

111

February 2, 2021

HONORABLE MAYOR AND CITY COUNCIL City of Long Beach California

# RECOMMENDATION:

Receive the supporting documentation into the record and conclude the public hearing;

Adopt a Resolution approving and certifying the Environmental Impact Report Addendum (EIRA-05-20) to the previously certified Midtown Specific Plan Programmatic Environmental Impact Report (SCH No. 2015031034);

Declare an Ordinance approving a Zone Change (ZCHG18-006) from the Regional Highway District (CHW), Community Automobile Orientated (CCA), and Two-Family Residential (R-2-N) zoning districts to Midtown Specific Plan (MTSP) Transit Node-Low Zoning District (TN Low) on nine lots located at 201–245 West Pacific Coast Highway and 1827 Pacific Avenue (APN 7209-022-900, 7209-022-028, 7209-022-027, and 7209-022-023), read the first time and laid over to the next regular meeting of the City Council for final reading; and,

Declare an Ordinance approving Zoning Code Amendment (ZCA 18-008) to the Midtown Specific Plan (SP-1) to reflect the expansion of the MTSP boundary to include the proposed Zone Change area, read the first time and laid over to the next regular meeting of the City Council for final reading. (District 6)

# **DISCUSSION**

On November 5, 2020, the Planning Commission (Attachment A – Planning Commission Report) held a public hearing and recommended (6-0, with one abstention) that City Council approve: (1) a Zone Change to rezone nine lots generally located on the north side of Pacific Coast Highway between Cedar Avenue to the west and Pacific Avenue to the east to the Midtown Specific Plan (MTSP) Transit Node Low (TN Low) district; and, (2) a Zone Code Amendment to modify plan text and maps to reflect the expansion of the boundary area of MTSP to encompass the subject parcels and facilitate a development project at the subject location (Attachment B - Location Map).

The subject site is surrounded by multifamily residential and commercial uses to the north, an education facility across Pacific Coast Highway to the south, commercial and multifamily uses across Pacific Avenue to the west, and commercial uses across Cedar Avenue to the east. The site is currently zoned Regional Highway District (CHW), Community Automobile Orientated (CCA) and Two-Family Residential (R-2-N) Districts and has a General Plan Land Use PlaceType designation of Transit Orientated Development (TOD-L). The 2019 General Plan Land Use Element Update designated the subject site as the TOD-L PlaceType and limits the

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site to a maximum height of seven stories. The TOD-L PlaceType supports mixed use developments and is generally characterized by average densities of 44 dwelling units per acre. The current zoning, which for the majority of the site allows only commercial uses (the CHW and CCA zones), is inconsistent with the mixed uses permitted by the General Plan Land Use Element PlaceType designation. Pursuant to State law, the City is required to rezone the property to bring the zoning into alignment with the General Plan. The City is currently undertaking a systematic geographic rezoning program to bring zoning throughout the City into consistency with the 2019 General Plan Land Use Element update. In a city as large as Long Beach, it is not feasible to rezone every parcel at one time due to the size of the City, the variety of contexts, and the need to engage the public in the process. As a result, the rezoning program will phase the development of new zones and rezoning of all properties in the City, consistent with State law, which provides that a city must update its zoning ordinance to be consistent with its updated General Plan within "a reasonable time" (see California Government Code Section 65860).

At this time, the applicant seeks a Zone Change to the Midtown Specific Plan (MTSP) Transit Node (TN) district (Attachment C – Proposed Zone Change Map) for the purpose of developing the site (Attachment D – Development Plans) in a manner that is consistent with the TOD-L PlaceType (described in greater detail below). This Zone Change would involve expanding the Midtown Specific Plan one block west to Cedar Avenue to encompass the subject site. The Transit Node District has two distinct subareas, High and Low. This development site will be rezoned to the Transit Node Low (TN Low) district. The proposed TN Low zoning district better aligns the zoning of the parcels with the goals of the TOD-Low PlaceType outlined in the Land Use Element and facilitates the construction of mixed-use development consisting of commercial and residential opportunities. The proposed zone change of the subject site is an appropriate extension of MTSP and provides a transition between the existing commercial uses that flank Pacific Coast Highway and the multifamily residences located on Cedar Avenue. A map of the Zone Change area and the expanded specific plan are attached to the proposed Ordinances as Exhibit A.

The MTSP TN Low zoning district allows a floor area ratio (FAR) of 3.0 and up to 65 feet in height and a maximum of five stories for parcels with depths of 200 feet or greater. MTSP does not have a maximum density for residential units; rather density is controlled by the development standards including building height, setbacks, parking, open space standards, etc. The General Plan Land Use Map permits building heights up to seven stories for the development site—two stories greater than the proposed Zoning District of MTSP TN-Low allows. The range of uses and intensity permitted by the MTSP is consistent with the general characteristics of the Placetype TOD-Low, which anticipates higher density residential units mixed with commercial uses in proximity to transit. For these reasons, the extension of the MTSP and the TN-Low zoning is appropriate and is supported by the PlaceType, given the site is located in a high-quality transit area served by light rail and high-frequency bus service. The eastern edge of the project areas is located just outside of the 1/4 mile, the determined radius for walkability from the "A" line, but is well within the critical one-mile distance for potential riders. The project site is also located along Long Beach Transit bus routes with bus stops located adjacent to the site on Pacific Coast Highway and Pacific Avenue. This Zone Change advances the Goals and Policies of the General Plan, including the following: LUE Goal No.3 HONORABLE MAYOR AND CITY COUNCIL February 2, 2021 Page 3 of 7

– Accommodate Strategic Growth and Change; LUE Policy 7 – Encourage degraded and abandoned buildings and properties to transition to more productive uses through adaptive reuse or new development; Goal No. 5 – Diversify Housing Opportunities; and, LUE Policy 13-2 – Provide new housing opportunities in neighborhood-serving centers and corridors within transit-oriented development areas and downtown.

The Zoning Code Amendment would modify the plan text of the MTSP and pertinent maps for the purpose of reflecting the expanded boundary of MTSP. There are no proposed changes to uses or development standards within the MTSP. The City Attorney has prepared an Ordinance reflecting the proposed amendments to the MTSP.

On November 5, 2020, the Planning Commission approved and recommended that City Council adopt the proposed Zone Change to rezone the subject site the MTSP TN-Low District and the Zoning Code Amendment to expand the boundaries of specific plan to better align the zoning designation of the parcels with their PlaceType to permit a mix of residential and commercial uses on otherwise vacant lots (Attachment E - PC Findings and Conditions). Furthermore, the Planning Commission's approval of a Site Plan Review (SPR18-054) and the Lot Merger (LMG18-032) for the mixed-use development consisting of two, five-story buildings, with 138-market-rate residential units and 24,911 square feet of ground floor commercial space is contingent on the proposed Zone Change and Zoning Code Amendment.

The buildings have been designed to minimize impact to the surrounding uses. They feature a terraced design that pushes the bulk and mass of the buildings away from the residential properties to the north and toward Pacific Coast Highway. The proposed project redevelops a currently underused site with residential units that can help the City address its housing shortage and meet its regional housing obligations. It includes nearly 25,000 square feet of nonresidential square-footage that will provide the surrounding community with access to neighborhood-serving commercial uses and creates a walkable environment with the incorporation of a public paseo that runs north/south through the project that will be lined with retail and other commercial uses. The development project would serve as an appropriate transition between the existing commercial uses that flank Pacific Coast Highway and the multifamily residences located on Cedar Avenue. Reuse of the subject site in the manner described is consistent with the 2019 General Plan Land Use Element Update, which directs new housing and commercial uses to major, mixed-use corridors as a means to accommodate the City's anticipated growth through the Plan's horizon year of 2040. There are no proposed changes to uses or development standards within the MTSP (Attachment F - Zone Change and Zone Code Amendment Findings).

# Summary of, and Response to, Public Input

The Proposed Zone Change represents one of the first projects to seek a zone change that is consistent with the 2019 General Plan Land Use Update. Public comments on the proposed zone change and development project were received via email, letters, and "in person" during the Planning Commission hearing. Some comments were supportive of the project and enhancement of the subject site, while other comments raised concerns or objections. The comments of concern are summarized as follows:

- The project is too tall, too dense, and severely under-parked.
- The project will result in increased traffic and negatively impact pedestrian safety.
- The proposed project is one of a number of new developments proposed in the Sixth Council District, and the cumulative impact of high-density, mid-rise buildings that are under-parked is having a detrimental impact on the entire community.
- The proposed project should be redesigned to be compatible with the adjoining onestory residence at 1832 Cedar Avenue and be no more than two stories in height.
- The proposed project is not compatible with the scale of the neighborhood, which is generally lower density and has buildings that are lower in height than the proposed project and is generally larger in scale than other new developments along Long Beach Boulevard.
- The proposed project is incompatible with the development pattern and height of the surrounding community; all four corners of Pacific Coast Highway and Pacific Avenue are improved with one story buildings and the surrounding area consists of one-story buildings with the exception of a low-profile two-story apartment to the west on Cedar Avenue.
- The proposed project at a height of 5 stories with a 9-foot, 6-inch high mezzanine, which
  gives it the appearance of 6 stories and a height of 62 to 71 feet, is not compatible with
  the surrounding area.
- This location is the gateway to Wrigley Village not Downtown Long Beach.

