8300e-004
tblVehicleEF	MH	0.72	0.62
tblVehicleEF	MH	0.07	0.06
tblVehicleEF	MH	0.27	0.23
tblVehicleEF	MH	0.12	0.09
tblVehicleEF	MH	0.02	0.01
tblVehicleEF	MH	0.35	0.10
tblVehicleEF	MH	0.03	0.01
tblVehicleEF	MH	0.02	0.02
tblVehicleEF	MH	1.98	1.04
tblVehicleEF	MH	4.97	2.10
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tblVehicleEF	MH	58.61	18.46
tblVehicleEF	MH	1.22	1.40
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tblVehicleEF	MH	0.02	0.03
tblVehicleEF	MH	1.0950e-003	2.6400e-004
tblVehicleEF	MH	3.2210e-003	3.2800e-003
tblVehicleEF	MH	0.02	0.02
tblVehicleEF	MH	1.0070e-003	2.4200e-004
tblVehicleEF	MH	1.70	0.62
tblVehicleEF	MH	0.07	0.06
tblVehicleEF	MH	0.58	0.23

tblVehicleEF	MH	0.09	0.07
tblVehicleEF	MH	0.02	0.01
tblVehicleEF	MH	0.29	0.10
tblVehicleEF	MH	0.01	0.02
tblVehicleEF	MH	6.7300e-004	1.8300e-004
tblVehicleEF	MH	1.70	0.62
tblVehicleEF	MH	0.07	0.06
tblVehicleEF	MH	0.58	0.23
tblVehicleEF	MH	0.13	0.09
tblVehicleEF	MH	0.02	0.01
tblVehicleEF	MH	0.32	0.10
tblVehicleEF	MH	0.03	0.01
tblVehicleEF	MH	0.02	0.02
tblVehicleEF	MH	1.83	1.04
tblVehicleEF	MH	5.97	2.10
tblVehicleEF	MH	1,212.10	1,530.69
tblVehicleEF	MH	58.61	18.46
tblVehicleEF	MH	1.34	1.40
tblVehicleEF	MH	0.86	0.24
tblVehicleEF	MH	0.01	0.01
tblVehicleEF	MH	0.02	0.03
tblVehicleEF	MH	1.0950e-003	2.6400e-004
tblVehicleEF	MH	3.2210e-003	3.2800e-003
tblVehicleEF	MH	0.02	0.02
tblVehicleEF	MH	1.0070e-003	2.4200e-004
tblVehicleEF	MH	0.30	0.62
tblVehicleEF	MH	0.08	0.06
tblVehicleEF	MH	0.13	0.23
tblVehicleEF	MH	0.09	0.07
tblVehicleEF	MH	0.02	0.01

tblVehicleEF	MH	0.33	0.10
tblVehicleEF	MH	0.01	0.02
tblVehicleEF	MH	6.9000e-004	1.8300e-004
tblVehicleEF	MH	0.30	0.62
tblVehicleEF	MH	0.08	0.06
tblVehicleEF	MH	0.13	0.23
tblVehicleEF	MH	0.12	0.09
tblVehicleEF	MH	0.02	0.01
tblVehicleEF	MH	0.37	0.10
tblVehicleEF	MHD	0.02	3.2940e-003
tblVehicleEF	MHD	4.1950e-003	1.8320e-003
tblVehicleEF	MHD	0.05	8.8050e-003
tblVehicleEF	MHD	0.34	0.39
tblVehicleEF	MHD	0.34	0.25
tblVehicleEF	MHD	5.44	1.04
tblVehicleEF	MHD	147.26	78.36
tblVehicleEF	MHD	1,186.94	1,080.49
tblVehicleEF	MHD	54.88	8.65
tblVehicleEF	MHD	0.41	0.47
tblVehicleEF	MHD	1.11	1.43
tblVehicleEF	MHD	11.39	1.74
tblVehicleEF	MHD	1.3600e-004	4.3600e-004
tblVehicleEF	MHD	3.1130e-003	6.8310e-003
tblVehicleEF	MHD	8.1000e-004	1.0600e-004
tblVehicleEF	MHD	1.3100e-004	4.1700e-004
tblVehicleEF	MHD	2.9730e-003	6.5300e-003
tblVehicleEF	MHD	7.4500e-004	9.7000e-005
tblVehicleEF	MHD	7.7400e-004	3.5400e-004
tblVehicleEF	MHD	0.04	0.02
tblVehicleEF	MHD	0.02	0.02

tblVehicleEF	MHD	4.3800e-004	1.9800e-004
tblVehicleEF	MHD	0.04	0.02
tblVehicleEF	MHD	0.02	0.02
tblVehicleEF	MHD	0.32	0.05
tblVehicleEF	MHD	1.4160e-003	7.4300e-004
tblVehicleEF	MHD	0.01	0.01
tblVehicleEF	MHD	6.4400e-004	8.6000e-005
tblVehicleEF	MHD	7.7400e-004	3.5400e-004
tblVehicleEF	MHD	0.04	0.02
tblVehicleEF	MHD	0.03	0.02
tblVehicleEF	MHD	4.3800e-004	1.9800e-004
tblVehicleEF	MHD	0.05	0.02
tblVehicleEF	MHD	0.02	0.02
tblVehicleEF	MHD	0.36	0.05
tblVehicleEF	MHD	0.01	3.2940e-003
tblVehicleEF	MHD	4.2860e-003	1.8320e-003
tblVehicleEF	MHD	0.05	8.8050e-003
tblVehicleEF	MHD	0.23	0.39
tblVehicleEF	MHD	0.35	0.25
tblVehicleEF	MHD	4.97	1.04
tblVehicleEF	MHD	156.13	78.36
tblVehicleEF	MHD	1,186.94	1,080.49
tblVehicleEF	MHD	54.88	8.65
tblVehicleEF	MHD	0.43	0.47
tblVehicleEF	MHD	1.06	1.43
tblVehicleEF	MHD	11.33	1.74
tblVehicleEF	MHD	1.1500e-004	4.3600e-004
tblVehicleEF	MHD	3.1130e-003	6.8310e-003
tblVehicleEF	MHD	8.1000e-004	1.0600e-004
tblVehicleEF	MHD	1.1000e-004	4.1700e-004

tblVehicleEF	MHD	2.9730e-003	6.5300e-003
tblVehicleEF	MHD	7.4500e-004	9.7000e-005
tblVehicleEF	MHD	1.8610e-003	3.5400e-004
tblVehicleEF	MHD	0.04	0.02
tblVehicleEF	MHD	0.02	0.02
tblVehicleEF	MHD	9.6300e-004	1.9800e-004
tblVehicleEF	MHD	0.04	0.02
tblVehicleEF	MHD	0.02	0.02
tblVehicleEF	MHD	0.30	0.05
tblVehicleEF	MHD	1.5000e-003	7.4300e-004
tblVehicleEF	MHD	0.01	0.01
tblVehicleEF	MHD	6.3600e-004	8.6000e-005
tblVehicleEF	MHD	1.8610e-003	3.5400e-004
tblVehicleEF	MHD	0.04	0.02
tblVehicleEF	MHD	0.03	0.02
tblVehicleEF	MHD	9.6300e-004	1.9800e-004
tblVehicleEF	MHD	0.05	0.02
tblVehicleEF	MHD	0.02	0.02
tblVehicleEF	MHD	0.33	0.05
tblVehicleEF	MHD	0.02	3.2940e-003
tblVehicleEF	MHD	4.1290e-003	1.8320e-003
tblVehicleEF	MHD	0.05	8.8050e-003
tblVehicleEF	MHD	0.44	0.39
tblVehicleEF	MHD	0.34	0.25
tblVehicleEF	MHD	5.85	1.04
tblVehicleEF	MHD	135.34	78.36
tblVehicleEF	MHD	1,186.94	1,080.49
tblVehicleEF	MHD	54.88	8.65
tblVehicleEF	MHD	0.40	0.47
tblVehicleEF	MHD	1.13	1.43

tblVehicleEF	MHD	11.43	1.74
tblVehicleEF	MHD	1.6600e-004	4.3600e-004
tblVehicleEF	MHD	3.1130e-003	6.8310e-003
tblVehicleEF	MHD	8.1000e-004	1.0600e-004
tblVehicleEF	MHD	1.5900e-004	4.1700e-004
tblVehicleEF	MHD	2.9730e-003	6.5300e-003
tblVehicleEF	MHD	7.4500e-004	9.7000e-005
tblVehicleEF	MHD	3.4900e-004	3.5400e-004
tblVehicleEF	MHD	0.04	0.02
tblVehicleEF	MHD	0.02	0.02
tblVehicleEF	MHD	2.0200e-004	1.9800e-004
tblVehicleEF	MHD	0.04	0.02
tblVehicleEF	MHD	0.02	0.02
tblVehicleEF	MHD	0.34	0.05
tblVehicleEF	MHD	1.3040e-003	7.4300e-004
tblVehicleEF	MHD	0.01	0.01
tblVehicleEF	MHD	6.5100e-004	8.6000e-005
tblVehicleEF	MHD	3.4900e-004	3.5400e-004
tblVehicleEF	MHD	0.04	0.02
tblVehicleEF	MHD	0.03	0.02
tblVehicleEF	MHD	2.0200e-004	1.9800e-004
tblVehicleEF	MHD	0.05	0.02
tblVehicleEF	MHD	0.02	0.02
tblVehicleEF	MHD	0.37	0.05
tblVehicleEF	OBUS	0.01	7.5890e-003
tblVehicleEF	OBUS	6.9470e-003	5.1890e-003
tblVehicleEF	OBUS	0.03	0.02
tblVehicleEF	OBUS	0.24	0.60
tblVehicleEF	OBUS	0.49	0.60
tblVehicleEF	OBUS	5.33	2.13

tblVehicleEF	OBUS	115.76	93.49
tblVehicleEF	OBUS	1,297.91	1,388.28
tblVehicleEF	OBUS	65.67	16.96
tblVehicleEF	OBUS	0.25	0.37
tblVehicleEF	OBUS	0.94	1.38
tblVehicleEF	OBUS	3.16	1.00
tblVehicleEF	OBUS	2.3000e-005	1.2300e-004
tblVehicleEF	OBUS	2.7570e-003	7.2230e-003
tblVehicleEF	OBUS	8.0600e-004	1.6200e-004
tblVehicleEF	OBUS	2.2000e-005	1.1800e-004
tblVehicleEF	OBUS	2.6210e-003	6.8970e-003
tblVehicleEF	OBUS	7.4100e-004	1.4900e-004
tblVehicleEF	OBUS	1.1170e-003	1.2080e-003
tblVehicleEF	OBUS	0.02	0.02
tblVehicleEF	OBUS	0.03	0.05
tblVehicleEF	OBUS	5.2800e-004	5.6800e-004
tblVehicleEF	OBUS	0.05	0.03
tblVehicleEF	OBUS	0.03	0.05
tblVehicleEF	OBUS	0.33	0.10
tblVehicleEF	OBUS	1.1160e-003	8.8900e-004
tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	7.5000e-004	1.6800e-004
tblVehicleEF	OBUS	1.1170e-003	1.2080e-003
tblVehicleEF	OBUS	0.02	0.02
tblVehicleEF	OBUS	0.05	0.06
tblVehicleEF	OBUS	5.2800e-004	5.6800e-004
tblVehicleEF	OBUS	0.06	0.04
tblVehicleEF	OBUS	0.03	0.05
tblVehicleEF	OBUS	0.36	0.11
tblVehicleEF	OBUS	0.01	7.5890e-003

tblVehicleEF	OBUS	7.1510e-003	5.1890e-003
tblVehicleEF	OBUS	0.03	0.02
tblVehicleEF	OBUS	0.24	0.60
tblVehicleEF	OBUS	0.50	0.60
tblVehicleEF	OBUS	4.84	2.13
tblVehicleEF	OBUS	121.68	93.49
tblVehicleEF	OBUS	1,297.91	1,388.28
tblVehicleEF	OBUS	65.67	16.96
tblVehicleEF	OBUS	0.26	0.37
tblVehicleEF	OBUS	0.90	1.38
tblVehicleEF	OBUS	3.09	1.00
tblVehicleEF	OBUS	1.9000e-005	1.2300e-004
tblVehicleEF	OBUS	2.7570e-003	7.2230e-003
tblVehicleEF	OBUS	8.0600e-004	1.6200e-004
tblVehicleEF	OBUS	1.9000e-005	1.1800e-004
tblVehicleEF	OBUS	2.6210e-003	6.8970e-003
tblVehicleEF	OBUS	7.4100e-004	1.4900e-004
tblVehicleEF	OBUS	2.5590e-003	1.2080e-003
tblVehicleEF	OBUS	0.02	0.02
tblVehicleEF	OBUS	0.03	0.05
tblVehicleEF	OBUS	1.1240e-003	5.6800e-004
tblVehicleEF	OBUS	0.05	0.03
tblVehicleEF	OBUS	0.03	0.05
tblVehicleEF	OBUS	0.31	0.10
tblVehicleEF	OBUS	1.1720e-003	8.8900e-004
tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	7.4200e-004	1.6800e-004
tblVehicleEF	OBUS	2.5590e-003	1.2080e-003
tblVehicleEF	OBUS	0.02	0.02
tblVehicleEF	OBUS	0.04	0.06

tblVehicleEF	OBUS	1.1240e-003	5.6800e-004
tblVehicleEF	OBUS	0.06	0.04
tblVehicleEF	OBUS	0.03	0.05
tblVehicleEF	OBUS	0.34	0.11
tblVehicleEF	OBUS	0.01	7.5890e-003
tblVehicleEF	OBUS	6.8010e-003	5.1890e-003
tblVehicleEF	OBUS	0.03	0.02
tblVehicleEF	OBUS	0.25	0.60
tblVehicleEF	OBUS	0.48	0.60
tblVehicleEF	OBUS	5.73	2.13
tblVehicleEF	OBUS	107.58	93.49
tblVehicleEF	OBUS	1,297.91	1,388.28
tblVehicleEF	OBUS	65.67	16.96
tblVehicleEF	OBUS	0.24	0.37
tblVehicleEF	OBUS	0.96	1.38
tblVehicleEF	OBUS	3.21	1.00
tblVehicleEF	OBUS	2.8000e-005	1.2300e-004
tblVehicleEF	OBUS	2.7570e-003	7.2230e-003
tblVehicleEF	OBUS	8.0600e-004	1.6200e-004
tblVehicleEF	OBUS	2.7000e-005	1.1800e-004
tblVehicleEF	OBUS	2.6210e-003	6.8970e-003
tblVehicleEF	OBUS	7.4100e-004	1.4900e-004
tblVehicleEF	OBUS	5.7600e-004	1.2080e-003
tblVehicleEF	OBUS	0.02	0.02
tblVehicleEF	OBUS	0.03	0.05
tblVehicleEF	OBUS	2.5900e-004	5.6800e-004
tblVehicleEF	OBUS	0.05	0.03
tblVehicleEF	OBUS	0.03	0.05
tblVehicleEF	OBUS	0.35	0.10
tblVehicleEF	OBUS	1.0380e-003	8.8900e-004

tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	7.5700e-004	1.6800e-004
tblVehicleEF	OBUS	5.7600e-004	1.2080e-003
tblVehicleEF	OBUS	0.02	0.02
tblVehicleEF	OBUS	0.05	0.06
tblVehicleEF	OBUS	2.5900e-004	5.6800e-004
tblVehicleEF	OBUS	0.06	0.04
tblVehicleEF	OBUS	0.03	0.05
tblVehicleEF	OBUS	0.38	0.11
tblVehicleEF	SBUS	0.84	0.04
tblVehicleEF	SBUS	0.01	5.3460e-003
tblVehicleEF	SBUS	0.07	4.0100e-003
tblVehicleEF	SBUS	5.73	2.01
tblVehicleEF	SBUS	0.70	0.43
tblVehicleEF	SBUS	5.89	0.59
tblVehicleEF	SBUS	1,246.37	336.62
tblVehicleEF	SBUS	1,129.50	1,038.33
tblVehicleEF	SBUS	37.26	3.37
tblVehicleEF	SBUS	10.76	3.15
tblVehicleEF	SBUS	4.30	4.24
tblVehicleEF	SBUS	14.96	1.01
tblVehicleEF	SBUS	0.01	3.1280e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.02	0.03
tblVehicleEF	SBUS	6.2200e-004	4.3000e-005
tblVehicleEF	SBUS	9.8380e-003	2.9930e-003
tblVehicleEF	SBUS	0.02	0.02
tblVehicleEF	SBUS	5.7200e-004	4.0000e-005
tblVehicleEF	SBUS	1.8020e-003	3.6100e-004
tblVehicleEF	SBUS	0.02	3.6730e-003