Neighborhood Compatibility, Scale and Design: The western half of the site is occupied by a small retail food market and parking lot. The eastern half of the project site was developed with a commercial building and parking lot on the parcel located at 201 West Pacific Coast Highway and a single-story motel on the parcel located at 1827 Pacific Avenue. The motel was demolished in 2011. The existing conditions of the project site feature several outdated commercial buildings, large expanse of surface parking and vacant land. The existing conditions in the area can be attributed to the limitations of the existing zoning. The area has not seen significant investment in recent decades due to the single use commercial zoning as well as the restrictive development standards, including a two-story height limit and high parking ratios that have inhibited both new development and changes of use in existing commercial buildings. The result has been vacancy and blight. This interim blighted condition has led to graffiti, illegal dumping, and other crime on and near the subject site.

The proposed project represents a feasible redevelopment of the site facilitated by the 2019 General Plan Land Use Element Update PlaceType designation that contemplates mixed use and taller building heights commensurate with the site's more urban, transit-accessible location to accommodate new housing and neighborhood-serving uses and amenities. Another project in the vicinity (a 100 percent affordable housing project at Pacific Coast Highway and Magnolia Avenue) achieved a similar scale using state density bonus incentives and waivers.

Generally, the area can be described as an area that is transition. While existing buildings in the vicinity range from one to two stories in height (multifamily residential uses on the westside of Cedar Avenue, north of the subject site are largely two story), the height of the proposed project is consistent with and less than the seven-story height limit contemplated by the

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updated General Plan. As housing and mixed-use projects are developed consistent with the TOD-Low PlaceType, there will be a more consistent scale in the area. Additionally, the site only directly abuts one low-density multifamily residential lot to the north. All other sides of the subject site abut a street or commercial uses, and residential uses northwest of the subject site are separated by a street, Cedar Avenue. The northwestern portion of the proposed development that directly abuts the low-density multifamily residential lot has been stepped down to 29 feet, which is effectively the height of a two-story building. The Cedar Building was designed to step down in height as it approaches the residential uses to the north in a terraced design. The rest of the building's height, which ranges from 62 to 67 feet (including architectural features), is oriented toward Pacific Coast Highway and the eastern portion of the site that abuts commercial uses to the north. The proposed project, relative to projects of similar size, has a significant commercial component that will ensure that area residents continue to have access to shopping and services and can allow for the replacement of the current grocery store and fulfill other neighborhood needs. This will contribute to a more activated pedestrian environment and a reduction in vehicle trips, as residents will be able to walk to basic services. Moreover, there are no residential uses on the site, so the proposed project will not result in the displacement of dwelling units and will represent a net gain in housing that is needed to address the City's severe housing shortage and accommodate the City's State-mandated housing obligations, which is a primary objective the General Plan Land Use Element Update.

As noted, the developer has been working with City staff since 2017 to design a project that would complement the neighborhood. The original design featured one, six-story building that extended across the entire block, Pacific Avenue to Cedar Avenue, and featured 154 residential units. Additional design modifications that a resulted in the current proposal include two buildings that will be connected by raised pedestrian bridges over the existing alley that is to remain and serve as a paseo through the site; this modification further breaks up the massing of the building, and along with the terraced height, incorporates vertical variation and articulation to further reduce the visual massing of the buildings and create greater architectural interest. As revised, the site would be developed with 138-market-rate residential units and 24,911 square feet of ground floor commercial.

Other Project Benefits: Pacific Coast Highway, a major transit corridor, is used by pedestrians traversing to and from bus stops, first and last mile. The project site's current blighted condition fosters an environment of inactivity and lacks adequate nighttime/security lighting that can contribute to a perception of a lack of safety and can deter walking and transit use. With its ground floor commercial uses and activated paseo, the proposed development project will provide a more walkable, safer pedestrian route along Pacific Coast Highway, which will help to promote the use of public transit. New commercial uses will not only activate Pacific Coast Highway but contribute to an enhanced pedestrian experience along Cedar and Pacific Avenues as well.

Although the project site includes an operating market, the site, as a whole, is largely underutilized. The majority of the site consists of surface parking or areas formerly used for parking and a vacant deteriorated commercial building. As proposed, the existing 9,100-square-foot market would be replaced by a larger supermarket approximately 23,000 square feet in size. The project would not result in a net loss of grocery stores in the area. Additionally, the project incorporates 138-market-rate residential units above the ground floor spread across

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two buildings. The additional housing helps to address the local and statewide housing shortage demands of new housing units at all income levels.

The addition of housing units is consistent with the General Plan Housing Element Policy 4.1: Encourage a balance of rental and homeownership opportunities, including high-quality apartments, townhomes, condominiums, and single-family homes to accommodate the housing needs of all socioeconomic segments of the community, including large families. Additionally, the redevelopment of the site satisfies Land Use Element Policy 7-9 to focus infill development along major corridors.

The General Plan identifies one of the challenges in the City is that many corridors, including Pacific Coast Highway, lack identity and do not integrate with adjoining neighborhoods. Issues include aging vacant or abandoned buildings, lack of private investments, high business turnover, distressed properties, lack of uniformity, deficiencies in pedestrian amenities and incompatible uses. The proposed project would ameliorate a number of these concerns at this location.

This matter was reviewed by Assistant City Attorney Michael J. Mais on December 28, 2020 and by Budget Management Officer Rhutu Amin Gharib on January 6, 2021.

# Public Notice and Environmental Compliance

A notice of public hearing was published in the Long Beach Press-Telegram on January 19, 2021, in accordance with the requirements of Chapter 21.21 of the Long Beach Municipal Code. Notices were mailed to property owners within a 300-foot radius of the project.

In June 2016, the City Council certified a program Environmental Impact Report (State Clearinghouse No. 2015031034) for the MTSP (Attachment G – Midtown Specific Plan EIR). In accordance with the California Environmental Quality Act (CEQA) and the CEQA Guidelines, an Addendum to the MTSP EIR was prepared for the proposed project. Pursuant to Public Resources Code Section 21166 and CEQA Guidelines Section 15162, the proposed project has been analyzed in accordance with the MTSP EIR and will not result in any new significant impacts upon the environment, or any impacts greater than those analyzed in the MTSP EIR. A CEQA statement of support and environmental compliance determination has been prepared to document this finding (Attachment H – Addendum to Midtown Specific Plan EIR). Therefore, no further environmental review is necessary.

The project will be subject to the Mitigation Monitoring and Reporting Program adopted with the MTSP EIR, which established mitigation measures that apply to development in the MTSP, including the proposed project. These mitigation measures pertain to aesthetics, air quality, cultural resources, geology and seismicity, greenhouse gas emissions, hazards and hazardous materials, hydrology and water quality, noise, traffic and circulation, utilities, and service systems.

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# TIMING CONSIDERATIONS

Pursuant to Section 21.25.103 of the Zoning Regulations, this request must be presented to the City Council within 60 days of the Planning Commission hearing, which took place on November 5, 2020. The February 2, 2020, meeting of the City Council was the first available hearing date for this item.

# FISCAL IMPACT

There is no fiscal or local job impact associated with this recommendation. This recommendation has no staffing impact beyond the normal budgeted scope of duties and is consistent with existing City Council priorities.

# SUGGESTED ACTION:

Approve recommendation.

Respectfully submitted.