tblVehicleEF	SBUS	0.68	0.21
tblVehicleEF	SBUS	8.3000e-004	1.5900e-004
tblVehicleEF	SBUS	0.11	0.07
tblVehicleEF	SBUS	8.8630e-003	7.4290e-003
tblVehicleEF	SBUS	0.29	0.02
tblVehicleEF	SBUS	0.01	3.2000e-003
tblVehicleEF	SBUS	0.01	9.9030e-003
tblVehicleEF	SBUS	4.7400e-004	3.3000e-005
tblVehicleEF	SBUS	1.8020e-003	3.6100e-004
tblVehicleEF	SBUS	0.02	3.6730e-003
tblVehicleEF	SBUS	0.98	0.30
tblVehicleEF	SBUS	8.3000e-004	1.5900e-004
tblVehicleEF	SBUS	0.13	0.09
tblVehicleEF	SBUS	8.8630e-003	7.4290e-003
tblVehicleEF	SBUS	0.32	0.02
tblVehicleEF	SBUS	0.84	0.04
tblVehicleEF	SBUS	0.01	5.3460e-003
tblVehicleEF	SBUS	0.06	4.0100e-003
tblVehicleEF	SBUS	5.60	2.01
tblVehicleEF	SBUS	0.71	0.43
tblVehicleEF	SBUS	4.32	0.59
tblVehicleEF	SBUS	1,309.51	336.62
tblVehicleEF	SBUS	1,129.50	1,038.33
tblVehicleEF	SBUS	37.26	3.37
tblVehicleEF	SBUS	11.11	3.15
tblVehicleEF	SBUS	4.12	4.24
tblVehicleEF	SBUS	14.92	1.01
tblVehicleEF	SBUS	8.6690e-003	3.1280e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.02	0.03

tblVehicleEF	SBUS	6.2200e-004	4.3000e-005
tblVehicleEF	SBUS	8.2940e-003	2.9930e-003
tblVehicleEF	SBUS	0.02	0.02
tblVehicleEF	SBUS	5.7200e-004	4.0000e-005
tblVehicleEF	SBUS	4.0760e-003	3.6100e-004
tblVehicleEF	SBUS	0.02	3.6730e-003
tblVehicleEF	SBUS	0.68	0.21
tblVehicleEF	SBUS	1.7660e-003	1.5900e-004
tblVehicleEF	SBUS	0.11	0.07
tblVehicleEF	SBUS	7.5580e-003	7.4290e-003
tblVehicleEF	SBUS	0.24	0.02
tblVehicleEF	SBUS	0.01	3.2000e-003
tblVehicleEF	SBUS	0.01	9.9030e-003
tblVehicleEF	SBUS	4.4800e-004	3.3000e-005
tblVehicleEF	SBUS	4.0760e-003	3.6100e-004
tblVehicleEF	SBUS	0.02	3.6730e-003
tblVehicleEF	SBUS	0.97	0.30
tblVehicleEF	SBUS	1.7660e-003	1.5900e-004
tblVehicleEF	SBUS	0.13	0.09
tblVehicleEF	SBUS	7.5580e-003	7.4290e-003
tblVehicleEF	SBUS	0.27	0.02
tblVehicleEF	SBUS	0.84	0.04
tblVehicleEF	SBUS	0.01	5.3460e-003
tblVehicleEF	SBUS	0.08	4.0100e-003
tblVehicleEF	SBUS	5.92	2.01
tblVehicleEF	SBUS	0.69	0.43
tblVehicleEF	SBUS	7.35	0.59
tblVehicleEF	SBUS	1,159.19	336.62
tblVehicleEF	SBUS	1,129.50	1,038.33
tblVehicleEF	SBUS	37.26	3.37

tblVehicleEF	SBUS	10.29	3.15
tblVehicleEF	SBUS	4.37	4.24
tblVehicleEF	SBUS	14.98	1.01
tblVehicleEF	SBUS	0.01	3.1280e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.02	0.03
tblVehicleEF	SBUS	6.2200e-004	4.3000e-005
tblVehicleEF	SBUS	0.01	2.9930e-003
tblVehicleEF	SBUS	0.02	0.02
tblVehicleEF	SBUS	5.7200e-004	4.0000e-005
tblVehicleEF	SBUS	9.4300e-004	3.6100e-004
tblVehicleEF	SBUS	0.02	3.6730e-003
tblVehicleEF	SBUS	0.69	0.21
tblVehicleEF	SBUS	4.1600e-004	1.5900e-004
tblVehicleEF	SBUS	0.11	0.07
tblVehicleEF	SBUS	0.01	7.4290e-003
tblVehicleEF	SBUS	0.33	0.02
tblVehicleEF	SBUS	0.01	3.2000e-003
tblVehicleEF	SBUS	0.01	9.9030e-003
tblVehicleEF	SBUS	4.9800e-004	3.3000e-005
tblVehicleEF	SBUS	9.4300e-004	3.6100e-004
tblVehicleEF	SBUS	0.02	3.6730e-003
tblVehicleEF	SBUS	0.98	0.30
tblVehicleEF	SBUS	4.1600e-004	1.5900e-004
tblVehicleEF	SBUS	0.13	0.09
tblVehicleEF	SBUS	0.01	7.4290e-003
tblVehicleEF	SBUS	0.36	0.02
tblVehicleEF	UBUS	0.29	1.20
tblVehicleEF	UBUS	0.05	5.8740e-003
tblVehicleEF	UBUS	5.44	8.80

tblVehicleEF	UBUS	8.46	0.42
tblVehicleEF	UBUS	2,112.65	1,667.55
tblVehicleEF	UBUS	98.35	4.70
tblVehicleEF	UBUS	10.87	1.17
tblVehicleEF	UBUS	15.16	0.05
tblVehicleEF	UBUS	0.61	0.07
tblVehicleEF	UBUS	0.01	0.03
tblVehicleEF	UBUS	0.22	5.5610e-003
tblVehicleEF	UBUS	1.0370e-003	3.2000e-005
tblVehicleEF	UBUS	0.26	0.03
tblVehicleEF	UBUS	3.0000e-003	7.8890e-003
tblVehicleEF	UBUS	0.21	5.3180e-003
tblVehicleEF	UBUS	9.5300e-004	2.9000e-005
tblVehicleEF	UBUS	2.7780e-003	2.5600e-004
tblVehicleEF	UBUS	0.06	3.8930e-003
tblVehicleEF	UBUS	1.4530e-003	1.6400e-004
tblVehicleEF	UBUS	0.66	0.02
tblVehicleEF	UBUS	0.01	1.0090e-003
tblVehicleEF	UBUS	0.65	0.03
tblVehicleEF	UBUS	0.02	0.01
tblVehicleEF	UBUS	1.1360e-003	4.6000e-005
tblVehicleEF	UBUS	2.7780e-003	2.5600e-004
tblVehicleEF	UBUS	0.06	3.8930e-003
tblVehicleEF	UBUS	1.4530e-003	1.6400e-004
tblVehicleEF	UBUS	1.00	1.23
tblVehicleEF	UBUS	0.01	1.0090e-003
tblVehicleEF	UBUS	0.71	0.03
tblVehicleEF	UBUS	0.29	1.20
tblVehicleEF	UBUS	0.04	5.8740e-003
tblVehicleEF	UBUS	5.50	8.80

tblVehicleEF	UBUS	6.66	0.42
tblVehicleEF	UBUS	2,112.65	1,667.55
tblVehicleEF	UBUS	98.35	4.70
tblVehicleEF	UBUS	10.41	1.17
tblVehicleEF	UBUS	15.08	0.05
tblVehicleEF	UBUS	0.61	0.07
tblVehicleEF	UBUS	0.01	0.03
tblVehicleEF	UBUS	0.22	5.5610e-003
tblVehicleEF	UBUS	1.0370e-003	3.2000e-005
tblVehicleEF	UBUS	0.26	0.03
tblVehicleEF	UBUS	3.0000e-003	7.8890e-003
tblVehicleEF	UBUS	0.21	5.3180e-003
tblVehicleEF	UBUS	9.5300e-004	2.9000e-005
tblVehicleEF	UBUS	6.6510e-003	2.5600e-004
tblVehicleEF	UBUS	0.06	3.8930e-003
tblVehicleEF	UBUS	3.1820e-003	1.6400e-004
tblVehicleEF	UBUS	0.67	0.02
tblVehicleEF	UBUS	0.01	1.0090e-003
tblVehicleEF	UBUS	0.56	0.03
tblVehicleEF	UBUS	0.02	0.01
tblVehicleEF	UBUS	1.1050e-003	4.6000e-005
tblVehicleEF	UBUS	6.6510e-003	2.5600e-004
tblVehicleEF	UBUS	0.06	3.8930e-003
tblVehicleEF	UBUS	3.1820e-003	1.6400e-004
tblVehicleEF	UBUS	1.02	1.23
tblVehicleEF	UBUS	0.01	1.0090e-003
tblVehicleEF	UBUS	0.61	0.03
tblVehicleEF	UBUS	0.28	1.20
tblVehicleEF	UBUS	0.05	5.8740e-003
tblVehicleEF	UBUS	5.40	8.80

tblVehicleEF	UBUS	10.09	0.42
tblVehicleEF	UBUS	2,112.65	1,667.55
tblVehicleEF	UBUS	98.35	4.70
tblVehicleEF	UBUS	11.05	1.17
tblVehicleEF	UBUS	15.22	0.05
tblVehicleEF	UBUS	0.61	0.07
tblVehicleEF	UBUS	0.01	0.03
tblVehicleEF	UBUS	0.22	5.5610e-003
tblVehicleEF	UBUS	1.0370e-003	3.2000e-005
tblVehicleEF	UBUS	0.26	0.03
tblVehicleEF	UBUS	3.0000e-003	7.8890e-003
tblVehicleEF	UBUS	0.21	5.3180e-003
tblVehicleEF	UBUS	9.5300e-004	2.9000e-005
tblVehicleEF	UBUS	1.2420e-003	2.5600e-004
tblVehicleEF	UBUS	0.07	3.8930e-003
tblVehicleEF	UBUS	6.5300e-004	1.6400e-004
tblVehicleEF	UBUS	0.65	0.02
tblVehicleEF	UBUS	0.02	1.0090e-003
tblVehicleEF	UBUS	0.72	0.03
tblVehicleEF	UBUS	0.02	0.01
tblVehicleEF	UBUS	1.1640e-003	4.6000e-005
tblVehicleEF	UBUS	1.2420e-003	2.5600e-004
tblVehicleEF	UBUS	0.07	3.8930e-003
tblVehicleEF	UBUS	6.5300e-004	1.6400e-004
tblVehicleEF	UBUS	0.99	1.23
tblVehicleEF	UBUS	0.02	1.0090e-003
tblVehicleEF	UBUS	0.79	0.03
tblVehicleTrips	ST_TR	722.03	235.49
tblVehicleTrips	ST_TR	158.37	64.00
tblVehicleTrips	ST_TR	177.59	68.34

tblVehicleTrips	SU_TR	542.72	235.49
tblVehicleTrips	SU_TR	131.84	64.00
tblVehicleTrips	SU_TR	166.44	68.34
tblVehicleTrips	WD_TR	496.12	235.49
tblVehicleTrips	WD_TR	127.15	64.00
tblVehicleTrips	WD_TR	102.24	68.34

2.0 Emissions Summary

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.1619	2.0000e-005	1.9700e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	3.8300e-003	3.8300e-003	1.0000e-005	0.0000	4.0800e-003
Energy	8.2600e-003	0.0751	0.0631	4.5000e-004		5.7100e-003	5.7100e-003		5.7100e-003	5.7100e-003	0.0000	234.1150	234.1150	0.0197	5.2500e-003	236.1720
Mobile	0.6490	1.0830	5.2638	0.0119	1.1058	0.0102	1.1161	0.2962	9.5700e-003	0.3058	0.0000	1,109.4247	1,109.4247	0.0779	0.0000	1,111.3716
Waste						0.0000	0.0000		0.0000	0.0000	46.8726	0.0000	46.8726	2.7701	0.0000	116.1250
Water						0.0000	0.0000		0.0000	0.0000	1.6794	3.2504	4.9299	0.1729	4.1500e-003	10.4895
Total	**0.8192**	**1.1581**	**5.3288**	**0.0123**	**1.1058**	**0.0160**	**1.1218**	**0.2962**	**0.0153**	**0.3115**	**48.5521**	**1,346.7940**	**1,395.3461**	**3.0406**	**9.4000e-003**	**1,474.1622**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.1619	2.0000e-005	1.9700e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	3.8300e-003	3.8300e-003	1.0000e-005	0.0000	4.0800e-003
Energy	8.2600e-003	0.0751	0.0631	4.5000e-004		5.7100e-003	5.7100e-003		5.7100e-003	5.7100e-003	0.0000	234.1150	234.1150	0.0197	5.2500e-003	236.1720
Mobile	0.6260	0.9293	4.6059	9.0200e-003	0.8172	8.0800e-003	0.8253	0.2189	7.5400e-003	0.2265	0.0000	841.5090	841.5090	0.0718	0.0000	843.3038
Waste						0.0000	0.0000		0.0000	0.0000	46.8726	0.0000	46.8726	2.7701	0.0000	116.1250
Water						0.0000	0.0000		0.0000	0.0000	1.6794	3.2504	4.9299	0.1729	4.1500e-003	10.4895
Total	**0.7961**	**1.0044**	**4.6709**	**9.4700e-003**	**0.8172**	**0.0138**	**0.8310**	**0.2189**	**0.0133**	**0.2322**	**48.5521**	**1,078.8783**	**1,127.4303**	**3.0345**	**9.4000e-003**	**1,206.0944**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**2.81**	**13.27**	**12.35**	**23.26**	**26.10**	**13.53**	**25.92**	**26.10**	**13.28**	**25.47**	**0.00**	**19.89**	**19.20**	**0.20**	**0.00**	**18.18**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Increase Transit Accessibility

Improve Pedestrian Network

	ROG	NOx	CO	SO2	Fugitive 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	0.6260	0.9293	4.6059	9.0200e-003	0.8172	8.0800e-003	0.8253	0.2189	7.5400e-003	0.2265	0.0000	841.5090	841.5090	0.0718	0.0000	843.3038

Unmitigated	0.6490	1.0830	5.2638	0.0119	1.1058	0.0102	1.1161	0.2962	9.5700e-003	0.3058	0.0000	1,109.4247	1,109.4247	0.0779	0.0000	1,111.3716

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Fast Food Restaurant with Drive Thru	430.95	430.95	430.95	402,644	297,565
High Turnover (Sit Down Restaurant)	224.00	224.00	224.00	259,899	192,073
Parking Lot	0.00	0.00	0.00		
Supermarket	2,037.90	2,037.90	2037.90	2,317,995	1,713,063
Total	2,692.85	2,692.85	2,692.85	2,980,538	2,202,701

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Fast Food Restaurant with Drive Thru	9.50	7.30	7.30	2.20	78.80	19.00	29	21	50
High Turnover (Sit Down Restaurant)	9.50	7.30	7.30	8.50	72.50	19.00	37	20	43
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Supermarket	9.50	7.30	7.30	6.50	74.50	19.00	34	30	36

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Fast Food Restaurant with Drive Thru	0.563460	0.055733	0.182630	0.114871	0.023581	0.005774	0.017880	0.025351	0.001779	0.001650	0.005676	0.000824	0.000791
High Turnover (Sit Down Restaurant)	0.563460	0.055733	0.182630	0.114871	0.023581	0.005774	0.017880	0.025351	0.001779	0.001650	0.005676	0.000824	0.000791
Parking Lot	0.563460	0.055733	0.182630	0.114871	0.023581	0.005774	0.017880	0.025351	0.001779	0.001650	0.005676	0.000824	0.000791
Supermarket	0.563460	0.055733	0.182630	0.114871	0.023581	0.005774	0.017880	0.025351	0.001779	0.001650	0.005676	0.000824	0.000791

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	152.3802	152.3802	0.0181	3.7500e-003	153.9515
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	152.3802	152.3802	0.0181	3.7500e-003	153.9515
NaturalGas Mitigated	8.2600e-003	0.0751	0.0631	4.5000e-004		5.7100e-003	5.7100e-003		5.7100e-003	5.7100e-003	0.0000	81.7348	81.7348	1.5700e-003	1.5000e-003	82.2205
NaturalGas Unmitigated	8.2600e-003	0.0751	0.0631	4.5000e-004		5.7100e-003	5.7100e-003		5.7100e-003	5.7100e-003	0.0000	81.7348	81.7348	1.5700e-003	1.5000e-003	82.2205

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					
Fast Food Restaurant with Drive Thru	346502	1.8700e-003	0.0170	0.0143	1.0000e-004		1.2900e-003	1.2900e-003		1.2900e-003	1.2900e-003	0.0000	18.4907	18.4907	3.5000e-004	3.4000e-004	18.6005
High Turnover (Sit Down Restaurant)	664160	3.5800e-003	0.0326	0.0274	2.0000e-004		2.4700e-003	2.4700e-003		2.4700e-003	2.4700e-003	0.0000	35.4421	35.4421	6.8000e-004	6.5000e-004	35.6527
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Supermarket	520990	2.8100e-003	0.0255	0.0215	1.5000e-004		1.9400e-003	1.9400e-003		1.9400e-003	1.9400e-003	0.0000	27.8020	27.8020	5.3000e-004	5.1000e-004	27.9672
Total		**8.2600e-003**	**0.0751**	**0.0631**	**4.5000e-004**		**5.7000e-003**	**5.7000e-003**		**5.7000e-003**	**5.7000e-003**	**0.0000**	**81.7348**	**81.7348**	**1.5600e-003**	**1.5000e-003**	**82.2205**

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					
Fast Food Restaurant with Drive Thru	346502	1.8700e-003	0.0170	0.0143	1.0000e-004		1.2900e-003	1.2900e-003		1.2900e-003	1.2900e-003	0.0000	18.4907	18.4907	3.5000e-004	3.4000e-004	18.6005
High Turnover (Sit Down Restaurant)	664160	3.5800e-003	0.0326	0.0274	2.0000e-004		2.4700e-003	2.4700e-003		2.4700e-003	2.4700e-003	0.0000	35.4421	35.4421	6.8000e-004	6.5000e-004	35.6527
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Supermarket	520990	2.8100e-003	0.0255	0.0215	1.5000e-004		1.9400e-003	1.9400e-003		1.9400e-003	1.9400e-003	0.0000	27.8020	27.8020	5.3000e-004	5.1000e-004	27.9672
Total		**8.2600e-003**	**0.0751**	**0.0631**	**4.5000e-004**		**5.7000e-003**	**5.7000e-003**		**5.7000e-003**	**5.7000e-003**	**0.0000**	**81.7348**	**81.7348**	**1.5600e-003**	**1.5000e-003**	**82.2205**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Fast Food Restaurant with Drive Thru	56971.2	6.2979	7.5000e-004	1.6000e-004	6.3628
High Turnover (Sit Down Restaurant)	109200	12.0715	1.4400e-003	3.0000e-004	12.1960
Parking Lot	25060	2.7703	3.3000e-004	7.0000e-005	2.7988
Supermarket	1.18721e+006	131.2406	0.0156	3.2300e-003	132.5938
Total		**152.3802**	**0.0181**	**3.7600e-003**	**153.9515**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e

Land Use	kWh/yr	MT/yr			
Fast Food Restaurant with Drive Thru	56971.2	6.2979	7.5000e-004	1.6000e-004	6.3628
High Turnover (Sit Down Restaurant)	109200	12.0715	1.4400e-003	3.0000e-004	12.1960
Parking Lot	25060	2.7703	3.3000e-004	7.0000e-005	2.7988
Supermarket	1.18721e+006	131.2406	0.0156	3.2300e-003	132.5938
Total		**152.3802**	**0.0181**	**3.7600e-003**	**153.9515**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.1619	2.0000e-005	1.9700e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	3.8300e-003	3.8300e-003	1.0000e-005	0.0000	4.0800e-003
Unmitigated	0.1619	2.0000e-005	1.9700e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	3.8300e-003	3.8300e-003	1.0000e-005	0.0000	4.0800e-003

6.2 Area by SubCategory

Unmitigated

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

SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0198					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.1419					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.8000e-004	2.0000e-005	1.9700e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	3.8300e-003	3.8300e-003	1.0000e-005	0.0000	4.0800e-003
Total	**0.1619**	**2.0000e-005**	**1.9700e-003**	**0.0000**		**1.0000e-005**	**1.0000e-005**		**1.0000e-005**	**1.0000e-005**	**0.0000**	**3.8300e-003**	**3.8300e-003**	**1.0000e-005**	**0.0000**	**4.0800e-003**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0198					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.1419					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.8000e-004	2.0000e-005	1.9700e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	3.8300e-003	3.8300e-003	1.0000e-005	0.0000	4.0800e-003
Total	**0.1619**	**2.0000e-005**	**1.9700e-003**	**0.0000**		**1.0000e-005**	**1.0000e-005**		**1.0000e-005**	**1.0000e-005**	**0.0000**	**3.8300e-003**	**3.8300e-003**	**1.0000e-005**	**0.0000**	**4.0800e-003**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			

Mitigated	4.9299	0.1729	4.1500e-003	10.4895
Unmitigated	4.9299	0.1729	4.1500e-003	10.4895

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Fast Food Restaurant with Drive Thru	0.555467 / 0.0354553	0.5222	0.0181	4.4000e-004	1.1056
High Turnover (Sit Down Restaurant)	1.06237 / 0.0678107	0.9987	0.0347	8.3000e-004	2.1146
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Supermarket	3.67586 / 0.113686	3.4089	0.1200	2.8800e-003	7.2693
Total		**4.9299**	**0.1729**	**4.1500e-003**	**10.4895**

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Fast Food Restaurant with Drive Thru	0.555467 / 0.0354553	0.5222	0.0181	4.4000e-004	1.1056
High Turnover (Sit Down Restaurant)	1.06237 / 0.0678107	0.9987	0.0347	8.3000e-004	2.1146
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000

Supermarket	3.67586 / 0.113686	3.4089	0.1200	2.8800e-003	7.2693
Total		**4.9299**	**0.1729**	**4.1500e-003**	**10.4895**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	46.8726	2.7701	0.0000	116.1250
Unmitigated	46.8726	2.7701	0.0000	116.1250

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Fast Food Restaurant with Drive Thru	21.08	4.2791	0.2529	0.0000	10.6012
High Turnover (Sit Down Restaurant)	41.65	8.4546	0.4997	0.0000	20.9459
Parking Lot	0	0.0000	0.0000	0.0000	0.0000

Supermarket	168.18	34.1390	2.0176	0.0000	84.5780
Total		**46.8726**	**2.7701**	**0.0000**	**116.1250**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Fast Food Restaurant with Drive-Thru	21.08	4.2791	0.2529	0.0000	10.6012
High Turnover (Sit Down Restaurant)	41.65	8.4546	0.4997	0.0000	20.9459
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Supermarket	168.18	34.1390	2.0176	0.0000	84.5780
Total		**46.8726**	**2.7701**	**0.0000**	**116.1250**

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

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

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Discovery Builders San Marco - Adjusted Project 2023 with ENERGY STAR

Bay Area AQMD Air District, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Parking Lot	179.00	Space	1.61	71,600.00	0
Fast Food Restaurant with Drive Thru	1.83	1000sqft	0.04	1,826.00	0
High Turnover (Sit Down Restaurant)	3.50	1000sqft	0.08	3,500.00	0
Supermarket	29.82	1000sqft	0.68	29,822.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	64
Climate Zone	4			**Operational Year**	2023
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	243.71	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

2.0 Emissions Summary

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.1619	2.0000e-005	1.9700e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	3.8300e-003	3.8300e-003	1.0000e-005	0.0000	4.0800e-003
Energy	8.2600e-003	0.0751	0.0631	4.5000e-004		5.7100e-003	5.7100e-003		5.7100e-003	5.7100e-003	0.0000	234.1150	234.1150	0.0197	5.2500e-003	236.1720
Mobile	0.6490	1.0830	5.2638	0.0119	1.1058	0.0102	1.1161	0.2962	9.5700e-003	0.3058	0.0000	1,109.4240	1,109.4240	0.0779	0.0000	1,111.3709
Waste						0.0000	0.0000		0.0000	0.0000	46.8726	0.0000	46.8726	2.7701	0.0000	116.1250
Water						0.0000	0.0000		0.0000	0.0000	1.6794	3.2504	4.9299	0.1729	4.1500e-003	10.4895
Total	**0.8192**	**1.1581**	**5.3289**	**0.0123**	**1.1058**	**0.0160**	**1.1218**	**0.2962**	**0.0153**	**0.3115**	**48.5521**	**1,346.7932**	**1,395.3453**	**3.0406**	**9.4000e-003**	**1,474.1615**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.1619	2.0000e-005	1.9700e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	3.8300e-003	3.8300e-003	1.0000e-005	0.0000	4.0800e-003
Energy	8.2600e-003	0.0751	0.0631	4.5000e-004		5.7100e-003	5.7100e-003		5.7100e-003	5.7100e-003	0.0000	221.1492	221.1492	0.0182	4.9300e-003	223.0725
Mobile	0.6260	0.9293	4.6059	9.0200e-003	0.8172	8.0800e-003	0.8253	0.2189	7.5400e-003	0.2265	0.0000	841.5085	841.5085	0.0718	0.0000	843.3033
Waste						0.0000	0.0000		0.0000	0.0000	46.8726	0.0000	46.8726	2.7701	0.0000	116.1250
Water						0.0000	0.0000		0.0000	0.0000	1.6794	3.2504	4.9299	0.1729	4.1500e-003	10.4895
Total	**0.7961**	**1.0044**	**4.6710**	**9.4700e-003**	**0.8172**	**0.0138**	**0.8310**	**0.2189**	**0.0133**	**0.2322**	**48.5521**	**1,065.9119**	**1,114.4640**	**3.0329**	**9.0800e-003**	**1,192.9943**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**2.81**	**13.27**	**12.35**	**23.26**	**26.10**	**13.53**	**25.92**	**26.10**	**13.28**	**25.47**	**0.00**	**20.86**	**20.13**	**0.25**	**3.40**	**19.07**

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Install Energy Efficient Appliances

	ROG	NOx	CO	SO2	Fugitive 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	139.4144	139.4144	0.0166	3.4300e-003	140.8520
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	152.3802	152.3802	0.0181	3.7500e-003	153.9515
NaturalGas Mitigated	8.2600e-003	0.0751	0.0631	4.5000e-004		5.7100e-003	5.7100e-003		5.7100e-003	5.7100e-003	0.0000	81.7348	81.7348	1.5700e-003	1.5000e-003	82.2205
NaturalGas Unmitigated	8.2600e-003	0.0751	0.0631	4.5000e-004		5.7100e-003	5.7100e-003		5.7100e-003	5.7100e-003	0.0000	81.7348	81.7348	1.5700e-003	1.5000e-003	82.2205

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					
Fast Food Restaurant with Drive Thru	346502	1.8700e-003	0.0170	0.0143	1.0000e-004		1.2900e-003	1.2900e-003		1.2900e-003	1.2900e-003	0.0000	18.4907	18.4907	3.5000e-004	3.4000e-004	18.6005
High Turnover (Sit Down Restaurant)	664160	3.5800e-003	0.0326	0.0274	2.0000e-004		2.4700e-003	2.4700e-003		2.4700e-003	2.4700e-003	0.0000	35.4421	35.4421	6.8000e-004	6.5000e-004	35.6527
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Supermarket	520990	2.8100e-003	0.0255	0.0215	1.5000e-004		1.9400e-003	1.9400e-003		1.9400e-003	1.9400e-003	0.0000	27.8020	27.8020	5.3000e-004	5.1000e-004	27.9672
Total		**8.2600e-003**	**0.0751**	**0.0631**	**4.5000e-004**		**5.7000e-003**	**5.7000e-003**		**5.7000e-003**	**5.7000e-003**	**0.0000**	**81.7348**	**81.7348**	**1.5600e-003**	**1.5000e-003**	**82.2205**

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					
Fast Food Restaurant with Drive Thru	346502	1.8700e-003	0.0170	0.0143	1.0000e-004		1.2900e-003	1.2900e-003		1.2900e-003	1.2900e-003	0.0000	18.4907	18.4907	3.5000e-004	3.4000e-004	18.6005
High Turnover (Sit Down Restaurant)	664160	3.5800e-003	0.0326	0.0274	2.0000e-004		2.4700e-003	2.4700e-003		2.4700e-003	2.4700e-003	0.0000	35.4421	35.4421	6.8000e-004	6.5000e-004	35.6527
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Supermarket	520990	2.8100e-003	0.0255	0.0215	1.5000e-004		1.9400e-003	1.9400e-003		1.9400e-003	1.9400e-003	0.0000	27.8020	27.8020	5.3000e-004	5.1000e-004	27.9672
Total		**8.2600e-003**	**0.0751**	**0.0631**	**4.5000e-004**		**5.7000e-003**	**5.7000e-003**		**5.7000e-003**	**5.7000e-003**	**0.0000**	**81.7348**	**81.7348**	**1.5600e-003**	**1.5000e-003**	**82.2205**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Fast Food Restaurant with Drive Thru	56971.2	6.2979	7.5000e-004	1.6000e-004	6.3628
High Turnover (Sit Down Restaurant)	109200	12.0715	1.4400e-003	3.0000e-004	12.1960
Parking Lot	25060	2.7703	3.3000e-004	7.0000e-005	2.7988
Supermarket	1.18721e+006	131.2406	0.0156	3.2300e-003	132.5938
Total		**152.3802**	**0.0181**	**3.7600e-003**	**153.9515**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Fast Food Restaurant with Drive Thru	56971.2	6.2979	7.5000e-004	1.6000e-004	6.3628
High Turnover (Sit Down Restaurant)	109200	12.0715	1.4400e-003	3.0000e-004	12.1960
Parking Lot	25060	2.7703	3.3000e-004	7.0000e-005	2.7988
Supermarket	1.06992e+006	118.2747	0.0141	2.9100e-003	119.4943
Total		**139.4144**	**0.0166**	**3.4400e-003**	**140.8520**

Discovery Builders San Marco - Adjusted Project 2030

Bay Area AQMD Air District, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Parking Lot	179.00	Space	1.61	71,600.00	0
Fast Food Restaurant with Drive Thru	1.83	1000sqft	0.04	1,826.00	0
High Turnover (Sit Down Restaurant)	3.50	1000sqft	0.08	3,500.00	0
Supermarket	29.82	1000sqft	0.68	29,822.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	64
Climate Zone	4			**Operational Year**	2030
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	145.5	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - CO2 Intensity Factor updated to account for 2030 RPS (60%)

Land Use - Land uses consistent with DEIR CalEEMod output (pg 407)

Vehicle Trips - Trip rates consistent with DEIR CalEEMod output (pg 407)

Vehicle Emission Factors - Vehicle EFs and Fleet Mix based on EMFAC2017 + SAFE Adjustments for BAAQMD 2030.

Vehicle Emission Factors - Vehicle EFs and Fleet Mix based on EMFAC2017 + SAFE Adjustments for BAAQMD 2030.

Vehicle Emission Factors - Vehicle EFs and Fleet Mix based on EMFAC2017 + SAFE Adjustments for BAAQMD 2030.

Energy Use - Energy use rates updated to account for 30% exceedance of Title 24.