APPROVED:

OSCAR W. ORCI DIRECTOR OF DEVELOPMENT SERVICES

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THOMAS B. MODICA CITY MANAGER

Attachments:

CITY COUNCIL RESOLUTION

CITY COUNCIL ORDINANCES (2)

ATTACHMENT A - PLANNING COMMISSION STAFF REPORT (NOVEMBER 5, 2020)

ATTACHMENT B - LOCATION MAP

ATTACHMENT C - PROPOSED ZONE CHANGE MAP

ATTACHMENT D - DEVELOPMENT PLAN

ATTACHMENT E - PC FINDINGS AND CONDITIONS

ATTACHMENT F - FINDINGS FOR ZONE CHANGE AND ZONE CODE AMENDMENT

ATTACHMENT G - MIDTOWN SPECIFIC PLAN EIR

ATTACHMENT H - ADDENDUM TO THE MIDTOWN SPECIFIC PLAN EIR

# OFFICE OF THE CITY ATTORNEY CHARLES PARKIN, City Attorney 411 West Ocean Boulevard, 9th Floor Lond Beach. CA 90802-4664

# RESOLUTION NO.

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF LONG BEACH APPROVING AND CERTIFYING AN ADDENDUM TO THE FINAL ENVIRONMENTAL IMPACT REPORT FOR THE MIDTOWN SPECIFIC PLAN (STATE CLEARINGHOUSE NO. 2015031034) IN ACCORDANCE WITH THE PROVISIONS OF THE CALIFORNIA ENVIRONMENTAL QUALITY ACT AND STATE AND LOCAL GUIDELINES AND MAKING CERTAIN FINDINGS AND DETERMINATIONS RELATIVE THERETO

The City Council of the City of Long Beach does hereby find, determine and resolve:

Section 1. Applicant, J.R. VAN DIJS, INC., has proposed a mixed-use residential and commercial project known as the 201 W. PCH Project located at 201-245 West Pacific Coast Highway and 1827 Pacific Avenue. Said project description and location are more fully described in the Midtown Specific Plan Environmental Impact Report (EIR) and Addendum No. 1 to the Midtown Specific Plan EIR (EIR Addendum), copies of which EIR and EIR Addendum are incorporated herein by this reference as though set forth in full, word for word.

Section 2. A Draft Environmental Impact Report (DEIR) for the Midtown Specific Plan was completed on January 12, 2016, and the Final Environmental Impact Report (FEIR) was completed on March 28, 2016, and circulated for public review and comment between January 12, 2016 and February 26, 2016.

Section 3. At the time the City Council approved and adopted the Midtown Specific Plan EIR on May 24, 2016, the City Council made certain Findings and determinations in accordance with the provisions of the California Environmental Quality

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Act (CEQA), adopted a Statement of Overriding Considerations for each environmental impact identified in the PEIR as "significant and unavoidable," and adopted a Mitigation Monitoring and Reporting Program ("MMRP"). The content of said Findings, Statement of Overriding Considerations, and MMRP are hereby incorporated herein by this reference as though set forth herein word for word.

Section 4. EIR Addendum No. 1, prepared for the Midtown Specific Plan. in connection with the 210 W. PCH Project, represents and discusses certain modifications to the approved project plan and is considered an addition to the previous environmental review documentation for the Midtown Specific Plan. A copy of the EIR Addendum No. 1 (EIRA-05-20) together with technical appendices and other supporting documentation has been provided to the City Council for its review and consideration.

Section 5. Pursuant to Section 15164 of the CEQA Guidelines, and based on the evidence and oral and written testimony presented at all previous public hearings, and based on all of the information contained in the files of the Development Services Department (incorporated herein by this reference) on the Project, including the EIR for the Midtown Specific Plan, and EIR Addendum No. 1, and including, but not limited to, the November 5, 2020, Planning Commission written and oral staff reports, and the February 2, 2021 City Council written and oral staff reports, the City Council finds that:

- Α. EIR Addendum No. 1 has been completed in compliance with CEQA:
- B. EIR Addendum No. 1 reflects the City Council's independent judgment and analysis with respect to the Project;
- None of the conditions described in CEQA Guidelines Section 15162 C. which call for the preparation of a subsequent or supplemental EIR have occurred:
- An EIR Addendum is appropriate since the Project would not result D. in any additional significant impacts nor would it increase the severity of previously anticipated impacts. Rather, all of the impacts associated with the Project are within the envelope of impacts addressed in the certified EIR and/or do not constitute a new or

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greater significant impact. Thus, a supplemental or subsequent EIR is not required pursuant to Public Resources Code Section 21166, or California Code of Regulations, Title 14, Section 15162 or 15163, because none of the conditions described in Section 15162 calling for the preparation of a subsequent or supplemental EIR have occurred.

The CEQA Findings made in this Resolution and in the EIR Section 6. Addendum as provided to the City Council are based on the information and evidence set forth in Midtown Specific Plan EIR, as referenced above, and EIR Addendum No. 1, and upon such other substantial evidence (both oral and written) which has been presented in the record of the proceeding, including, but not limited to, that information received by the City Council at the public hearing conducted on \_\_\_\_\_\_, 2021, including the Staff Report presented to the City Council. The EIR and the EIR Addendum, staff reports, testimony, technical studies, appendices, plans, specifications, figures, exhibits, and other materials that constitute the record of proceedings on which this resolution is based are on file and available for public examination during normal business hours in the Department of Development Services, Planning Bureau, 411 West Ocean Boulevard, 3rd Floor, Long Beach, CA 90802. The custodian of said records is the Director of Development Services.

> Section 7. Decision,

The City Council hereby approves and adopts the Addendum No. 1 to the Environmental Impact Report for the Midtown Specific Plan, which Addendum and all Appendices and Exhibits thereto, are incorporated herein by this reference as though set forth word for word.

Section 8. The City Council hereby adopts, and incorporates herein by this reference, each and every fact and finding as set forth in the City Council Staff Report dated February 2, 2021, as well as those facts and findings as set forth in the EIR Addendum which has been provided to the City Council for its review and consideration; together with all of the Mitigation Measures as set forth and described in the EIR Addendum, which Measures are specifically imposed upon the Project as part of the

Project approval and which will be monitored by the City of Long Beach for compliance. Section 9. This resolution shall take effect immediately upon its adoption by the City Council, and the City Clerk shall certify the vote adopting this resolution. I hereby certify that the foregoing resolution was adopted by the City Council of the City of Long Beach at its meeting of \_\_\_\_\_\_, 20\_\_\_\_, by the following vote: Ayes: Councilmembers: Councilmembers: Noes: Councilmembers: Absent: Recusal(s): Councilmembers: City Clerk 

# OFFICE OF THE CITY ATTORNEY CHARLES PARKIN, City Attorney 411 West Ocean Boulevard, 9th Floor Long Beach, CA 90802-4664

# ORDINANCE NO.

AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF LONG BEACH AMENDING THE USE DISTRICT MAP OF THE CITY OF LONG BEACH AS SAID MAP HAS BEEN ESTABLISHED AND AMENDED BY AMENDING PORTIONS OF PART 9 OF SAID MAP FROM CCA (COMMUNITY COMMERCIAL AUTOMOBILE-ORIENTED), CHW (REGIONAL HIGHWAY COMMERCIAL) AND TWO-FAMILY RESIDENTIAL (R-2-N) TO MIDTOWN SPECIFIC PLAN (TOD-L)

The City Council of the City of Long Beach ordains as follows:

Section 1. Environmental documentation having been prepared, certified, received and considered as required by law, and the City Council hereby finding that the proposed change will not adversely affect the character, livability or appropriate development of the surrounding area and that the proposed change is consistent with the goals, objectives and provisions of the General Plan, the official Use District Map of the City of Long Beach, as established and amended, is further amended by amending portions of Part 9 of said Map from CCA (Community Commercial Automobile-Oriented), CHW (Regional Highway Commercial) and R-2-N (Two-Family Residential) to Midtown Specific Plan (TOD-L).

Section 2. Those portions of Part 9 of said Map that are amended by this ordinance are depicted on Exhibit "A" which is attached hereto and by this reference made a part of this ordinance and the official Use District Map of the City.

Section 3. All ordinances and parts of ordinances in conflict herewith are hereby repealed.

OFFICE OF THE CITY ATTORNEY CHARLES PARKIN, City Attorney 411 West Ocean Boulevard, 9th Floor Long Beach, CA 90802-4664

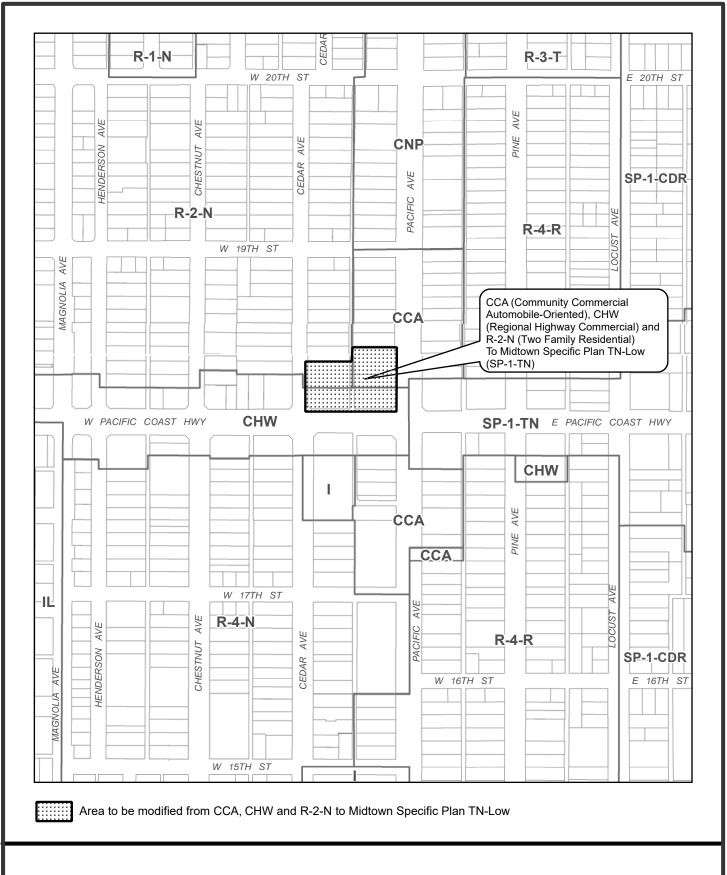
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1	Section	4. The City Clerk sha	ll certify to the passage of this ordinance by				
2	the City Council and cause it to be posted in three conspicuous places in the City of Long						
3	Beach, and it shall take effect on the thirty-first day after it is approved by the Mayor.						
4	I hereb	y certify that the foreg	oing ordinance was adopted by the City				
5	Council of the City of	Long Beach at its meet	ing of, 2021, by the				
6	following vote:						
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8	Ayes:	Councilmembers;					
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11							
12	Noes:	Councilmembers:					
13							
14	Absent:	Councilmembers:					
15							
16	Recusal(s):	Councilmembers:					
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20			City Clerk				
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22	Approved:						
23			Mayor				
24							