Mobile Land Use Mitigation - Traffic mitigation measures consistent with DEIR CalEEMod output (pg 433)

Table Name	Column Name	Default Value	New Value
tblEnergyUse	T24E	5.07	3.55
tblEnergyUse	T24E	5.07	3.55
tblEnergyUse	T24E	4.08	2.86
tblEnergyUse	T24NG	60.41	42.29
tblEnergyUse	T24NG	60.41	42.29
tblEnergyUse	T24NG	16.69	11.68
tblFleetMix	HHD	0.03	0.03
tblFleetMix	HHD	0.03	0.03
tblFleetMix	HHD	0.03	0.03
tblFleetMix	HHD	0.03	0.03
tblFleetMix	LDA	0.59	0.57
tblFleetMix	LDA	0.59	0.57
tblFleetMix	LDA	0.59	0.57
tblFleetMix	LDA	0.59	0.57
tblFleetMix	LDT1	0.04	0.06
tblFleetMix	LDT1	0.04	0.06
tblFleetMix	LDT1	0.04	0.06
tblFleetMix	LDT1	0.04	0.06
tblFleetMix	LDT2	0.19	0.18
tblFleetMix	LDT2	0.19	0.18
tblFleetMix	LDT2	0.19	0.18
tblFleetMix	LDT2	0.19	0.18
tblFleetMix	LHD1	0.01	0.02
tblFleetMix	LHD1	0.01	0.02
tblFleetMix	LHD1	0.01	0.02
tblFleetMix	LHD1	0.01	0.02
tblFleetMix	LHD2	5.2740e-003	5.9030e-003

tblFleetMix	LHD2	5.2740e-003	5.9030e-003
tblFleetMix	LHD2	5.2740e-003	5.9030e-003
tblFleetMix	LHD2	5.2740e-003	5.9030e-003
tblFleetMix	MCY	5.6260e-003	5.4650e-003
tblFleetMix	MCY	5.6260e-003	5.4650e-003
tblFleetMix	MCY	5.6260e-003	5.4650e-003
tblFleetMix	MCY	5.6260e-003	5.4650e-003
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tblFleetMix	MDV	0.11	0.11
tblFleetMix	MDV	0.11	0.11
tblFleetMix	MDV	0.11	0.11
tblFleetMix	MH	6.7600e-004	7.5700e-004
tblFleetMix	MH	6.7600e-004	7.5700e-004
tblFleetMix	MH	6.7600e-004	7.5700e-004
tblFleetMix	MH	6.7600e-004	7.5700e-004
tblFleetMix	MHD	0.02	0.02
tblFleetMix	MHD	0.02	0.02
tblFleetMix	MHD	0.02	0.02
tblFleetMix	MHD	0.02	0.02
tblFleetMix	OBUS	2.6990e-003	1.6410e-003
tblFleetMix	OBUS	2.6990e-003	1.6410e-003
tblFleetMix	OBUS	2.6990e-003	1.6410e-003
tblFleetMix	OBUS	2.6990e-003	1.6410e-003
tblFleetMix	SBUS	9.2100e-004	9.3700e-004
tblFleetMix	SBUS	9.2100e-004	9.3700e-004
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tblFleetMix	UBUS	1.7890e-003	1.5500e-003
tblFleetMix	UBUS	1.7890e-003	1.5500e-003
tblFleetMix	UBUS	1.7890e-003	1.5500e-003

tblFleetMix	UBUS	1.7890e-003	1.5500e-003
tblLandUse	LandUseSquareFeet	1,830.00	1,826.00
tblLandUse	LandUseSquareFeet	29,820.00	29,822.00
tblProjectCharacteristics	CO2IntensityFactor	641.35	145.5
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tblVehicleEF	HHD	1,508.60	1,226.16
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tblVehicleEF	HHD	3.9060e-003	2.0460e-003
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	8.8260e-003	8.8850e-003
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tblVehicleEF	HHD	1.5600e-004	1.0000e-006
tblVehicleEF	HHD	7.7000e-005	1.0000e-006
tblVehicleEF	HHD	3.8220e-003	7.1000e-005
tblVehicleEF	HHD	0.43	0.48
tblVehicleEF	HHD	5.3000e-005	1.0000e-006
tblVehicleEF	HHD	0.16	0.07
tblVehicleEF	HHD	3.5300e-004	3.2000e-005
tblVehicleEF	HHD	0.07	2.0000e-006
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tblVehicleEF	HHD	0.05	0.00
tblVehicleEF	HHD	1.04	6.22
tblVehicleEF	HHD	0.95	0.41
tblVehicleEF	HHD	3.06	6.5970e-003
tblVehicleEF	HHD	4,251.03	920.45
tblVehicleEF	HHD	1,508.60	1,226.16
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tblVehicleEF	HHD	5.6850e-003	0.02
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tblVehicleEF	HHD	8.8260e-003	8.8850e-003
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tblVehicleEF	HHD	3.3800e-004	3.2000e-005
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tblVehicleEF	HHD	0.04	8.5600e-003
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tblVehicleEF	HHD	1.5200e-004	1.0000e-006
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tblVehicleEF	HHD	1,508.60	1,226.16

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tblVehicleEF	HHD	0.04	0.04
tblVehicleEF	HHD	5.6850e-003	0.02
tblVehicleEF	HHD	1.1100e-004	1.0000e-006
tblVehicleEF	HHD	4.7520e-003	2.0460e-003
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tblVehicleEF	HHD	8.8260e-003	8.8850e-003
tblVehicleEF	HHD	5.4390e-003	0.02
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tblVehicleEF	HHD	0.03	8.5600e-003
tblVehicleEF	HHD	0.01	0.01
tblVehicleEF	HHD	1.6000e-004	1.0000e-006
tblVehicleEF	HHD	4.0000e-005	1.0000e-006
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tblVehicleEF	LDA	0.06	0.07
tblVehicleEF	LDA	0.02	0.02
tblVehicleEF	LDA	5.0260e-003	3.4030e-003
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tblVehicleEF	LDA	0.06	0.07
tblVehicleEF	LDA	0.02	0.02
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tblVehicleEF	LDA	0.02	0.02
tblVehicleEF	LDA	0.03	0.13
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tblVehicleEF	LDA	1.8340e-003	1.2920e-003
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tblVehicleEF	LDA	0.07	0.07
tblVehicleEF	LDA	0.04	0.02
tblVehicleEF	LDA	5.6040e-003	3.4030e-003
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tblVehicleEF	LDA	0.03	0.12
tblVehicleEF	LDA	2.0060e-003	2.0020e-003
tblVehicleEF	LDA	4.3500e-004	4.2100e-004
tblVehicleEF	LDA	0.04	0.02
tblVehicleEF	LDA	0.07	0.07
tblVehicleEF	LDA	0.04	0.02
tblVehicleEF	LDA	8.1540e-003	4.9420e-003
tblVehicleEF	LDA	0.03	0.02
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tblVehicleEF	LDA	0.03	0.02

tblVehicleEF	LDA	0.03	0.13
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tblVehicleEF	LDA	1.8340e-003	1.2920e-003
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tblVehicleEF	LDA	0.07	0.07
tblVehicleEF	LDA	8.1500e-003	0.02
tblVehicleEF	LDA	7.1200e-003	4.9420e-003
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tblVehicleEF	LDA	0.04	0.14
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tblVehicleEF	LDT1	0.51	0.52
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tblVehicleEF	LDT1	2.0330e-003	1.3690e-003
tblVehicleEF	LDT1	0.04	0.04
tblVehicleEF	LDT1	0.12	0.10
tblVehicleEF	LDT1	0.04	0.04
tblVehicleEF	LDT1	8.7390e-003	6.4170e-003
tblVehicleEF	LDT1	0.09	0.06
tblVehicleEF	LDT1	0.06	0.16
tblVehicleEF	LDT1	2.3650e-003	2.4180e-003
tblVehicleEF	LDT1	5.6700e-004	5.1300e-004
tblVehicleEF	LDT1	0.04	0.04
tblVehicleEF	LDT1	0.12	0.10
tblVehicleEF	LDT1	0.04	0.04
tblVehicleEF	LDT1	0.01	9.3630e-003
tblVehicleEF	LDT1	0.09	0.06
tblVehicleEF	LDT1	0.07	0.18
tblVehicleEF	LDT1	3.9120e-003	1.6590e-003
tblVehicleEF	LDT1	3.9220e-003	0.04
tblVehicleEF	LDT1	0.60	0.52
tblVehicleEF	LDT1	0.91	1.87
tblVehicleEF	LDT1	253.98	250.11
tblVehicleEF	LDT1	54.74	53.05
tblVehicleEF	LDT1	0.04	0.03
tblVehicleEF	LDT1	0.05	0.16
tblVehicleEF	LDT1	1.4610e-003	1.0880e-003
tblVehicleEF	LDT1	2.2110e-003	1.4890e-003
tblVehicleEF	LDT1	1.3430e-003	1.0000e-003
tblVehicleEF	LDT1	2.0330e-003	1.3690e-003
tblVehicleEF	LDT1	0.10	0.04
tblVehicleEF	LDT1	0.13	0.10
tblVehicleEF	LDT1	0.08	0.04

tblVehicleEF	LDT1	9.6920e-003	6.4170e-003
tblVehicleEF	LDT1	0.08	0.06
tblVehicleEF	LDT1	0.05	0.16
tblVehicleEF	LDT1	2.5450e-003	2.4180e-003
tblVehicleEF	LDT1	5.6200e-004	5.1300e-004
tblVehicleEF	LDT1	0.10	0.04
tblVehicleEF	LDT1	0.13	0.10
tblVehicleEF	LDT1	0.08	0.04
tblVehicleEF	LDT1	0.01	9.3630e-003
tblVehicleEF	LDT1	0.08	0.06
tblVehicleEF	LDT1	0.06	0.18
tblVehicleEF	LDT1	3.4400e-003	1.6590e-003
tblVehicleEF	LDT1	5.4030e-003	0.04
tblVehicleEF	LDT1	0.51	0.52
tblVehicleEF	LDT1	1.37	1.87
tblVehicleEF	LDT1	233.93	250.11
tblVehicleEF	LDT1	54.74	53.05
tblVehicleEF	LDT1	0.05	0.03
tblVehicleEF	LDT1	0.06	0.16
tblVehicleEF	LDT1	1.4610e-003	1.0880e-003
tblVehicleEF	LDT1	2.2110e-003	1.4890e-003
tblVehicleEF	LDT1	1.3430e-003	1.0000e-003
tblVehicleEF	LDT1	2.0330e-003	1.3690e-003
tblVehicleEF	LDT1	0.02	0.04
tblVehicleEF	LDT1	0.13	0.10
tblVehicleEF	LDT1	0.02	0.04
tblVehicleEF	LDT1	8.5230e-003	6.4170e-003
tblVehicleEF	LDT1	0.11	0.06
tblVehicleEF	LDT1	0.07	0.16
tblVehicleEF	LDT1	2.3430e-003	2.4180e-003

tblVehicleEF	LDT1	5.7000e-004	5.1300e-004
tblVehicleEF	LDT1	0.02	0.04
tblVehicleEF	LDT1	0.13	0.10
tblVehicleEF	LDT1	0.02	0.04
tblVehicleEF	LDT1	0.01	9.3630e-003
tblVehicleEF	LDT1	0.11	0.06
tblVehicleEF	LDT1	0.08	0.18
tblVehicleEF	LDT2	2.9290e-003	1.6620e-003
tblVehicleEF	LDT2	3.1830e-003	0.04
tblVehicleEF	LDT2	0.47	0.53
tblVehicleEF	LDT2	0.89	2.29
tblVehicleEF	LDT2	267.51	257.26
tblVehicleEF	LDT2	61.27	54.95
tblVehicleEF	LDT2	0.04	0.03
tblVehicleEF	LDT2	0.05	0.17
tblVehicleEF	LDT2	1.3320e-003	1.0420e-003
tblVehicleEF	LDT2	2.0270e-003	1.3520e-003
tblVehicleEF	LDT2	1.2250e-003	9.5900e-004
tblVehicleEF	LDT2	1.8640e-003	1.2430e-003
tblVehicleEF	LDT2	0.03	0.04
tblVehicleEF	LDT2	0.07	0.09
tblVehicleEF	LDT2	0.03	0.05
tblVehicleEF	LDT2	7.2750e-003	6.2130e-003
tblVehicleEF	LDT2	0.05	0.05
tblVehicleEF	LDT2	0.04	0.18
tblVehicleEF	LDT2	2.6780e-003	2.4870e-003
tblVehicleEF	LDT2	6.2700e-004	5.3100e-004
tblVehicleEF	LDT2	0.03	0.04
tblVehicleEF	LDT2	0.07	0.09
tblVehicleEF	LDT2	0.03	0.05

tblVehicleEF	LDT2	0.01	9.0250e-003
tblVehicleEF	LDT2	0.05	0.05
tblVehicleEF	LDT2	0.05	0.20
tblVehicleEF	LDT2	3.2590e-003	1.6620e-003
tblVehicleEF	LDT2	2.6520e-003	0.04
tblVehicleEF	LDT2	0.55	0.53
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tblVehicleEF	LDT2	287.87	257.26
tblVehicleEF	LDT2	61.27	54.95
tblVehicleEF	LDT2	0.03	0.03
tblVehicleEF	LDT2	0.04	0.17
tblVehicleEF	LDT2	1.3320e-003	1.0420e-003
tblVehicleEF	LDT2	2.0270e-003	1.3520e-003
tblVehicleEF	LDT2	1.2250e-003	9.5900e-004
tblVehicleEF	LDT2	1.8640e-003	1.2430e-003
tblVehicleEF	LDT2	0.06	0.04
tblVehicleEF	LDT2	0.08	0.09
tblVehicleEF	LDT2	0.05	0.05
tblVehicleEF	LDT2	8.0910e-003	6.2130e-003
tblVehicleEF	LDT2	0.05	0.05
tblVehicleEF	LDT2	0.04	0.18
tblVehicleEF	LDT2	2.8820e-003	2.4870e-003
tblVehicleEF	LDT2	6.2400e-004	5.3100e-004
tblVehicleEF	LDT2	0.06	0.04
tblVehicleEF	LDT2	0.08	0.09
tblVehicleEF	LDT2	0.05	0.05
tblVehicleEF	LDT2	0.01	9.0250e-003
tblVehicleEF	LDT2	0.05	0.05
tblVehicleEF	LDT2	0.04	0.20
tblVehicleEF	LDT2	2.8540e-003	1.6620e-003

tblVehicleEF	LDT2	3.5720e-003	0.04
tblVehicleEF	LDT2	0.47	0.53
tblVehicleEF	LDT2	1.03	2.29
tblVehicleEF	LDT2	265.06	257.26
tblVehicleEF	LDT2	61.27	54.95
tblVehicleEF	LDT2	0.04	0.03
tblVehicleEF	LDT2	0.05	0.17
tblVehicleEF	LDT2	1.3320e-003	1.0420e-003
tblVehicleEF	LDT2	2.0270e-003	1.3520e-003
tblVehicleEF	LDT2	1.2250e-003	9.5900e-004
tblVehicleEF	LDT2	1.8640e-003	1.2430e-003
tblVehicleEF	LDT2	0.01	0.04
tblVehicleEF	LDT2	0.07	0.09
tblVehicleEF	LDT2	0.01	0.05
tblVehicleEF	LDT2	7.0900e-003	6.2130e-003
tblVehicleEF	LDT2	0.07	0.05
tblVehicleEF	LDT2	0.05	0.18
tblVehicleEF	LDT2	2.6530e-003	2.4870e-003
tblVehicleEF	LDT2	6.2900e-004	5.3100e-004
tblVehicleEF	LDT2	0.01	0.04
tblVehicleEF	LDT2	0.07	0.09
tblVehicleEF	LDT2	0.01	0.05
tblVehicleEF	LDT2	0.01	9.0250e-003
tblVehicleEF	LDT2	0.07	0.05
tblVehicleEF	LDT2	0.05	0.20
tblVehicleEF	LHD1	3.9690e-003	4.1460e-003
tblVehicleEF	LHD1	9.1010e-003	5.4760e-003
tblVehicleEF	LHD1	0.01	9.1240e-003
tblVehicleEF	LHD1	0.14	0.18
tblVehicleEF	LHD1	0.65	0.50

tblVehicleEF	LHD1	1.67	0.89
tblVehicleEF	LHD1	8.99	8.34
tblVehicleEF	LHD1	643.58	702.21
tblVehicleEF	LHD1	26.66	10.04
tblVehicleEF	LHD1	0.07	0.05
tblVehicleEF	LHD1	0.65	0.37
tblVehicleEF	LHD1	0.68	0.23
tblVehicleEF	LHD1	8.2100e-004	9.2900e-004
tblVehicleEF	LHD1	0.01	9.9180e-003
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tblVehicleEF	LHD1	6.5700e-004	2.1000e-004
tblVehicleEF	LHD1	7.8500e-004	8.8900e-004
tblVehicleEF	LHD1	2.6050e-003	2.4790e-003
tblVehicleEF	LHD1	0.01	7.4230e-003
tblVehicleEF	LHD1	6.0400e-004	1.9300e-004
tblVehicleEF	LHD1	1.7120e-003	1.3190e-003
tblVehicleEF	LHD1	0.08	0.06
tblVehicleEF	LHD1	0.01	0.02
tblVehicleEF	LHD1	1.0100e-003	7.7900e-004
tblVehicleEF	LHD1	0.10	0.08
tblVehicleEF	LHD1	0.27	0.19
tblVehicleEF	LHD1	0.15	0.04
tblVehicleEF	LHD1	8.9000e-005	8.1000e-005
tblVehicleEF	LHD1	6.2880e-003	6.8460e-003
tblVehicleEF	LHD1	2.9700e-004	9.9000e-005
tblVehicleEF	LHD1	1.7120e-003	1.3190e-003
tblVehicleEF	LHD1	0.08	0.06
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	1.0100e-003	7.7900e-004
tblVehicleEF	LHD1	0.12	0.09

tblVehicleEF	LHD1	0.27	0.19
tblVehicleEF	LHD1	0.16	0.05
tblVehicleEF	LHD1	3.9690e-003	4.1460e-003
tblVehicleEF	LHD1	9.2710e-003	5.4760e-003
tblVehicleEF	LHD1	0.01	9.1240e-003
tblVehicleEF	LHD1	0.14	0.18
tblVehicleEF	LHD1	0.66	0.50
tblVehicleEF	LHD1	1.55	0.89
tblVehicleEF	LHD1	8.99	8.34
tblVehicleEF	LHD1	643.58	702.21
tblVehicleEF	LHD1	26.66	10.04
tblVehicleEF	LHD1	0.07	0.05
tblVehicleEF	LHD1	0.62	0.37
tblVehicleEF	LHD1	0.63	0.23
tblVehicleEF	LHD1	8.2100e-004	9.2900e-004
tblVehicleEF	LHD1	0.01	9.9180e-003
tblVehicleEF	LHD1	0.01	7.8050e-003
tblVehicleEF	LHD1	6.5700e-004	2.1000e-004
tblVehicleEF	LHD1	7.8500e-004	8.8900e-004
tblVehicleEF	LHD1	2.6050e-003	2.4790e-003
tblVehicleEF	LHD1	0.01	7.4230e-003
tblVehicleEF	LHD1	6.0400e-004	1.9300e-004
tblVehicleEF	LHD1	3.9540e-003	1.3190e-003
tblVehicleEF	LHD1	0.09	0.06
tblVehicleEF	LHD1	0.01	0.02
tblVehicleEF	LHD1	2.0540e-003	7.7900e-004
tblVehicleEF	LHD1	0.10	0.08
tblVehicleEF	LHD1	0.26	0.19
tblVehicleEF	LHD1	0.14	0.04
tblVehicleEF	LHD1	8.9000e-005	8.1000e-005

tblVehicleEF	LHD1	6.2880e-003	6.8460e-003
tblVehicleEF	LHD1	2.9500e-004	9.9000e-005
tblVehicleEF	LHD1	3.9540e-003	1.3190e-003
tblVehicleEF	LHD1	0.09	0.06
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	2.0540e-003	7.7900e-004
tblVehicleEF	LHD1	0.12	0.09
tblVehicleEF	LHD1	0.26	0.19
tblVehicleEF	LHD1	0.15	0.05
tblVehicleEF	LHD1	3.9690e-003	4.1460e-003
tblVehicleEF	LHD1	8.9710e-003	5.4760e-003
tblVehicleEF	LHD1	0.01	9.1240e-003
tblVehicleEF	LHD1	0.14	0.18
tblVehicleEF	LHD1	0.64	0.50
tblVehicleEF	LHD1	1.79	0.89
tblVehicleEF	LHD1	8.99	8.34
tblVehicleEF	LHD1	643.58	702.21
tblVehicleEF	LHD1	26.66	10.04
tblVehicleEF	LHD1	0.07	0.05
tblVehicleEF	LHD1	0.67	0.37
tblVehicleEF	LHD1	0.73	0.23
tblVehicleEF	LHD1	8.2100e-004	9.2900e-004
tblVehicleEF	LHD1	0.01	9.9180e-003
tblVehicleEF	LHD1	0.01	7.8050e-003
tblVehicleEF	LHD1	6.5700e-004	2.1000e-004
tblVehicleEF	LHD1	7.8500e-004	8.8900e-004
tblVehicleEF	LHD1	2.6050e-003	2.4790e-003
tblVehicleEF	LHD1	0.01	7.4230e-003
tblVehicleEF	LHD1	6.0400e-004	1.9300e-004
tblVehicleEF	LHD1	8.1300e-004	1.3190e-003

tblVehicleEF	LHD1	0.09	0.06
tblVehicleEF	LHD1	0.01	0.02
tblVehicleEF	LHD1	4.9900e-004	7.7900e-004
tblVehicleEF	LHD1	0.10	0.08
tblVehicleEF	LHD1	0.30	0.19
tblVehicleEF	LHD1	0.16	0.04
tblVehicleEF	LHD1	8.9000e-005	8.1000e-005
tblVehicleEF	LHD1	6.2880e-003	6.8460e-003
tblVehicleEF	LHD1	2.9900e-004	9.9000e-005
tblVehicleEF	LHD1	8.1300e-004	1.3190e-003
tblVehicleEF	LHD1	0.09	0.06
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	4.9900e-004	7.7900e-004
tblVehicleEF	LHD1	0.12	0.09
tblVehicleEF	LHD1	0.30	0.19
tblVehicleEF	LHD1	0.17	0.05
tblVehicleEF	LHD2	2.5720e-003	2.5800e-003
tblVehicleEF	LHD2	5.3560e-003	5.3930e-003
tblVehicleEF	LHD2	3.3110e-003	5.0230e-003
tblVehicleEF	LHD2	0.12	0.13
tblVehicleEF	LHD2	0.46	0.50
tblVehicleEF	LHD2	0.89	0.49
tblVehicleEF	LHD2	13.63	13.05
tblVehicleEF	LHD2	677.21	686.39
tblVehicleEF	LHD2	21.98	6.59
tblVehicleEF	LHD2	0.07	0.08
tblVehicleEF	LHD2	0.24	0.42
tblVehicleEF	LHD2	0.27	0.13
tblVehicleEF	LHD2	1.0470e-003	1.4850e-003
tblVehicleEF	LHD2	0.01	0.01

tblVehicleEF	LHD2	9.5330e-003	0.01
tblVehicleEF	LHD2	3.7000e-004	1.0500e-004
tblVehicleEF	LHD2	1.0020e-003	1.4200e-003
tblVehicleEF	LHD2	2.7060e-003	2.7080e-003
tblVehicleEF	LHD2	9.0970e-003	0.01
tblVehicleEF	LHD2	3.4000e-004	9.6000e-005
tblVehicleEF	LHD2	4.7900e-004	6.0600e-004
tblVehicleEF	LHD2	0.02	0.03
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	3.1200e-004	3.8500e-004
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tblVehicleEF	LHD2	0.04	0.06
tblVehicleEF	LHD2	0.04	0.02
tblVehicleEF	LHD2	1.3300e-004	1.2500e-004
tblVehicleEF	LHD2	6.5800e-003	6.6220e-003
tblVehicleEF	LHD2	2.3500e-004	6.5000e-005
tblVehicleEF	LHD2	4.7900e-004	6.0600e-004
tblVehicleEF	LHD2	0.02	0.03
tblVehicleEF	LHD2	0.01	0.02
tblVehicleEF	LHD2	3.1200e-004	3.8500e-004
tblVehicleEF	LHD2	0.11	0.11
tblVehicleEF	LHD2	0.04	0.06
tblVehicleEF	LHD2	0.05	0.03
tblVehicleEF	LHD2	2.5720e-003	2.5800e-003
tblVehicleEF	LHD2	5.3960e-003	5.3930e-003
tblVehicleEF	LHD2	3.1810e-003	5.0230e-003
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tblVehicleEF	LHD2	0.46	0.50
tblVehicleEF	LHD2	0.83	0.49
tblVehicleEF	LHD2	13.63	13.05

tblVehicleEF	LHD2	677.21	686.39
tblVehicleEF	LHD2	21.98	6.59
tblVehicleEF	LHD2	0.07	0.08
tblVehicleEF	LHD2	0.23	0.42
tblVehicleEF	LHD2	0.26	0.13
tblVehicleEF	LHD2	1.0470e-003	1.4850e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	9.5330e-003	0.01
tblVehicleEF	LHD2	3.7000e-004	1.0500e-004
tblVehicleEF	LHD2	1.0020e-003	1.4200e-003
tblVehicleEF	LHD2	2.7060e-003	2.7080e-003
tblVehicleEF	LHD2	9.0970e-003	0.01
tblVehicleEF	LHD2	3.4000e-004	9.6000e-005
tblVehicleEF	LHD2	1.0960e-003	6.0600e-004
tblVehicleEF	LHD2	0.02	0.03
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	6.2800e-004	3.8500e-004
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tblVehicleEF	LHD2	0.04	0.06
tblVehicleEF	LHD2	0.04	0.02
tblVehicleEF	LHD2	1.3300e-004	1.2500e-004
tblVehicleEF	LHD2	6.5800e-003	6.6220e-003
tblVehicleEF	LHD2	2.3400e-004	6.5000e-005
tblVehicleEF	LHD2	1.0960e-003	6.0600e-004
tblVehicleEF	LHD2	0.02	0.03
tblVehicleEF	LHD2	0.01	0.02
tblVehicleEF	LHD2	6.2800e-004	3.8500e-004
tblVehicleEF	LHD2	0.11	0.11
tblVehicleEF	LHD2	0.04	0.06
tblVehicleEF	LHD2	0.05	0.03

tblVehicleEF	LHD2	2.5720e-003	2.5800e-003
tblVehicleEF	LHD2	5.3260e-003	5.3930e-003
tblVehicleEF	LHD2	3.4170e-003	5.0230e-003
tblVehicleEF	LHD2	0.12	0.13
tblVehicleEF	LHD2	0.46	0.50
tblVehicleEF	LHD2	0.95	0.49
tblVehicleEF	LHD2	13.63	13.05
tblVehicleEF	LHD2	677.21	686.39
tblVehicleEF	LHD2	21.98	6.59
tblVehicleEF	LHD2	0.07	0.08
tblVehicleEF	LHD2	0.25	0.42
tblVehicleEF	LHD2	0.28	0.13
tblVehicleEF	LHD2	1.0470e-003	1.4850e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	9.5330e-003	0.01
tblVehicleEF	LHD2	3.7000e-004	1.0500e-004
tblVehicleEF	LHD2	1.0020e-003	1.4200e-003
tblVehicleEF	LHD2	2.7060e-003	2.7080e-003
tblVehicleEF	LHD2	9.0970e-003	0.01
tblVehicleEF	LHD2	3.4000e-004	9.6000e-005
tblVehicleEF	LHD2	2.4400e-004	6.0600e-004
tblVehicleEF	LHD2	0.02	0.03
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	1.5500e-004	3.8500e-004
tblVehicleEF	LHD2	0.09	0.10
tblVehicleEF	LHD2	0.05	0.06
tblVehicleEF	LHD2	0.05	0.02
tblVehicleEF	LHD2	1.3300e-004	1.2500e-004
tblVehicleEF	LHD2	6.5800e-003	6.6220e-003
tblVehicleEF	LHD2	2.3600e-004	6.5000e-005

tblVehicleEF	LHD2	2.4400e-004	6.0600e-004
tblVehicleEF	LHD2	0.02	0.03
tblVehicleEF	LHD2	0.01	0.02
tblVehicleEF	LHD2	1.5500e-004	3.8500e-004
tblVehicleEF	LHD2	0.11	0.11
tblVehicleEF	LHD2	0.05	0.06
tblVehicleEF	LHD2	0.05	0.03
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tblVehicleEF	MCY	0.16	0.25
tblVehicleEF	MCY	18.21	18.37
tblVehicleEF	MCY	10.42	9.28
tblVehicleEF	MCY	175.56	213.76
tblVehicleEF	MCY	43.08	59.74
tblVehicleEF	MCY	1.15	1.15
tblVehicleEF	MCY	0.32	0.27
tblVehicleEF	MCY	2.2270e-003	2.2080e-003
tblVehicleEF	MCY	3.3450e-003	2.8780e-003
tblVehicleEF	MCY	2.0780e-003	2.0600e-003
tblVehicleEF	MCY	3.1310e-003	2.6930e-003
tblVehicleEF	MCY	0.79	0.81
tblVehicleEF	MCY	0.61	0.64
tblVehicleEF	MCY	0.45	0.46
tblVehicleEF	MCY	2.20	2.22
tblVehicleEF	MCY	0.45	0.45
tblVehicleEF	MCY	2.14	1.91
tblVehicleEF	MCY	2.1190e-003	2.1150e-003
tblVehicleEF	MCY	6.6400e-004	5.9100e-004
tblVehicleEF	MCY	0.79	0.81
tblVehicleEF	MCY	0.61	0.64
tblVehicleEF	MCY	0.45	0.46

tblVehicleEF	MCY	2.76	2.78
tblVehicleEF	MCY	0.45	0.45
tblVehicleEF	MCY	2.33	2.08
tblVehicleEF	MCY	0.46	0.33
tblVehicleEF	MCY	0.13	0.25
tblVehicleEF	MCY	17.42	18.37
tblVehicleEF	MCY	8.97	9.28
tblVehicleEF	MCY	175.56	213.76
tblVehicleEF	MCY	43.08	59.74
tblVehicleEF	MCY	1.01	1.15
tblVehicleEF	MCY	0.29	0.27
tblVehicleEF	MCY	2.2270e-003	2.2080e-003
tblVehicleEF	MCY	3.3450e-003	2.8780e-003
tblVehicleEF	MCY	2.0780e-003	2.0600e-003
tblVehicleEF	MCY	3.1310e-003	2.6930e-003
tblVehicleEF	MCY	2.17	0.81
tblVehicleEF	MCY	0.83	0.64
tblVehicleEF	MCY	1.24	0.46
tblVehicleEF	MCY	2.13	2.22
tblVehicleEF	MCY	0.41	0.45
tblVehicleEF	MCY	1.79	1.91
tblVehicleEF	MCY	2.1040e-003	2.1150e-003
tblVehicleEF	MCY	6.3000e-004	5.9100e-004
tblVehicleEF	MCY	2.17	0.81
tblVehicleEF	MCY	0.83	0.64
tblVehicleEF	MCY	1.24	0.46
tblVehicleEF	MCY	2.67	2.78
tblVehicleEF	MCY	0.41	0.45
tblVehicleEF	MCY	1.95	2.08
tblVehicleEF	MCY	0.49	0.33