# AMENDMENT TO A PORTION OF PART 9 OF THE USE DISTRICT MAP

Rezoning Case # ZCHG18-006

# OFFICE OF THE CITY ATTORNEY CHARLES PARKIN, City Attorney 411 West Ocean Boulevard, 9th Floor Long Beach. CA 90802

# ORDINANCE NO. ORD-

AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF LONG BEACH AMENDING AND RESTATING THE MIDTOWN SPECIFIC PLAN (SP-1) TO REFLECT A BOUNDARY CHANGE

WHEREAS, the Planning Commission, at its hearing on November 5, 2020, reviewed the proposed amendment to the text of the Midtown Specific Plan (SP-1), and recommended the City Council adopt same;

WHEREAS, the City Council, hereby finds that the proposed amendments to the boundary maps and text of the Midtown Specific Plan will not adversely affect the character, livability or appropriate development of the surrounding properties and that the proposed amendments are consistent with the goals, objectives and provisions of the General Plan.

NOW, THEREFORE, the City Council of the City of Long Beach ordains as follows:

Section 1. The Midtown Specific Plan (SP-1) is hereby amended, restated, and adopted in its entirety as set forth in Exhibit "A" which is attached hereto and incorporated herein by this reference.

Section 2. The City Clerk shall certify to the passage of this ordinance by the City Council and cause it to be posted in three (3) conspicuous places in the City of Long Beach, and it shall take effect on the thirty-first (31st) day after it is approved by the Mayor.

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OFFICE OF THE CITY ATTORNEY CHARLES PARKIN, City Attorney 411 West Ocean Boulevard, 9th Floor Long Beach. CA 90802

I hereby certify that the foregoing ordinance was adopted by the City							
Council of the City of Long Beach at its meeting of, 20 by the							
following vote:							
	Ayes:	Councilmembers:	-				
	Noes:	Councilmembers:					
	Absent:	Councilmembers:					
	Recusal(s):	Councilmembers:					
i i							
			011 01 1				
			City Clerk				
<b>A</b>	رم ما،						
Approv	ed:		Mayor				

Exhibit "A"

Midtown will be a vibrant and thriving community for our children, family, and friends.





# **ACKNOWLEDGEMENTS**

# **Mayor and City Council**

Honorable Mayor Robert Garcia
Lena Gonzalez, Councilwoman, 1st District
Jeannine Pearce, Councilmember, 2nd District
Suzie Price, Councilwoman, 3rd District
Daryl Supernaw, Councilman, 4th District
Stacy Mungo, Councilwoman, 5th District
Dee Andrews, Councilman, 6th District
Roberto Uranga, Councilmember, 7th District

Al Austin II, Councilmember, 8th District

Rex Richardson, Vice Mayor, 9th District

# City of Long Beach Planning Commission

Donita Van Horik, Chair
Erick Verduzco-Vega, Vice Chair
Mark Christoffels
Ron Cruz
Richard Lewis (term began September 2016)
Andy Perez
Jane Templin

Alan Fox (term ended August 2016)

# Office of the City Manager

Patrick H. West, City Manager Tom Modica, Assistant City Manager Arturo Sanchez, Deputy City Manager

# City of Long Beach Department of Development Services

Amy J. Bodek AICP, Director
Oscar W. Orci, Deputy Director
Linda F. Tatum, AICP, Planning Bureau Manager
Carrie Tai, Current Planning Officer
Christopher Koontz, AICP, Advance Planning Officer
Ira Brown, Planner
Craig Chalfant, Planner

Angela Reynolds, AICP, Deputy Director (ret.)

#### **Consultant Team**

Katalyst, Inc., Rich Flierl, Principal
PlaceWorks, Colin Drukker, Associate Principal
Fehr & Peers, Jason Pack, Principal
Strategic Economics, Sujata Srivastava, Principal
Fuscoe Engineering, Ian Adam, Principal

# **Special Recognition**

Southern California Association of Governments (SCAG)

# SCAG COMPASS BLUEPRINT PROGRAM

This is a project for the City of Long Beach with funding provided by the Southern California Association of Governments' (SCAG) Compass Blueprint Program. Compass Blueprint assists Southern California cities and other organizations in evaluating planning options and stimulating development consistent with the region's goals. Compass Blueprint tools support visioning efforts, infill analyses, economic and policy analyses, and marketing and communication programs.

The preparation of this document has been financed in part through grant(s) from the Federal Highway Administration (FHWA) and the Federal Transit Administration (FTA) through the U.S. Department of Transportation (DOT) in accordance with the provisions under the Metropolitan Planning Program as set forth in Section 104(f) of Title 23 of the U.S. Code.

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# **CITY OF LONG BEACH**

# MIDTOWN SPECIFIC PLAN

ADOPTED BY THE LONG BEACH CITY COUNCIL ON JUNE 14, 2016
ORDINANCE NO. ORD-16-0009
AMENDED \_\_\_\_\_ [DATE]
ORDINANCE NO. ORD-XX-XXXX

Prepared for the City of Long Beach Department of Development Services Katalyst, Inc., PlaceWorks, Fehr & Peers, Strategic Economics, Fuscoe Engineering

This information is available in alternative format by request at (562) 570-3807. For an electronic version, visit our website at www.lbds.info.

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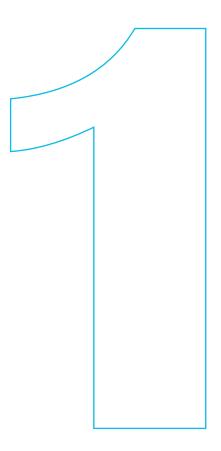
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# **SUMMARY**

MIDTOWN SPECIFIC PLAN



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# 1.0 Summary

# 1.1 VISION, PURPOSE, AND GUIDING PRINCIPLES

# **Vision: A Vibrant Midtown**

Midtown will be a vibrant and thriving community for our children, family, and friends. Midtown will be known for its unique blend of parks, strong businesses, and transit-oriented housing. Additionally, Midtown will be an early leader in multi-modal transportation practices, where a person can safely and easily travel by walking, riding a bike, catching a bus, taking a train, or driving a car.

# **Purpose of the Specific Plan**

The Midtown Specific Plan provides a framework for the development and improvement of a 375-acre corridor along Long Beach Boulevard in the City of Long Beach.

The Specific Plan is intended to be more flexible than conventional zoning to encourage new investment and development along the corridor. The Specific Plan establishes a land use plan and regulations, infrastructure requirements, design guidelines, and implementation strategies necessary to achieve the vision.

# **Guiding Principles**

Five principles accompany the vision to guide the Specific Plan and support Citywide efforts to increase non-motorized transportation, promote healthy living options, and work toward a more sustainable future.

## 1. Enhanced Mobility and Complete Streets

Long Beach Boulevard must evolve to prioritize and enhance the walkability of the corridor, improve mobility options for bicycles and transit riders, and preserve functionality of the corridor as a thoroughfare for automobiles. The addition of trees, landscape, furnishings, and bikeways; improved pedestrian crossings; and small changes in travel lanes will enhance the public realm experience for all users.

# 2. Safety and Wellness

The physical environment plays a critical role in our community's overall health. Providing active and passive park spaces for urban neighborhoods along Long Beach Boulevard is critical to improve health and wellness. A well-designed street creates a safer and more appealing setting for families, bicyclists, and others along the corridor. The Specific Plan proposes physical and programmatic connections between health-related institutions, park areas, and the public right-of-way.