tblVehicleEF	MCY	0.18	0.25
tblVehicleEF	MCY	19.58	18.37
tblVehicleEF	MCY	11.90	9.28
tblVehicleEF	MCY	175.56	213.76
tblVehicleEF	MCY	43.08	59.74
tblVehicleEF	MCY	1.23	1.15
tblVehicleEF	MCY	0.34	0.27
tblVehicleEF	MCY	2.2270e-003	2.2080e-003
tblVehicleEF	MCY	3.3450e-003	2.8780e-003
tblVehicleEF	MCY	2.0780e-003	2.0600e-003
tblVehicleEF	MCY	3.1310e-003	2.6930e-003
tblVehicleEF	MCY	0.26	0.81
tblVehicleEF	MCY	0.71	0.64
tblVehicleEF	MCY	0.16	0.46
tblVehicleEF	MCY	2.28	2.22
tblVehicleEF	MCY	0.54	0.45
tblVehicleEF	MCY	2.46	1.91
tblVehicleEF	MCY	2.1440e-003	2.1150e-003
tblVehicleEF	MCY	6.9800e-004	5.9100e-004
tblVehicleEF	MCY	0.26	0.81
tblVehicleEF	MCY	0.71	0.64
tblVehicleEF	MCY	0.16	0.46
tblVehicleEF	MCY	2.86	2.78
tblVehicleEF	MCY	0.54	0.45
tblVehicleEF	MCY	2.68	2.08
tblVehicleEF	MDV	4.8630e-003	1.7560e-003
tblVehicleEF	MDV	7.2400e-003	0.04
tblVehicleEF	MDV	0.64	0.53
tblVehicleEF	MDV	1.52	2.34
tblVehicleEF	MDV	362.82	311.10

tblVehicleEF	MDV	82.45	65.21
tblVehicleEF	MDV	0.07	0.03
tblVehicleEF	MDV	0.11	0.18
tblVehicleEF	MDV	1.3980e-003	1.0470e-003
tblVehicleEF	MDV	2.0800e-003	1.3550e-003
tblVehicleEF	MDV	1.2880e-003	9.6500e-004
tblVehicleEF	MDV	1.9120e-003	1.2460e-003
tblVehicleEF	MDV	0.05	0.05
tblVehicleEF	MDV	0.13	0.10
tblVehicleEF	MDV	0.05	0.06
tblVehicleEF	MDV	0.01	6.7700e-003
tblVehicleEF	MDV	0.09	0.05
tblVehicleEF	MDV	0.10	0.20
tblVehicleEF	MDV	3.6280e-003	3.0040e-003
tblVehicleEF	MDV	8.5000e-004	6.3100e-004
tblVehicleEF	MDV	0.05	0.05
tblVehicleEF	MDV	0.13	0.10
tblVehicleEF	MDV	0.05	0.06
tblVehicleEF	MDV	0.02	9.8070e-003
tblVehicleEF	MDV	0.09	0.05
tblVehicleEF	MDV	0.11	0.22
tblVehicleEF	MDV	5.4110e-003	1.7560e-003
tblVehicleEF	MDV	5.9830e-003	0.04
tblVehicleEF	MDV	0.75	0.53
tblVehicleEF	MDV	1.20	2.34
tblVehicleEF	MDV	389.75	311.10
tblVehicleEF	MDV	82.45	65.21
tblVehicleEF	MDV	0.06	0.03
tblVehicleEF	MDV	0.10	0.18
tblVehicleEF	MDV	1.3980e-003	1.0470e-003

tblVehicleEF	MDV	2.0800e-003	1.3550e-003
tblVehicleEF	MDV	1.2880e-003	9.6500e-004
tblVehicleEF	MDV	1.9120e-003	1.2460e-003
tblVehicleEF	MDV	0.11	0.05
tblVehicleEF	MDV	0.14	0.10
tblVehicleEF	MDV	0.10	0.06
tblVehicleEF	MDV	0.01	6.7700e-003
tblVehicleEF	MDV	0.08	0.05
tblVehicleEF	MDV	0.08	0.20
tblVehicleEF	MDV	3.8990e-003	3.0040e-003
tblVehicleEF	MDV	8.4500e-004	6.3100e-004
tblVehicleEF	MDV	0.11	0.05
tblVehicleEF	MDV	0.14	0.10
tblVehicleEF	MDV	0.10	0.06
tblVehicleEF	MDV	0.02	9.8070e-003
tblVehicleEF	MDV	0.08	0.05
tblVehicleEF	MDV	0.09	0.22
tblVehicleEF	MDV	4.7370e-003	1.7560e-003
tblVehicleEF	MDV	8.1710e-003	0.04
tblVehicleEF	MDV	0.63	0.53
tblVehicleEF	MDV	1.77	2.34
tblVehicleEF	MDV	359.53	311.10
tblVehicleEF	MDV	82.45	65.21
tblVehicleEF	MDV	0.07	0.03
tblVehicleEF	MDV	0.12	0.18
tblVehicleEF	MDV	1.3980e-003	1.0470e-003
tblVehicleEF	MDV	2.0800e-003	1.3550e-003
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tblVehicleEF	MDV	1.9120e-003	1.2460e-003
tblVehicleEF	MDV	0.02	0.05

tblVehicleEF	MDV	0.13	0.10
tblVehicleEF	MDV	0.02	0.06
tblVehicleEF	MDV	0.01	6.7700e-003
tblVehicleEF	MDV	0.11	0.05
tblVehicleEF	MDV	0.11	0.20
tblVehicleEF	MDV	3.5950e-003	3.0040e-003
tblVehicleEF	MDV	8.5400e-004	6.3100e-004
tblVehicleEF	MDV	0.02	0.05
tblVehicleEF	MDV	0.13	0.10
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tblVehicleEF	MDV	0.02	9.8070e-003
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tblVehicleEF	MDV	0.12	0.22
tblVehicleEF	MH	8.3120e-003	5.0570e-003
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tblVehicleEF	MH	3.2220e-003	3.3000e-003
tblVehicleEF	MH	0.01	0.02
tblVehicleEF	MH	8.0300e-004	1.9300e-004
tblVehicleEF	MH	0.41	0.31
tblVehicleEF	MH	0.04	0.03
tblVehicleEF	MH	0.17	0.13

tblVehicleEF	MH	0.04	0.04
tblVehicleEF	MH	0.01	5.4940e-003
tblVehicleEF	MH	0.22	0.07
tblVehicleEF	MH	0.01	0.01
tblVehicleEF	MH	6.3200e-004	1.5300e-004
tblVehicleEF	MH	0.41	0.31
tblVehicleEF	MH	0.04	0.03
tblVehicleEF	MH	0.17	0.13
tblVehicleEF	MH	0.05	0.05
tblVehicleEF	MH	0.01	5.4940e-003
tblVehicleEF	MH	0.24	0.08
tblVehicleEF	MH	8.5810e-003	5.0570e-003
tblVehicleEF	MH	0.02	0.02
tblVehicleEF	MH	0.47	0.32
tblVehicleEF	MH	3.38	1.63
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tblVehicleEF	MH	0.01	0.01
tblVehicleEF	MH	0.01	0.02
tblVehicleEF	MH	8.7400e-004	2.0900e-004
tblVehicleEF	MH	3.2220e-003	3.3000e-003
tblVehicleEF	MH	0.01	0.02
tblVehicleEF	MH	8.0300e-004	1.9300e-004
tblVehicleEF	MH	0.96	0.31
tblVehicleEF	MH	0.04	0.03
tblVehicleEF	MH	0.36	0.13
tblVehicleEF	MH	0.04	0.04
tblVehicleEF	MH	9.7730e-003	5.4940e-003

tblVehicleEF	MH	0.20	0.07
tblVehicleEF	MH	0.01	0.01
tblVehicleEF	MH	6.2600e-004	1.5300e-004
tblVehicleEF	MH	0.96	0.31
tblVehicleEF	MH	0.04	0.03
tblVehicleEF	MH	0.36	0.13
tblVehicleEF	MH	0.05	0.05
tblVehicleEF	MH	9.7730e-003	5.4940e-003
tblVehicleEF	MH	0.22	0.08
tblVehicleEF	MH	8.1130e-003	5.0570e-003
tblVehicleEF	MH	0.02	0.02
tblVehicleEF	MH	0.44	0.32
tblVehicleEF	MH	4.00	1.63
tblVehicleEF	MH	1,184.66	1,351.69
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tblVehicleEF	MH	0.87	1.09
tblVehicleEF	MH	0.66	0.24
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tblVehicleEF	MH	0.01	0.02
tblVehicleEF	MH	8.7400e-004	2.0900e-004
tblVehicleEF	MH	3.2220e-003	3.3000e-003
tblVehicleEF	MH	0.01	0.02
tblVehicleEF	MH	8.0300e-004	1.9300e-004
tblVehicleEF	MH	0.19	0.31
tblVehicleEF	MH	0.04	0.03
tblVehicleEF	MH	0.09	0.13
tblVehicleEF	MH	0.04	0.04
tblVehicleEF	MH	0.01	5.4940e-003
tblVehicleEF	MH	0.23	0.07
tblVehicleEF	MH	0.01	0.01

tblVehicleEF	MH	6.3700e-004	1.5300e-004
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tblVehicleEF	MH	0.04	0.03
tblVehicleEF	MH	0.09	0.13
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tblVehicleEF	MHD	11.71	1.78
tblVehicleEF	MHD	5.9000e-005	1.6900e-004
tblVehicleEF	MHD	3.0180e-003	6.9630e-003
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tblVehicleEF	MHD	5.7000e-005	1.6100e-004
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tblVehicleEF	MHD	6.3100e-004	8.3000e-005
tblVehicleEF	MHD	5.2500e-004	2.2800e-004
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tblVehicleEF	MHD	0.02	0.02
tblVehicleEF	MHD	3.3900e-004	1.4600e-004
tblVehicleEF	MHD	0.04	0.01

tblVehicleEF	MHD	0.01	0.01
tblVehicleEF	MHD	0.20	0.03
tblVehicleEF	MHD	1.4600e-003	6.6800e-004
tblVehicleEF	MHD	0.01	9.2240e-003
tblVehicleEF	MHD	5.6000e-004	7.0000e-005
tblVehicleEF	MHD	5.2500e-004	2.2800e-004
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tblVehicleEF	MHD	0.03	0.02
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tblVehicleEF	MHD	0.01	0.01
tblVehicleEF	MHD	0.22	0.04
tblVehicleEF	MHD	0.01	3.2270e-003
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tblVehicleEF	MHD	0.03	7.0270e-003
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tblVehicleEF	MHD	0.25	0.15
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tblVehicleEF	MHD	1,164.21	968.31
tblVehicleEF	MHD	50.28	7.11
tblVehicleEF	MHD	0.42	0.38
tblVehicleEF	MHD	1.00	1.43
tblVehicleEF	MHD	11.68	1.78
tblVehicleEF	MHD	5.0000e-005	1.6900e-004
tblVehicleEF	MHD	3.0180e-003	6.9630e-003
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tblVehicleEF	MHD	4.8000e-005	1.6100e-004
tblVehicleEF	MHD	2.8820e-003	6.6560e-003
tblVehicleEF	MHD	6.3100e-004	8.3000e-005

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tblVehicleEF	MHD	0.02	0.02
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tblVehicleEF	MHD	0.04	0.01
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tblVehicleEF	MHD	0.01	9.2240e-003
tblVehicleEF	MHD	5.5500e-004	7.0000e-005
tblVehicleEF	MHD	1.2020e-003	2.2800e-004
tblVehicleEF	MHD	0.03	0.01
tblVehicleEF	MHD	0.03	0.02
tblVehicleEF	MHD	6.9000e-004	1.4600e-004
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tblVehicleEF	MHD	0.24	0.15
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tblVehicleEF	MHD	0.38	0.38
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tblVehicleEF	MHD	7.2000e-005	1.6900e-004

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tblVehicleEF	MHD	6.9000e-005	1.6100e-004
tblVehicleEF	MHD	2.8820e-003	6.6560e-003
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tblVehicleEF	MHD	2.6800e-004	2.2800e-004
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tblVehicleEF	MHD	0.02	0.02
tblVehicleEF	MHD	1.6800e-004	1.4600e-004
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tblVehicleEF	MHD	5.6400e-004	7.0000e-005
tblVehicleEF	MHD	2.6800e-004	2.2800e-004
tblVehicleEF	MHD	0.03	0.01
tblVehicleEF	MHD	0.03	0.02
tblVehicleEF	MHD	1.6800e-004	1.4600e-004
tblVehicleEF	MHD	0.05	0.01
tblVehicleEF	MHD	0.01	0.01
tblVehicleEF	MHD	0.23	0.04
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tblVehicleEF	OBUS	4.1330e-003	2.4610e-003
tblVehicleEF	OBUS	0.02	0.02
tblVehicleEF	OBUS	0.24	0.69
tblVehicleEF	OBUS	0.32	0.29
tblVehicleEF	OBUS	4.14	1.68
tblVehicleEF	OBUS	131.68	102.80
tblVehicleEF	OBUS	1,276.65	1,219.51

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tblVehicleEF	OBUS	0.91	1.41
tblVehicleEF	OBUS	3.23	1.11
tblVehicleEF	OBUS	2.7000e-005	1.5300e-004
tblVehicleEF	OBUS	2.9480e-003	8.0870e-003
tblVehicleEF	OBUS	9.1300e-004	1.5700e-004
tblVehicleEF	OBUS	2.6000e-005	1.4600e-004
tblVehicleEF	OBUS	2.8000e-003	7.7220e-003
tblVehicleEF	OBUS	8.4000e-004	1.4500e-004
tblVehicleEF	OBUS	1.0760e-003	1.0910e-003
tblVehicleEF	OBUS	0.02	0.02
tblVehicleEF	OBUS	0.03	0.05
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tblVehicleEF	OBUS	0.03	0.05
tblVehicleEF	OBUS	0.26	0.08
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tblVehicleEF	OBUS	1.0760e-003	1.0910e-003
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tblVehicleEF	OBUS	0.03	0.05
tblVehicleEF	OBUS	0.29	0.09
tblVehicleEF	OBUS	0.01	7.3320e-003
tblVehicleEF	OBUS	4.2240e-003	2.4610e-003
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tblVehicleEF	OBUS	0.32	0.29
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tblVehicleEF	OBUS	138.58	102.80
tblVehicleEF	OBUS	1,276.65	1,219.51
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tblVehicleEF	OBUS	2.4230e-003	1.0910e-003
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tblVehicleEF	OBUS	0.03	0.05
tblVehicleEF	OBUS	1.0900e-003	5.3900e-004
tblVehicleEF	OBUS	0.04	0.02
tblVehicleEF	OBUS	0.03	0.05
tblVehicleEF	OBUS	0.24	0.08
tblVehicleEF	OBUS	1.3330e-003	9.7600e-004
tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	7.0000e-004	1.3900e-004
tblVehicleEF	OBUS	2.4230e-003	1.0910e-003
tblVehicleEF	OBUS	0.02	0.02
tblVehicleEF	OBUS	0.05	0.07
tblVehicleEF	OBUS	1.0900e-003	5.3900e-004
tblVehicleEF	OBUS	0.05	0.02

tblVehicleEF	OBUS	0.03	0.05
tblVehicleEF	OBUS	0.27	0.09
tblVehicleEF	OBUS	0.01	7.3320e-003
tblVehicleEF	OBUS	4.0680e-003	2.4610e-003
tblVehicleEF	OBUS	0.02	0.02
tblVehicleEF	OBUS	0.26	0.69
tblVehicleEF	OBUS	0.31	0.29
tblVehicleEF	OBUS	4.45	1.68
tblVehicleEF	OBUS	122.15	102.80
tblVehicleEF	OBUS	1,276.65	1,219.51
tblVehicleEF	OBUS	63.38	14.05
tblVehicleEF	OBUS	0.29	0.46
tblVehicleEF	OBUS	0.93	1.41
tblVehicleEF	OBUS	3.27	1.11
tblVehicleEF	OBUS	3.3000e-005	1.5300e-004
tblVehicleEF	OBUS	2.9480e-003	8.0870e-003
tblVehicleEF	OBUS	9.1300e-004	1.5700e-004
tblVehicleEF	OBUS	3.2000e-005	1.4600e-004
tblVehicleEF	OBUS	2.8000e-003	7.7220e-003
tblVehicleEF	OBUS	8.4000e-004	1.4500e-004
tblVehicleEF	OBUS	5.8200e-004	1.0910e-003
tblVehicleEF	OBUS	0.02	0.02
tblVehicleEF	OBUS	0.03	0.05
tblVehicleEF	OBUS	2.6600e-004	5.3900e-004
tblVehicleEF	OBUS	0.04	0.02
tblVehicleEF	OBUS	0.03	0.05
tblVehicleEF	OBUS	0.28	0.08
tblVehicleEF	OBUS	1.1770e-003	9.7600e-004
tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	7.1200e-004	1.3900e-004