# MIDTOWN VISION

Midtown will be a vibrant and thriving community for our children, family, and friends.

Midtown will be known for its unique blend of parks, strong businesses, and transit-oriented housing.

Additionally, Midtown will be an early leader in multi-modal transportation practices where a person can safely and easily travel by walking, riding a bike, catching a bus, taking a train, or driving a car.

# **GUIDING PRINCIPLES**

Enhanced Mobility and Complete Streets

Safety and Wellness

A Sustainable Future

**Supporting Urban Amenities** 

Working with and for the Community



#### 3. A Sustainable Future

The City of Long Beach supports a sustainable future for its residents, its businesses, and the environment. The Midtown area should improve and develop in a sustainable manner by decreasing the reliance on automobiles, reducing the urban heat-island effect, and promoting a balance of jobs and housing.

## 4. Supporting Urban Amenities

The supporting amenities serving Midtown must be improved to stimulate reinvestment and attract new development. Midtown must be an enjoyable place to live and do business. Improvements and new development will seek out urban amenities such as attractive rights-of-way, safe and efficient bikeway and pedestrian facilities, parks and parklets, and landscaping enhancements.

# 5. Working with and for the Community

The ideas and plans presented in this Specific Plan were generated by close coordination with existing residential, business, property owner, and development communities. Working with and for the community does not stop after the adoption of the Plan. This Plan places special emphasis on coordinating public and private improvements and programming with Long Beach Memorial and other medical facilities in Midtown.

## 1.2 ACHIEVING THE VISION

## 1.2.1 Partnerships and Coordination

Midtown is a complex organism containing numerous interdependent components. Long-term success will rely not only on the public agencies that fund and maintain public improvements, but on the businesses and institutions that offer services and employ thousands; the property owners that develop, fund, and maintain private and public improvements; and the general public who live, work, and/or learn along the corridor.

An open dialogue between the transit agencies, local advisory groups, the general public, medical centers, development community, business owners, and land owners helped define the guiding principles. Maintaining collaboration and communication among these groups will be necessary to bring positive change to Midtown. Future partnerships should include interagency and public/private partnerships.

## 1.2.2 Responding to the Market

Current market trends indicate that capitalizing on existing amenities like transit stations and proximity to jobs, schools, and housing make this area a prime location for revitalization. Redirecting and concentrating commercial facilities and transit-oriented development along the boulevard will redefine Midtown. Attracting new business will bring development opportunities. Taking advantage of opportunities to build on vacant lots



and energizing tired store fronts will attract residents and visitors to shop, dine, and support businesses along the corridor. Other development efforts, such as the Promenade, courthouse, and numerous façade improvements throughout the City, have demonstrated the success and economic gain from strategic enhancements with long-term vision.

# 1.2.3 Investments and Financing

Public-private partnerships, transit funding, street improvements, and business and improvement districts are all possible mechanisms for funding revitalization and growth projects along the corridor. Midtown has substantial vacant and underutilized land resources alongside major transit investments, and excellent access to the freeway and Downtown Long Beach.

## 1.3 LAND USE PLAN

The Midtown Specific Plan regulates the project area through four development districts: Transit Node, Corridor, Medical, and Open Space. Each district has its own development standards and land use patterns. Overall, the 375-acre Specific Plan could ultimately support roughly 3,600 homes and 15,600 jobs in 2.9 million square feet of building space, concentrating and intensifying development at key transit and employment nodes.

Figure 1-1 and Table 1-1 summarize the development intensity and boundaries for each district, including the projected distribution of development potential by district subarea.

# 1.3.1 Land Use Districts

# Transit Node (TN)

The Transit Node District supports compact, transit-oriented mixed-use and residential development centered on the three Metro Blue Line stations.

## Corridor (CDR)

The Corridor District is applied to properties along Long Beach Boulevard between Blue Line stations and the 405 Freeway. It is intended to provide housing options and neighborhood-serving uses within walking distance of a transit node.

#### Medical (M)

The Medical District establishes a comprehensive health campus based on the Long Beach Memorial Medical Center's master planning efforts.

# Open Space (OS)

The Open Space District identifies existing areas reserved for community and mini-parks and creates new space for parks.



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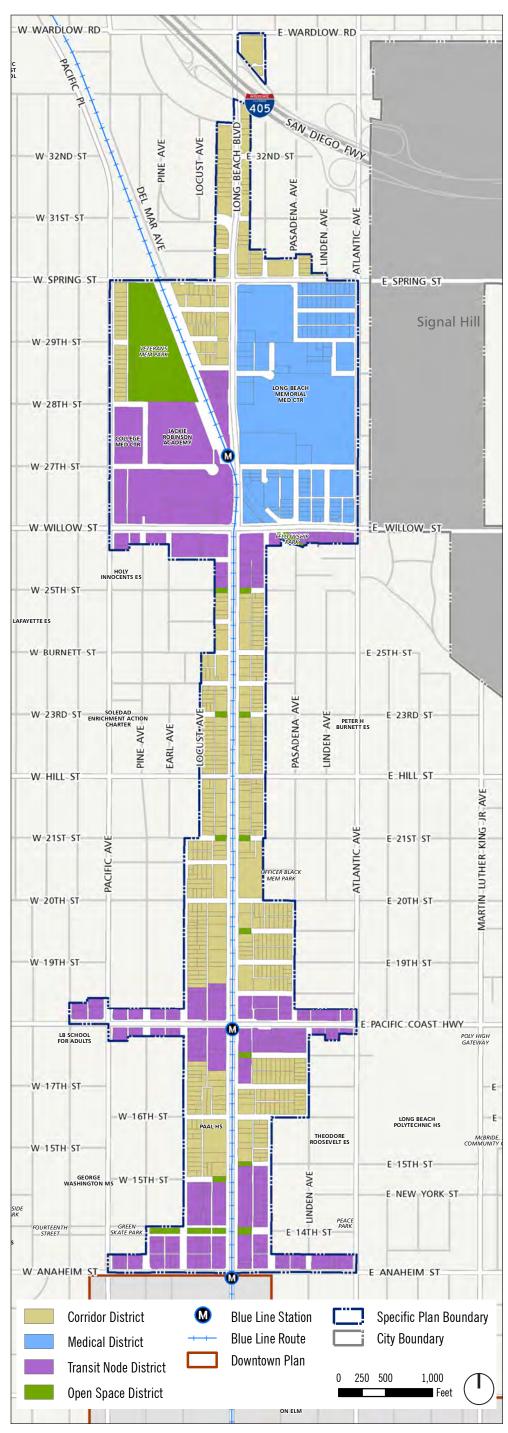
TABLE 1-1 LAND USE SUMMARY BY DISTRICT

Land Use Summary by District							
District	Acres	Typical Density (per ac)	Dwelling Units	Comm/Employ Sq Ft	Hotel Rooms/ Hospital Beds		
Corridor Districts							
1	25	15-40	408	274,766			
2	51	15-40	924	331,815			
3	20	15-40	450	92,663			
Total	96	-	1,782	699,244			
		M	ledical District				
4	63	20-30	300	757,600	854 beds		
Total	63	-	300	757,600	854 beds		
Transit Node Districts							
5	44	30-60	774	924,296	175 rooms/ 148 beds		
6	20	30-60	362	297,125	102 rooms		
7	19	30-60	401	319,000			
Total	83	-	1,537	1,540,421	277 rooms/ 148 beds		
OS1	18	-	-	-	-		
ROW	114	-	-	-	-		
Total	Total 375 - 3,619		2,997,265	277 rooms/ 983 beds			
Note:							



This map divides the land use districts into subareas to summarize the approximate distribution of development potential throughout the Midtown Specific Plan.









## 1.4 MOBILITY AND STREETSCAPE PLAN

Drawing from the Mobility Element of the City's General Plan, the mobility plan for Midtown incorporates enhancements that promote active transportation, including walking, cycling, and skating. This Plan also promotes alternative transportation modes that can help to alleviate roadway congestion, reduce greenhouse gas emissions, and improve air quality, while helping residents to improve their own health and wellness. Infrastructure improvements related to mobility include enhancements that will create a complete street, a roadway network that provides safe and convenient access for all users-pedestrian, bicycle, transit, and automobile.

The mobility and streetscape plan are discussed in greater detail in Chapter 4, Mobility and Streetscape.

# 1.5 DESIGN GUIDELINES

The design guidelines in this Plan are intended to promote quality design that is consistent with the overall vision, and provide a level of flexibility to encourage creative design. The guidelines direct the physical design of building sites, architecture, and landscape elements within the Specific Plan boundary. The design guidelines are established to create a distinct character for Long Beach Boulevard and to ensure that new development is designed to cultivate an active street life while creating an overall positive architectural aesthetic.

The design guidelines are discussed in greater detail in Chapter 5, Design Guidelines.