tblVehicleEF	OBUS	5.8200e-004	1.0910e-003
tblVehicleEF	OBUS	0.02	0.02
tblVehicleEF	OBUS	0.05	0.07
tblVehicleEF	OBUS	2.6600e-004	5.3900e-004
tblVehicleEF	OBUS	0.05	0.02
tblVehicleEF	OBUS	0.03	0.05
tblVehicleEF	OBUS	0.30	0.09
tblVehicleEF	SBUS	0.82	0.06
tblVehicleEF	SBUS	5.7320e-003	3.4080e-003
tblVehicleEF	SBUS	0.05	4.8910e-003
tblVehicleEF	SBUS	6.56	2.56
tblVehicleEF	SBUS	0.39	0.29
tblVehicleEF	SBUS	5.20	0.68
tblVehicleEF	SBUS	1,145.40	316.42
tblVehicleEF	SBUS	1,080.15	936.84
tblVehicleEF	SBUS	44.55	3.97
tblVehicleEF	SBUS	5.56	2.32
tblVehicleEF	SBUS	2.00	2.57
tblVehicleEF	SBUS	13.53	1.41
tblVehicleEF	SBUS	2.8160e-003	1.5510e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	9.9250e-003	0.02
tblVehicleEF	SBUS	8.2600e-004	5.9000e-005
tblVehicleEF	SBUS	2.6950e-003	1.4840e-003
tblVehicleEF	SBUS	2.7040e-003	2.7130e-003
tblVehicleEF	SBUS	9.4810e-003	0.02
tblVehicleEF	SBUS	7.6000e-004	5.4000e-005
tblVehicleEF	SBUS	2.2670e-003	5.4600e-004
tblVehicleEF	SBUS	0.02	5.4720e-003
tblVehicleEF	SBUS	0.78	0.26

tblVehicleEF	SBUS	1.1480e-003	2.7600e-004
tblVehicleEF	SBUS	0.07	0.05
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.27	0.03
tblVehicleEF	SBUS	0.01	3.0130e-003
tblVehicleEF	SBUS	0.01	8.9520e-003
tblVehicleEF	SBUS	5.3500e-004	3.9000e-005
tblVehicleEF	SBUS	2.2670e-003	5.4600e-004
tblVehicleEF	SBUS	0.02	5.4720e-003
tblVehicleEF	SBUS	1.12	0.38
tblVehicleEF	SBUS	1.1480e-003	2.7600e-004
tblVehicleEF	SBUS	0.08	0.06
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.30	0.03
tblVehicleEF	SBUS	0.82	0.06
tblVehicleEF	SBUS	5.8320e-003	3.4080e-003
tblVehicleEF	SBUS	0.05	4.8910e-003
tblVehicleEF	SBUS	6.48	2.56
tblVehicleEF	SBUS	0.39	0.29
tblVehicleEF	SBUS	3.81	0.68
tblVehicleEF	SBUS	1,200.39	316.42
tblVehicleEF	SBUS	1,080.15	936.84
tblVehicleEF	SBUS	44.55	3.97
tblVehicleEF	SBUS	5.73	2.32
tblVehicleEF	SBUS	1.91	2.57
tblVehicleEF	SBUS	13.50	1.41
tblVehicleEF	SBUS	2.3740e-003	1.5510e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	9.9250e-003	0.02
tblVehicleEF	SBUS	8.2600e-004	5.9000e-005

tblVehicleEF	SBUS	2.2720e-003	1.4840e-003
tblVehicleEF	SBUS	2.7040e-003	2.7130e-003
tblVehicleEF	SBUS	9.4810e-003	0.02
tblVehicleEF	SBUS	7.6000e-004	5.4000e-005
tblVehicleEF	SBUS	5.0090e-003	5.4600e-004
tblVehicleEF	SBUS	0.02	5.4720e-003
tblVehicleEF	SBUS	0.78	0.26
tblVehicleEF	SBUS	2.3120e-003	2.7600e-004
tblVehicleEF	SBUS	0.07	0.05
tblVehicleEF	SBUS	9.2870e-003	0.01
tblVehicleEF	SBUS	0.23	0.03
tblVehicleEF	SBUS	0.01	3.0130e-003
tblVehicleEF	SBUS	0.01	8.9520e-003
tblVehicleEF	SBUS	5.1200e-004	3.9000e-005
tblVehicleEF	SBUS	5.0090e-003	5.4600e-004
tblVehicleEF	SBUS	0.02	5.4720e-003
tblVehicleEF	SBUS	1.12	0.38
tblVehicleEF	SBUS	2.3120e-003	2.7600e-004
tblVehicleEF	SBUS	0.08	0.06
tblVehicleEF	SBUS	9.2870e-003	0.01
tblVehicleEF	SBUS	0.25	0.03
tblVehicleEF	SBUS	0.82	0.06
tblVehicleEF	SBUS	5.6570e-003	3.4080e-003
tblVehicleEF	SBUS	0.06	4.8910e-003
tblVehicleEF	SBUS	6.67	2.56
tblVehicleEF	SBUS	0.38	0.29
tblVehicleEF	SBUS	6.48	0.68
tblVehicleEF	SBUS	1,069.45	316.42
tblVehicleEF	SBUS	1,080.15	936.84
tblVehicleEF	SBUS	44.55	3.97

tblVehicleEF	SBUS	5.31	2.32
tblVehicleEF	SBUS	2.03	2.57
tblVehicleEF	SBUS	13.55	1.41
tblVehicleEF	SBUS	3.4270e-003	1.5510e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	9.9250e-003	0.02
tblVehicleEF	SBUS	8.2600e-004	5.9000e-005
tblVehicleEF	SBUS	3.2790e-003	1.4840e-003
tblVehicleEF	SBUS	2.7040e-003	2.7130e-003
tblVehicleEF	SBUS	9.4810e-003	0.02
tblVehicleEF	SBUS	7.6000e-004	5.4000e-005
tblVehicleEF	SBUS	1.2740e-003	5.4600e-004
tblVehicleEF	SBUS	0.02	5.4720e-003
tblVehicleEF	SBUS	0.78	0.26
tblVehicleEF	SBUS	5.8600e-004	2.7600e-004
tblVehicleEF	SBUS	0.07	0.05
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.31	0.03
tblVehicleEF	SBUS	0.01	3.0130e-003
tblVehicleEF	SBUS	0.01	8.9520e-003
tblVehicleEF	SBUS	5.5700e-004	3.9000e-005
tblVehicleEF	SBUS	1.2740e-003	5.4600e-004
tblVehicleEF	SBUS	0.02	5.4720e-003
tblVehicleEF	SBUS	1.13	0.38
tblVehicleEF	SBUS	5.8600e-004	2.7600e-004
tblVehicleEF	SBUS	0.08	0.06
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.34	0.03
tblVehicleEF	UBUS	0.24	1.76
tblVehicleEF	UBUS	0.05	4.9700e-003

tblVehicleEF	UBUS	3.27	13.30
tblVehicleEF	UBUS	8.18	0.42
tblVehicleEF	UBUS	1,953.45	1,631.09
tblVehicleEF	UBUS	124.04	4.00
tblVehicleEF	UBUS	5.11	0.68
tblVehicleEF	UBUS	13.36	0.04
tblVehicleEF	UBUS	0.54	0.07
tblVehicleEF	UBUS	0.01	0.03
tblVehicleEF	UBUS	0.10	4.9500e-003
tblVehicleEF	UBUS	1.3240e-003	5.0000e-005
tblVehicleEF	UBUS	0.23	0.03
tblVehicleEF	UBUS	3.0000e-003	7.8890e-003
tblVehicleEF	UBUS	0.10	4.7320e-003
tblVehicleEF	UBUS	1.2180e-003	4.6000e-005
tblVehicleEF	UBUS	2.8600e-003	1.4800e-004
tblVehicleEF	UBUS	0.05	1.8210e-003
tblVehicleEF	UBUS	1.7430e-003	8.8000e-005
tblVehicleEF	UBUS	0.27	0.03
tblVehicleEF	UBUS	0.01	3.8300e-004
tblVehicleEF	UBUS	0.71	0.02
tblVehicleEF	UBUS	0.02	0.01
tblVehicleEF	UBUS	1.3900e-003	4.0000e-005
tblVehicleEF	UBUS	2.8600e-003	1.4800e-004
tblVehicleEF	UBUS	0.05	1.8210e-003
tblVehicleEF	UBUS	1.7430e-003	8.8000e-005
tblVehicleEF	UBUS	0.53	1.79
tblVehicleEF	UBUS	0.01	3.8300e-004
tblVehicleEF	UBUS	0.77	0.02
tblVehicleEF	UBUS	0.24	1.76
tblVehicleEF	UBUS	0.05	4.9700e-003

tblVehicleEF	UBUS	3.29	13.30
tblVehicleEF	UBUS	6.57	0.42
tblVehicleEF	UBUS	1,953.45	1,631.09
tblVehicleEF	UBUS	124.04	4.00
tblVehicleEF	UBUS	4.88	0.68
tblVehicleEF	UBUS	13.27	0.04
tblVehicleEF	UBUS	0.54	0.07
tblVehicleEF	UBUS	0.01	0.03
tblVehicleEF	UBUS	0.10	4.9500e-003
tblVehicleEF	UBUS	1.3240e-003	5.0000e-005
tblVehicleEF	UBUS	0.23	0.03
tblVehicleEF	UBUS	3.0000e-003	7.8890e-003
tblVehicleEF	UBUS	0.10	4.7320e-003
tblVehicleEF	UBUS	1.2180e-003	4.6000e-005
tblVehicleEF	UBUS	6.6550e-003	1.4800e-004
tblVehicleEF	UBUS	0.06	1.8210e-003
tblVehicleEF	UBUS	3.6100e-003	8.8000e-005
tblVehicleEF	UBUS	0.27	0.03
tblVehicleEF	UBUS	0.01	3.8300e-004
tblVehicleEF	UBUS	0.62	0.02
tblVehicleEF	UBUS	0.02	0.01
tblVehicleEF	UBUS	1.3620e-003	4.0000e-005
tblVehicleEF	UBUS	6.6550e-003	1.4800e-004
tblVehicleEF	UBUS	0.06	1.8210e-003
tblVehicleEF	UBUS	3.6100e-003	8.8000e-005
tblVehicleEF	UBUS	0.54	1.79
tblVehicleEF	UBUS	0.01	3.8300e-004
tblVehicleEF	UBUS	0.68	0.02
tblVehicleEF	UBUS	0.24	1.76
tblVehicleEF	UBUS	0.06	4.9700e-003

tblVehicleEF	UBUS	3.25	13.30
tblVehicleEF	UBUS	9.59	0.42
tblVehicleEF	UBUS	1,953.45	1,631.09
tblVehicleEF	UBUS	124.04	4.00
tblVehicleEF	UBUS	5.19	0.68
tblVehicleEF	UBUS	13.43	0.04
tblVehicleEF	UBUS	0.54	0.07
tblVehicleEF	UBUS	0.01	0.03
tblVehicleEF	UBUS	0.10	4.9500e-003
tblVehicleEF	UBUS	1.3240e-003	5.0000e-005
tblVehicleEF	UBUS	0.23	0.03
tblVehicleEF	UBUS	3.0000e-003	7.8890e-003
tblVehicleEF	UBUS	0.10	4.7320e-003
tblVehicleEF	UBUS	1.2180e-003	4.6000e-005
tblVehicleEF	UBUS	1.4870e-003	1.4800e-004
tblVehicleEF	UBUS	0.05	1.8210e-003
tblVehicleEF	UBUS	8.8000e-004	8.8000e-005
tblVehicleEF	UBUS	0.27	0.03
tblVehicleEF	UBUS	0.02	3.8300e-004
tblVehicleEF	UBUS	0.77	0.02
tblVehicleEF	UBUS	0.02	0.01
tblVehicleEF	UBUS	1.4140e-003	4.0000e-005
tblVehicleEF	UBUS	1.4870e-003	1.4800e-004
tblVehicleEF	UBUS	0.05	1.8210e-003
tblVehicleEF	UBUS	8.8000e-004	8.8000e-005
tblVehicleEF	UBUS	0.53	1.79
tblVehicleEF	UBUS	0.02	3.8300e-004
tblVehicleEF	UBUS	0.85	0.02
tblVehicleTrips	ST_TR	722.03	235.49
tblVehicleTrips	ST_TR	158.37	64.00

tblVehicleTrips	ST_TR	177.59	68.34
tblVehicleTrips	SU_TR	542.72	235.49
tblVehicleTrips	SU_TR	131.84	64.00
tblVehicleTrips	SU_TR	166.44	68.34
tblVehicleTrips	WD_TR	496.12	235.49
tblVehicleTrips	WD_TR	127.15	64.00
tblVehicleTrips	WD_TR	102.24	68.34

2.0 Emissions Summary

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.1619	2.0000e-005	1.9600e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	3.8300e-003	3.8300e-003	1.0000e-005	0.0000	4.0700e-003
Energy	8.2600e-003	0.0751	0.0631	4.5000e-004		5.7100e-003	5.7100e-003		5.7100e-003	5.7100e-003	0.0000	172.7047	172.7047	0.0197	5.2500e-003	174.7615
Mobile	0.4346	0.8917	4.0530	9.9200e-003	1.1067	8.0000e-003	1.1147	0.2966	7.4900e-003	0.3041	0.0000	940.5996	940.5996	0.0547	0.0000	941.9670
Waste						0.0000	0.0000		0.0000	0.0000	46.8726	0.0000	46.8726	2.7701	0.0000	116.1250
Water						0.0000	0.0000		0.0000	0.0000	1.6794	1.9406	3.6200	0.1729	4.1500e-003	9.1797
Total	**0.6047**	**0.9668**	**4.1180**	**0.0104**	**1.1067**	**0.0137**	**1.1204**	**0.2966**	**0.0132**	**0.3098**	**48.5521**	**1,115.2487**	**1,163.8008**	**3.0174**	**9.4000e-003**	**1,242.0372**

Mitigated Operational

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

Category	tons/yr										MT/yr					
Area	0.1619	2.0000e-005	1.9600e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	3.8300e-003	3.8300e-003	1.0000e-005	0.0000	4.0700e-003
Energy	8.2600e-003	0.0751	0.0631	4.5000e-004		5.7100e-003	5.7100e-003		5.7100e-003	5.7100e-003	0.0000	172.7047	172.7047	0.0197	5.2500e-003	174.7615
Mobile	0.4178	0.7698	3.5704	7.5300e-003	0.8178	6.2900e-003	0.8241	0.2192	5.8800e-003	0.2250	0.0000	713.7378	713.7378	0.0492	0.0000	714.9667
Waste						0.0000	0.0000		0.0000	0.0000	46.8726	0.0000	46.8726	2.7701	0.0000	116.1250
Water						0.0000	0.0000		0.0000	0.0000	1.6794	1.9406	3.6200	0.1729	4.1500e-003	9.1797
Total	**0.5879**	**0.8449**	**3.6355**	**7.9800e-003**	**0.8178**	**0.0120**	**0.8299**	**0.2192**	**0.0116**	**0.2308**	**48.5521**	**888.3869**	**936.9390**	**3.0118**	**9.4000e-003**	**1,015.0369**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**2.78**	**12.60**	**11.72**	**23.05**	**26.10**	**12.46**	**25.93**	**26.10**	**12.19**	**25.51**	**0.00**	**20.34**	**19.49**	**0.18**	**0.00**	**18.28**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Increase Transit Accessibility

Improve Pedestrian Network

	ROG	NOx	CO	SO2	Fugitive 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	0.4178	0.7698	3.5704	7.5300e-003	0.8178	6.2900e-003	0.8241	0.2192	5.8800e-003	0.2250	0.0000	713.7378	713.7378	0.0492	0.0000	714.9667
Unmitigated	0.4346	0.8917	4.0530	9.9200e-003	1.1067	8.0000e-003	1.1147	0.2966	7.4900e-003	0.3041	0.0000	940.5996	940.5996	0.0547	0.0000	941.9670

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Fast Food Restaurant with Drive Thru	430.95	430.95	430.95	402,644	297,565
High Turnover (Sit Down Restaurant)	224.00	224.00	224.00	259,899	192,073
Parking Lot	0.00	0.00	0.00		
Supermarket	2,037.90	2,037.90	2037.90	2,317,995	1,713,063
Total	2,692.85	2,692.85	2,692.85	2,980,538	2,202,701

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Fast Food Restaurant with Drive Thru	9.50	7.30	7.30	2.20	78.80	19.00	29	21	50
High Turnover (Sit Down Restaurant)	9.50	7.30	7.30	8.50	72.50	19.00	37	20	43
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Supermarket	9.50	7.30	7.30	6.50	74.50	19.00	34	30	36

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Fast Food Restaurant with Drive Thru	0.567441	0.056499	0.177800	0.113094	0.022543	0.005903	0.019048	0.027325	0.001641	0.001550	0.005465	0.000937	0.000757
High Turnover (Sit Down Restaurant)	0.567441	0.056499	0.177800	0.113094	0.022543	0.005903	0.019048	0.027325	0.001641	0.001550	0.005465	0.000937	0.000757
Parking Lot	0.567441	0.056499	0.177800	0.113094	0.022543	0.005903	0.019048	0.027325	0.001641	0.001550	0.005465	0.000937	0.000757
Supermarket	0.567441	0.056499	0.177800	0.113094	0.022543	0.005903	0.019048	0.027325	0.001641	0.001550	0.005465	0.000937	0.000757

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	90.9660	90.9660	0.0181	3.7500e-003	92.5371
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	90.9660	90.9660	0.0181	3.7500e-003	92.5371
NaturalGas Mitigated	8.2600e-003	0.0751	0.0631	4.5000e-004		5.7100e-003	5.7100e-003		5.7100e-003	5.7100e-003	0.0000	81.7387	81.7387	1.5700e-003	1.5000e-003	82.2244
NaturalGas Unmitigated	8.2600e-003	0.0751	0.0631	4.5000e-004		5.7100e-003	5.7100e-003		5.7100e-003	5.7100e-003	0.0000	81.7387	81.7387	1.5700e-003	1.5000e-003	82.2244

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					
Fast Food Restaurant with Drive Thru	346496	1.8700e-003	0.0170	0.0143	1.0000e-004		1.2900e-003	1.2900e-003		1.2900e-003	1.2900e-003	0.0000	18.4904	18.4904	3.5000e-004	3.4000e-004	18.6002
High Turnover (Sit Down Restaurant)	664150	3.5800e-003	0.0326	0.0274	2.0000e-004		2.4700e-003	2.4700e-003		2.4700e-003	2.4700e-003	0.0000	35.4416	35.4416	6.8000e-004	6.5000e-004	35.6522
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Supermarket	521080	2.8100e-003	0.0255	0.0215	1.5000e-004		1.9400e-003	1.9400e-003		1.9400e-003	1.9400e-003	0.0000	27.8068	27.8068	5.3000e-004	5.1000e-004	27.9720
Total		**8.2600e-003**	**0.0751**	**0.0631**	**4.5000e-004**		**5.7000e-003**	**5.7000e-003**		**5.7000e-003**	**5.7000e-003**	**0.0000**	**81.7387**	**81.7387**	**1.5600e-003**	**1.5000e-003**	**82.2244**

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					

Fast Food Restaurant with Drive Thru	346496	1.8700e-003	0.0170	0.0143	1.0000e-004		1.2900e-003	1.2900e-003		1.2900e-003	1.2900e-003	0.0000	18.4904	18.4904	3.5000e-004	3.4000e-004	18.6002
High Turnover (Sit Down Restaurant)	664150	3.5800e-003	0.0326	0.0274	2.0000e-004		2.4700e-003	2.4700e-003		2.4700e-003	2.4700e-003	0.0000	35.4416	35.4416	6.8000e-004	6.5000e-004	35.6522
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Supermarket	521080	2.8100e-003	0.0255	0.0215	1.5000e-004		1.9400e-003	1.9400e-003		1.9400e-003	1.9400e-003	0.0000	27.8068	27.8068	5.3000e-004	5.1000e-004	27.9720
Total		**8.2600e-003**	**0.0751**	**0.0631**	**4.5000e-004**		**5.7000e-003**	**5.7000e-003**		**5.7000e-003**	**5.7000e-003**	**0.0000**	**81.7387**	**81.7387**	**1.5600e-003**	**1.5000e-003**	**82.2244**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Fast Food Restaurant with Drive Thru	56969.4	3.7599	7.5000e-004	1.6000e-004	3.8248
High Turnover (Sit Down Restaurant)	109197	7.2067	1.4400e-003	3.0000e-004	7.3312
Parking Lot	25060	1.6539	3.3000e-004	7.0000e-005	1.6825
Supermarket	1.18709e+006	78.3455	0.0156	3.2300e-003	79.6986
Total		**90.9660**	**0.0181**	**3.7600e-003**	**92.5371**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Fast Food Restaurant with Drive Thru	56969.4	3.7599	7.5000e-004	1.6000e-004	3.8248

High Turnover (Sit Down Restaurant)	109197	7.2067	1.4400e-003	3.0000e-004	7.3312
Parking Lot	25060	1.6539	3.3000e-004	7.0000e-005	1.6825
Supermarket	1.18709e+006	78.3455	0.0156	3.2300e-003	79.6986
Total		**90.9660**	**0.0181**	**3.7600e-003**	**92.5371**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.1619	2.0000e-005	1.9600e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	3.8300e-003	3.8300e-003	1.0000e-005	0.0000	4.0700e-003
Unmitigated	0.1619	2.0000e-005	1.9600e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	3.8300e-003	3.8300e-003	1.0000e-005	0.0000	4.0700e-003

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0198					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Consumer Products	0.1419					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.8000e-004	2.0000e-005	1.9600e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	3.8300e-003	3.8300e-003	1.0000e-005	0.0000	4.0700e-003
Total	**0.1619**	**2.0000e-005**	**1.9600e-003**	**0.0000**		**1.0000e-005**	**1.0000e-005**		**1.0000e-005**	**1.0000e-005**	**0.0000**	**3.8300e-003**	**3.8300e-003**	**1.0000e-005**	**0.0000**	**4.0700e-003**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0198					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.1419					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.8000e-004	2.0000e-005	1.9600e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	3.8300e-003	3.8300e-003	1.0000e-005	0.0000	4.0700e-003
Total	**0.1619**	**2.0000e-005**	**1.9600e-003**	**0.0000**		**1.0000e-005**	**1.0000e-005**		**1.0000e-005**	**1.0000e-005**	**0.0000**	**3.8300e-003**	**3.8300e-003**	**1.0000e-005**	**0.0000**	**4.0700e-003**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	3.6200	0.1729	4.1500e-003	9.1797
Unmitigated	3.6200	0.1729	4.1500e-003	9.1797

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Fast Food Restaurant with Drive Thru	0.555467 / 0.0354553	0.3828	0.0181	4.4000e-004	0.9662
High Turnover (Sit Down Restaurant)	1.06237 / 0.0678107	0.7321	0.0347	8.3000e-004	1.8479
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Supermarket	3.67586 / 0.113686	2.5051	0.1200	2.8800e-003	6.3655
Total		**3.6200**	**0.1729**	**4.1500e-003**	**9.1797**

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Fast Food Restaurant with Drive Thru	0.555467 / 0.0354553	0.3828	0.0181	4.4000e-004	0.9662
High Turnover (Sit Down Restaurant)	1.06237 / 0.0678107	0.7321	0.0347	8.3000e-004	1.8479
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Supermarket	3.67586 / 0.113686	2.5051	0.1200	2.8800e-003	6.3655
Total		**3.6200**	**0.1729**	**4.1500e-003**	**9.1797**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	46.8726	2.7701	0.0000	116.1250
Unmitigated	46.8726	2.7701	0.0000	116.1250

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Fast Food Restaurant with Drive Thru	21.08	4.2791	0.2529	0.0000	10.6012
High Turnover (Sit Down Restaurant)	41.65	8.4546	0.4997	0.0000	20.9459
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Supermarket	168.18	34.1390	2.0176	0.0000	84.5780
Total		**46.8726**	**2.7701**	**0.0000**	**116.1250**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Fast Food Restaurant with Drive Thru	21.08	4.2791	0.2529	0.0000	10.6012
High Turnover (Sit Down Restaurant)	41.65	8.4546	0.4997	0.0000	20.9459
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Supermarket	168.18	34.1390	2.0176	0.0000	84.5780
Total		**46.8726**	**2.7701**	**0.0000**	**116.1250**

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

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

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Discovery Builders San Marco - Adjusted Project 2030 with ENERGY STAR

Bay Area AQMD Air District, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Parking Lot	179.00	Space	1.61	71,600.00	0
Fast Food Restaurant with Drive Thru	1.83	1000sqft	0.04	1,826.00	0
High Turnover (Sit Down Restaurant)	3.50	1000sqft	0.08	3,500.00	0
Supermarket	29.82	1000sqft	0.68	29,822.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	64
Climate Zone	4			**Operational Year**	2030
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	145.5	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.1619	2.0000e-005	1.9600e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	3.8300e-003	3.8300e-003	1.0000e-005	0.0000	4.0700e-003
Energy	8.2600e-003	0.0751	0.0631	4.5000e-004		5.7100e-003	5.7100e-003		5.7100e-003	5.7100e-003	0.0000	172.7047	172.7047	0.0197	5.2500e-003	174.7615
Mobile	0.4346	0.8917	4.0530	9.9200e-003	1.1067	8.0000e-003	1.1147	0.2966	7.4900e-003	0.3041	0.0000	940.5996	940.5996	0.0547	0.0000	941.9670
Waste						0.0000	0.0000		0.0000	0.0000	46.8726	0.0000	46.8726	2.7701	0.0000	116.1250
Water						0.0000	0.0000		0.0000	0.0000	1.6794	1.9406	3.6200	0.1729	4.1500e-003	9.1797
Total	**0.6047**	**0.9668**	**4.1180**	**0.0104**	**1.1067**	**0.0137**	**1.1204**	**0.2966**	**0.0132**	**0.3098**	**48.5521**	**1,115.2487**	**1,163.8008**	**3.0174**	**9.4000e-003**	**1,242.0372**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.1619	2.0000e-005	1.9600e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	3.8300e-003	3.8300e-003	1.0000e-005	0.0000	4.0700e-003
Energy	8.2600e-003	0.0751	0.0631	4.5000e-004		5.7100e-003	5.7100e-003		5.7100e-003	5.7100e-003	0.0000	164.9638	164.9638	0.0182	4.9300e-003	166.8870
Mobile	0.4187	0.7769	3.5983	7.6700e-003	0.8345	6.3800e-003	0.8409	0.2236	5.9700e-003	0.2296	0.0000	726.8487	726.8487	0.0495	0.0000	728.0856
Waste						0.0000	0.0000		0.0000	0.0000	46.8726	0.0000	46.8726	2.7701	0.0000	116.1250
Water						0.0000	0.0000		0.0000	0.0000	1.6794	1.9406	3.6200	0.1729	4.1500e-003	9.1797
Total	**0.5889**	**0.8520**	**3.6634**	**8.1200e-003**	**0.8345**	**0.0121**	**0.8466**	**0.2236**	**0.0117**	**0.2353**	**48.5521**	**893.7569**	**942.3090**	**3.0106**	**9.0800e-003**	**1,020.2812**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**2.62**	**11.88**	**11.04**	**21.70**	**24.59**	**11.81**	**24.43**	**24.59**	**11.51**	**24.03**	**0.00**	**19.86**	**19.03**	**0.22**	**3.40**	**17.85**

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Install Energy Efficient Appliances

	ROG	NOx	CO	SO2	Fugitive 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	83.2251	83.2251	0.0166	3.4300e-003	84.6625
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	90.9660	90.9660	0.0181	3.7500e-003	92.5371
NaturalGas Mitigated	8.2600e-003	0.0751	0.0631	4.5000e-004		5.7100e-003	5.7100e-003		5.7100e-003	5.7100e-003	0.0000	81.7387	81.7387	1.5700e-003	1.5000e-003	82.2244
NaturalGas Unmitigated	8.2600e-003	0.0751	0.0631	4.5000e-004		5.7100e-003	5.7100e-003		5.7100e-003	5.7100e-003	0.0000	81.7387	81.7387	1.5700e-003	1.5000e-003	82.2244

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					
Fast Food Restaurant with Drive Thru	346496	1.8700e-003	0.0170	0.0143	1.0000e-004		1.2900e-003	1.2900e-003		1.2900e-003	1.2900e-003	0.0000	18.4904	18.4904	3.5000e-004	3.4000e-004	18.6002
High Turnover (Sit Down Restaurant)	664150	3.5800e-003	0.0326	0.0274	2.0000e-004		2.4700e-003	2.4700e-003		2.4700e-003	2.4700e-003	0.0000	35.4416	35.4416	6.8000e-004	6.5000e-004	35.6522
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Supermarket	521080	2.8100e-003	0.0255	0.0215	1.5000e-004		1.9400e-003	1.9400e-003		1.9400e-003	1.9400e-003	0.0000	27.8068	27.8068	5.3000e-004	5.1000e-004	27.9720
Total		**8.2600e-003**	**0.0751**	**0.0631**	**4.5000e-004**		**5.7000e-003**	**5.7000e-003**		**5.7000e-003**	**5.7000e-003**	**0.0000**	**81.7387**	**81.7387**	**1.5600e-003**	**1.5000e-003**	**82.2244**

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					
Fast Food Restaurant with Drive Thru	346496	1.8700e-003	0.0170	0.0143	1.0000e-004		1.2900e-003	1.2900e-003		1.2900e-003	1.2900e-003	0.0000	18.4904	18.4904	3.5000e-004	3.4000e-004	18.6002
High Turnover (Sit Down Restaurant)	664150	3.5800e-003	0.0326	0.0274	2.0000e-004		2.4700e-003	2.4700e-003		2.4700e-003	2.4700e-003	0.0000	35.4416	35.4416	6.8000e-004	6.5000e-004	35.6522
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Supermarket	521080	2.8100e-003	0.0255	0.0215	1.5000e-004		1.9400e-003	1.9400e-003		1.9400e-003	1.9400e-003	0.0000	27.8068	27.8068	5.3000e-004	5.1000e-004	27.9720
Total		**8.2600e-003**	**0.0751**	**0.0631**	**4.5000e-004**		**5.7000e-003**	**5.7000e-003**		**5.7000e-003**	**5.7000e-003**	**0.0000**	**81.7387**	**81.7387**	**1.5600e-003**	**1.5000e-003**	**82.2244**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Fast Food Restaurant with Drive Thru	56969.4	3.7599	7.5000e-004	1.6000e-004	3.8248
High Turnover (Sit Down Restaurant)	109197	7.2067	1.4400e-003	3.0000e-004	7.3312
Parking Lot	25060	1.6539	3.3000e-004	7.0000e-005	1.6825
Supermarket	1.18709e+006	78.3455	0.0156	3.2300e-003	79.6986
Total		**90.9660**	**0.0181**	**3.7600e-003**	**92.5371**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Fast Food Restaurant with Drive Thru	56969.4	3.7599	7.5000e-004	1.6000e-004	3.8248
High Turnover (Sit Down Restaurant)	109197	7.2067	1.4400e-003	3.0000e-004	7.3312
Parking Lot	25060	1.6539	3.3000e-004	7.0000e-005	1.6825
Supermarket	1.0698e+006	70.6046	0.0141	2.9100e-003	71.8241
Total		**83.2251**	**0.0166**	**3.4400e-003**	**84.6625**