# 1.6 INFRASTRUCTURE PLAN

The potential buildout of this Specific Plan can rely on existing facilities for water, sewer, and stormwater. A few improvements, already identified by the City's Master Plan of Drainage, need to be implemented as development occurs in the Medical District and Corridor District 2. Overall, changes in Midtown proposed by this Plan have a minimal impact on the City's infrastructure systems and public services provided in the area.

The infrastructure plan is discussed in greater detail in Chapter 6, Infrastructure.

# 1.7 IMPLEMENTATION PLAN

Revitalizing Midtown will require streetscape and infrastructure upgrades to stimulate change and turn this Plan's vision into reality. Based on an analysis of the corridor and input from the residents, property owners, and development community, this Plan identifies several infrastructure



enhancements, including the addition of bicycle and pedestrian facilities, more canopy trees, and flexible regulations to spur private investment and revitalization in Midtown. Financing for the development concept projects and other future corridor enhancements are summarized below and provided in Chapter 7, Administration and Implementation.

# 1.7.1 Implementation Funding and Strategy

Funding the implementation of upgraded infrastructure could come from a variety of resources. These include, but are not limited to, local capital funds; local partnerships; regional, state, and federal grants; district-based assessments; and developer contributions. Many of these funding mechanisms depend on capturing a portion of real estate value and may take time to implement because they partly depend on improvement in property values or development activity in Midtown.

However, changes to the Specific Plan area are intended to occur incrementally. The City can start with small interim projects, such as adding street trees and furniture, which may help to attract developer interest and increase property values.

Since funding may be limited, the City should employ a strategy of concentrating improvements in stronger nodes to maximize their market impact. Short-term investments should be concentrated in the highest-potential development areas within a few blocks of the intersection of East Anaheim Street and Long Beach Boulevard (Transit Node 7) and near the Willow Transit Station area (Transit Node 5). Where feasible, bicycle lanes and the installation of other bicycle facility improvements could occur in the short term around these nodes. Over time, the improvements can be extended when grant funding and/or local district-based funding sources become available.

Table 1-2 provides a summary of the applicable funding sources categorized by potential infrastructure improvement.



TABLE 1-2 FUNDING SOURCES FOR INFRASTRUCTURE IMPROVEMENTS

		Improvement Category					
Funding Source Category	Funding Source	Bicycle Network & Facilities	Pedestrian Enhancements	Streetscape	Park & Recreation	Transit Facilities	
Local Revenues	Local Revenues	X	X	X	Χ	X	
& Fees	User Fees					X	
	BID/PBID	X	X	X	Χ	X	
Property-Based Financing Tools	Assessment District	X	X	X	Χ	X	
Tillationing 10013	Community Facilities District	X	X	X	Χ	X	
	Impact and In-Lieu Fees	X	X	X	Χ	X	
Development	Development Agreements	X	X	X	Χ	X	
	Local Partnerships		X	X	Χ	X	
	SCAG RTP	X	X	X		X	
	LA Metro TIP	X	X	X		X	
	SCAG ATP	X	X	X			
	Caltrans ATP	X	X	X			
<b>Grant Programs</b>	HCD Housing-Related Parks				Χ		
	HCD IIG		X	X			
	HCD TOD Housing	X	X	X		X	
	California Parks and Rec LWCF				Χ		
	HUD CDBG	X	X	X	Χ	Х	
Other Teels	Structured Funds						
Other Tools	Revolving Loan Funds	X	Х	Χ	X	X	

# 1.8 ENVIRONMENTAL ASSESSMENT

The Specific Plan was adopted in compliance with the requirements of the California Environmental Quality Act (CEQA) (California Public Resources Code, Section 21000 et seq.). Pursuant to the CEQA Guidelines (Title 14, California Code of Regulations, Chapter 3, Section 15000 et seq.), the City of Long Beach prepared an Initial Study and Notice of Preparation and made these documents available to responsible agencies, trustee agencies, and interested parties for a 30-day public review period, which extended from March 9 to April 7, 2015. Through the Initial Study, the City determined that implementation of the Specific Plan could result in potentially significant environmental impacts and that the preparation of a programmatic-level Environmental Impact Report (Program EIR) was required.

The Midtown Specific Plan EIR (State Clearinghouse No. 2015031034) is a Program EIR. As provided in Section 15168 of the CEQA Guidelines, a Program EIR may be prepared on a series of actions that may be characterized as one large project. The Specific Plan establishes an overall development program that can be characterized as one large project,



but its implementation will require a series of future discretionary actions (approvals of specific projects) by the City of Long Beach. The Specific Plan Program EIR is intended to serve as the primary environmental document for all future entitlements (later activities) associated with implementation of the Specific Plan, including all discretionary approvals requested or required to implement the project.

Pursuant to Section 15168 of the CEQA Guidelines, a later activity under the Specific Plan development program must be examined in the light of the Specific Plan Program EIR to determine whether additional environmental documentation must be prepared. Each later activity must undergo an initial study and analysis by the City to determine if the activity is within the scope of the Specific Plan Program EIR. Because these later activities are not new projects as defined by CEQA, compliance for each impact category is narrowed to a determination as to whether the activity would result in: (1) no substantial change from the previous analysis; (2) a more severe impact; or (3) a new significant impact. Based on the results of this initial study, the City will determine which of the following actions is applicable to the later activity:

- The later activity is a component of and consistent with the Specific Plan and has been previously analyzed as a part of the Specific Plan Program EIR and findings certified pursuant to the CEQA Guidelines. No additional CEQA documentation is required (CEQA Guidelines Section 15168).
- The later activity is a component of the Specific Plan and has been previously analyzed as a part of the Specific Plan Program EIR and findings certified pursuant to the State CEQA Guidelines; however, minor technical changes or additions are needed to make the previous documentation adequate to cover the project. An Addendum to the Specific Plan Program EIR is required (CEQA Guidelines Section 15164).
- The later activity is either not a component of the Specific Plan or has not been previously analyzed as part of the Specific Plan Program EIR, in which case an initial study and additional environmental review under CEQA will be required unless the later activity is exempt under CEQA.

In addition, future development projects within the Specific Plan area may be eligible for streamlining under CEQA Guidelines Section 15183.3, effective January 1, 2013. To be eligible, a project must:

- Be located in an urban area on a previously developed site or surrounded by urban uses (75 percent of perimeter);
- Satisfy performance standards in CEQA Guidelines Appendix M; and
- Be consistent with the general use designation, density, building intensity, and applicable policies in the Southern California Association of Governments Sustainable Communities Strategy.



# CONTEXT

**MIDTOWN SPECIFIC PLAN** 





# 2.0 Context

### 2.1 LOCATION

The Midtown project area is in the City of Long Beach and is just north of the Downtown. Long Beach is the seventh largest city in California, with roughly 460,000 residents and nearly 160,000 employment opportunities (2010). The City is about 20 miles south of Downtown Los Angeles and borders Orange County on its eastern edge.

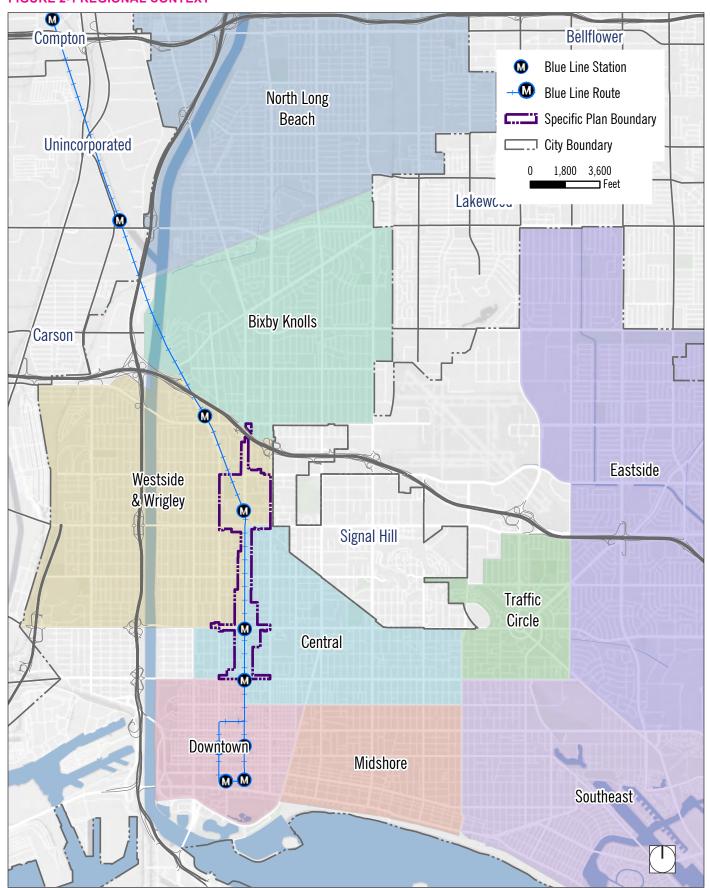
Long Beach Boulevard is historically significant as a grand entrance to the City and its Downtown. The boulevard continues to be one of the City's primary transit corridors, with the Metro Blue Line operating in the center of the street from 1st Street to just north of Willow Street (where it veers northwest off the boulevard).

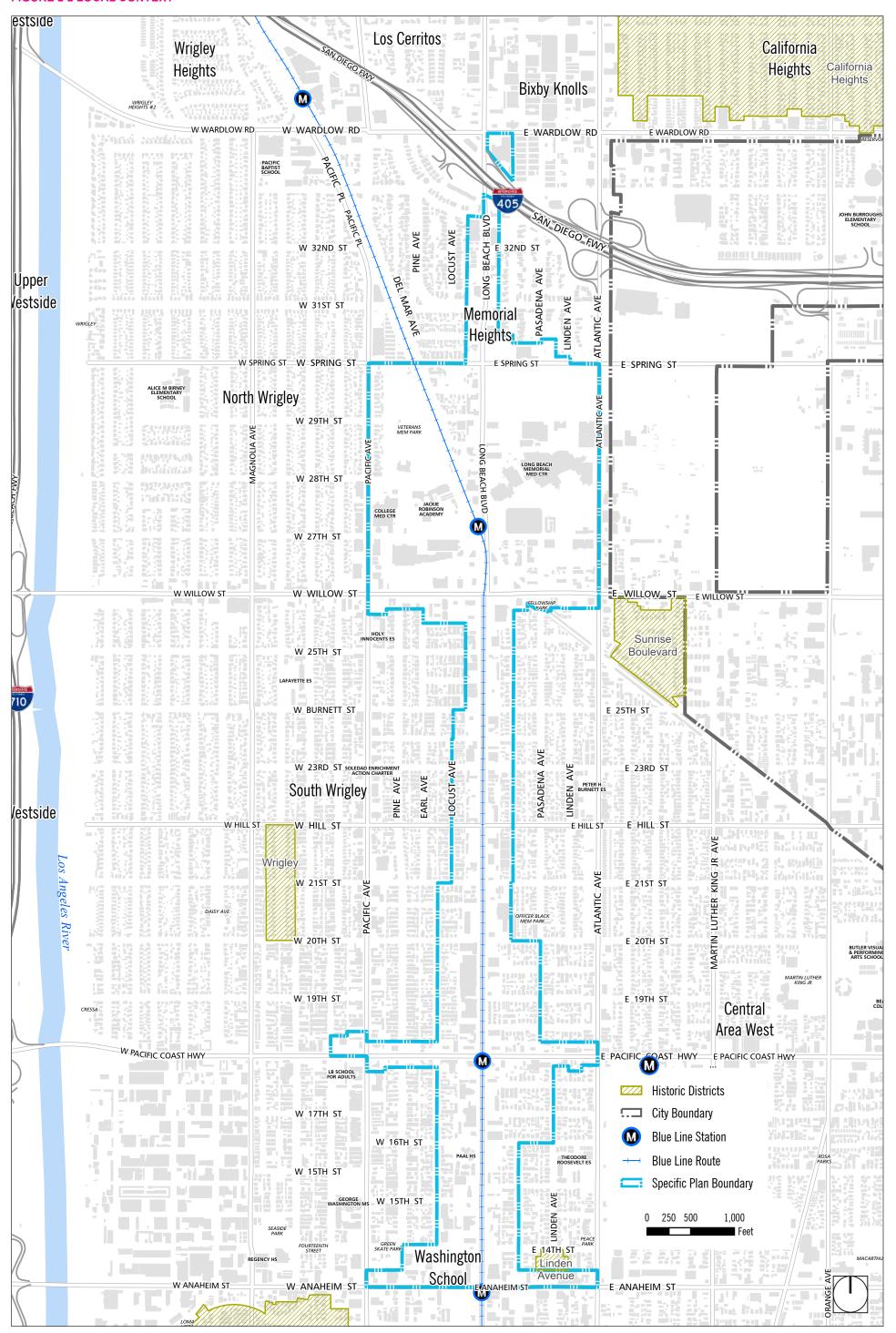
In total, the project area encompasses 375 acres of public and private property, including 261 acres of parcelized land and 114 acres of roads and other rights-of-way. The northern border is Wardlow Road and the southern boundary is two and a half miles south at Anaheim Street. The eastern and western boundaries generally fall one block from Long Beach Boulevard, except at key intersections and the area between Spring and Willow Streets, where the boundaries extend to Atlantic and Pacific Avenues.

The project area is also within three general neighborhood areas of Long Beach: Wrigley/West Long Beach, west of Long Beach Boulevard; Central, east of Long Beach Boulevard; and the Downtown, south of Pacific Coast Highway. Figure 2-1 shows a map of the project boundaries in the regional context, and Figure 2-2 provides a view of the local context.



# **FIGURE 2-1 REGIONAL CONTEXT**







### 2.2 HISTORY

Long Beach Boulevard, called American Avenue until 1958, is a busy street that has catered to nearly all modes of travel over the past 100 years. The size of its right-of-way, generally 132 feet, reflects its history as a streetcar route. The original Red Line streetcar line began service in 1902 and ran along the Metro Blue Line route, operated by Pacific Electric Railway. By 1927, Long Beach had over 30 miles of streetcar tracks and soon became one of the fastest growing cities in the country.

In the 1930s, automobile use exploded and streetcars fell out of favor. The proliferation of freeways and an increasingly auto-centric culture pushed Long Beach Boulevard to adapt to the new car-oriented way of life. Not only did it become vehicular dominated as a means of travel, but the boulevard also became a regional destination for people to shop for new cars in the 1960s and 1970s. However, after the passage of Proposition 13 capped property taxes, cities began competing for auto dealerships to boost sales tax revenues. Dealerships abandoned the boulevard for larger sites in other cities, and the area began to decline. The effects of this loss are still visible in the remaining vacant lots and marginal commercial uses.

Long Beach Boulevard began shifting from an auto-dominated street to a transit-oriented community in the late 1980s. The Metro Blue Line opened for business on Long Beach Boulevard on July 14, 1990, transporting passengers from Los Angeles to Downtown Long Beach. The Blue Line has become one of the busiest light rail lines in the country, averaging roughly 90,000 boardings every weekday. It has become so busy that several station platforms have been extended to provide for longer trains and new riders.

The City has sought to use transit as a catalyst for Midtown's physical and economic revitalization since the Metro Blue Line's opening in 1990. The City adopted the Long Beach Boulevard Planned Development District (PD-29) in 1991 to provide a regulatory framework that could attract new investment along the boulevard in the form of mixed-use, high-density infill projects.

Development along the boulevard and new economic opportunities for local residents have been minimal over the past 20 years. Since PD-29's adoption, most new development has been limited to low density and single-use commercial and retail projects. The designs and layouts of these projects emphasized automobile access and provided few physical connections or access to transit. This resulting development pattern is neither consistent with the City's desired mixed-use transit corridor, nor does it provide significant benefits to local residents.



Historical photo of Long Beach Boulevard from the 1910s or 1920s.



Mike Salta Pontiac, 16th Street and Long Beach Boulevard, circa 1966.



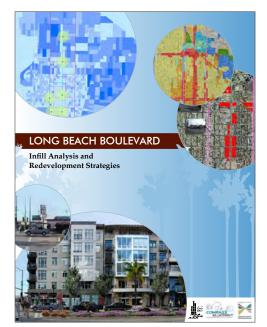
The Blue Line opened in July 1990, reestablishing passenger rail service from Long Beach to LA.

Photo credits:

Top: Ronald W. Mahan & Joseph J. Musil Photo Theatre Collection Middle: Bob Wicker, PontiacsOnline.com

Bottom: Dorothy Peyton Gray Transportation Library and Archive at the Los Angeles County Metropolitan Transportation Authority





The 2007 SCAG Demonstration Project highlighted key issues and strategies for improving the corridor.









The corridor contains a wide variety of single- and multifamily housing, commercial and service businesses, and medical facilities.

In 2007, the City of Long Beach was selected for a SCAG Compass Blueprint Demonstration Project to analyze the existing land use regulations and market constraints for transit-oriented development on Long Beach Boulevard and to make recommendations for specific code changes and redevelopment strategies. The Demonstration Project and the City ultimately concluded that the corridor would benefit from an overhaul of PD-29 to incentivize new, transit-oriented development. In 2011, the City partnered with SCAG on a second demonstration project to create this Specific Plan and EIR for this segment of Long Beach Boulevard and Midtown. This Specific Plan replaces PD-29 and is now the regulating document for land use in the area with the exception of a 4 acre residential area near Daryle Black Park which is covered by conventional zoning.

Long Beach Memorial Medical Center first opened in Midtown in 1958 and is currently run by the not-for-profit MemorialCare Health System. The medical center prepared plans to improve its facilities and operations within Midtown in 2005 through a master plan and environmental impact report (EIR). This master plan is currently being updated, and the City coordinated closely with MemorialCare to plan physical improvements and operational programming to best serve Midtown.

# 2.3 EXISTING CONDITIONS

# 2.3.1 Existing Land Uses and Development

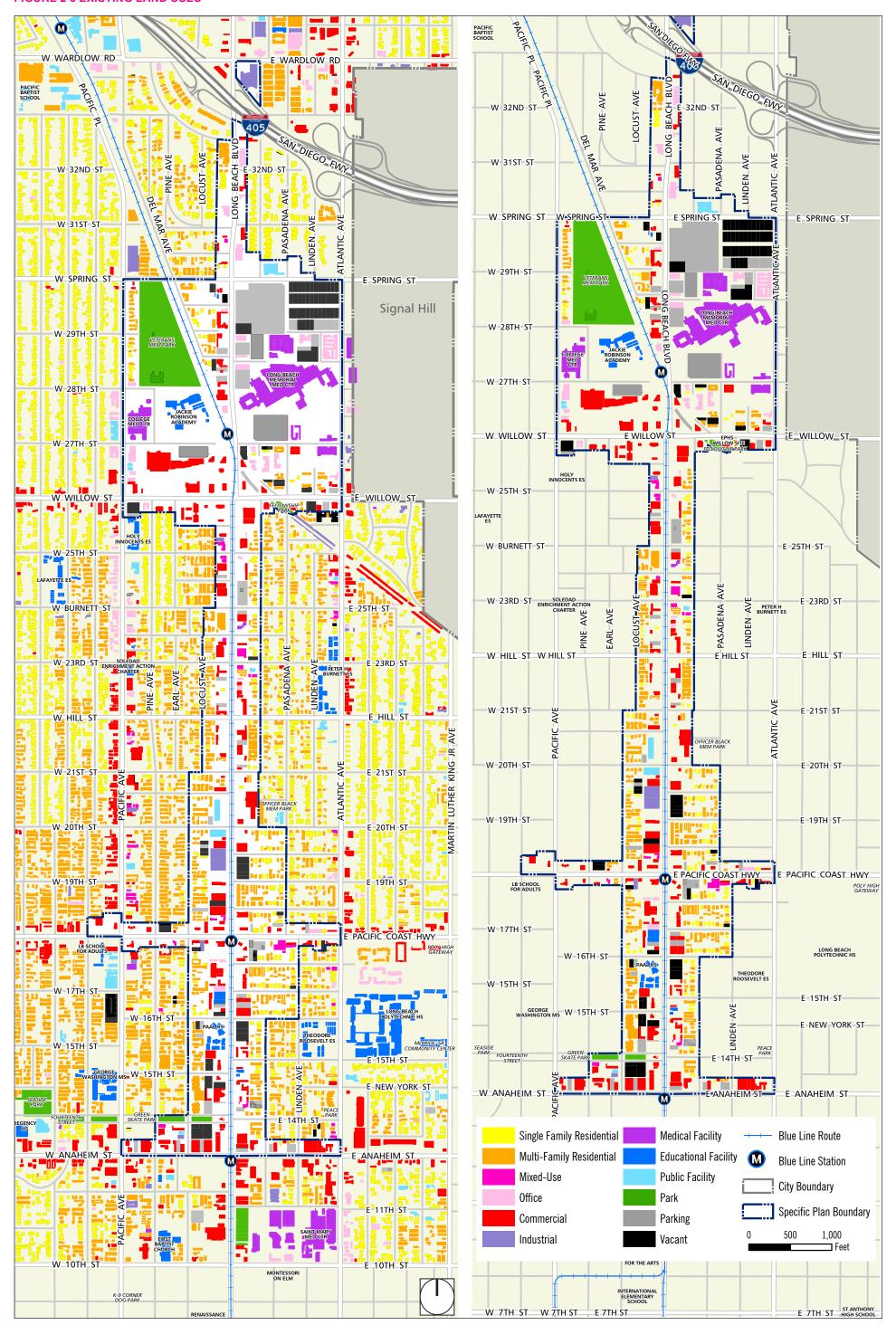
A wide variety of land uses can be found within and around the Long Beach Boulevard Midtown project area. Figure 2-3 illustrates the pattern of existing land uses as of 2014 by building footprint and land use type—both around and within the project area.

**Residential.** The project area and the surrounding neighborhoods are home to thousands of Long Beach residents, who live in a mixture of single-family and multi-family homes. Several historic neighborhoods lie within a quarter mile of the project boundaries: Drake Park/Willmore, Linden, Sunrise Boulevard, and Wrigley.

Commercial. Although struggling commercially in many ways, Long Beach Boulevard is still a key retail corridor for the surrounding community. A range of small- to medium-sized retail and service establishments provide essential services for area residents. On a typical day, several areas along the corridor bustle with patrons on foot or accessing transit. Households in the neighborhoods adjacent to the corridor tend toward lower income families who would benefit significantly from an increase in retail destinations within close proximity and a greater variety of housing opportunities along the transit-rich corridor.

**Medical.** Long Beach Boulevard is the medical core of Long Beach, with multiple hospitals and dozens of medical office, diagnostic, and research

# **FIGURE 2-3 EXISTING LAND USES**





businesses. MemorialCare is currently preparing a healthcare facility master plan for the Long Beach Memorial Medical Center campus. The long-term vision for this master plan is reflected in this Specific Plan and incorporates mixed-use development, workforce housing, and a more activated street frontage for Long Beach Boulevard.

Long Beach Memorial Medical Center, including Long Beach Memorial Hospital, Miller Children's Hospital, and Pacific Hospital of Long Beach are adjacent to the Willow Metro Station. Just south of the Specific Plan boundary at Anaheim Street is St. Mary Medical Center.

**Open Space and Recreation.** Like many urbanized corridors in Southern California, few recreation and open space areas can be found along or near Long Beach Boulevard. The northern and southern portions of the corridor have access to open space, but the central portion of the project area is largely devoid of open space.

Veterans Memorial Park is the largest park space (14.7 acres) in the general area. It is adjacent to the Willow Metro Blue Line stop and has sports fields/courts and a community recreation center. McBride Park, on Martin Luther King Jr. Avenue east of Polytechnic High School, is the newest park in the area and includes a skate park and teen center. The 14th Street Park also has a skate park and connects to Seaside Park west of Pacific Avenue. Finally, a few mini-parks (Fellowship, Daryle Black, and Peace) offer small areas of recreation for residents in close proximity.

**Education.** A number of schools (listed below) can be found along and around the corridor to serve families in the adjacent neighborhoods and, in some cases, the greater Long Beach area.

- Jackie Robinson Academy (K–8) adjacent to the Willow Metro Station.
- Holy Innocents Parish (K–8) south of Willow Street off Atlantic Avenue.
- Burnett Elementary (K-5) at Atlantic Avenue and Hill Street.
- Roosevelt Elementary School (K–5) next to Polytechnic High.
- Polytechnic High School (9–12) on Atlantic Avenue south of Pacific Coast Highway, and PAAL Academy on Long Beach Boulevard south of 16th Street.
- Washington Middle School on Pacific Avenue north of 14th Street.
- Renaissance High School for the Arts on Long Beach Boulevard between 8th and 9th Street.

The large number of schools at all levels of education means that Long Beach Boulevard, Pacific Avenue, and Atlantic Avenue are heavily used by children and must become safer streets for walking, biking, and riding







Top: 14th Street Park and Veterans Park Bottom: McBride Park









From top left, clockwise: Jackie Robinson Academy, Polytechnic High, Roosevelt Elementary, and Burnett Elementary







Long Beach Boulevard is one of the few streets in Southern California that truly carries all modes of travel.



Traveling southbound from the off-ramp at Long Beach Boulevard requires a cautious left turn across northbound traffic, which includes cars, buses, and trucks.



The Blue Line provides excellent regional transit access, but it also creates east—west barriers and adds over 20 feet to an already wide roadway with its exclusive travel lanes.

transit. Additionally, Hancock University, a private college at 16th Street and Long Beach Boulevard, is expected to grow and is interested in student housing and other student-serving uses along the corridor.

# 2.3.2 Circulation and Site Accessibility

**Overall Structure.** Long Beach Boulevard possesses many of the attributes required to support a vibrant, mixed-use, transit-oriented district. The area is well served by regional bus and rail transit; streets are laid out in a traditional grid with smaller block circumferences that provide multiple travel options for different modes; and sidewalks are generally wide and offer pedestrian access from the residential neighborhoods and local retail/service shops to the transit facilities. Figure 2-4 displays a map of the existing circulation systems within and around the project area.

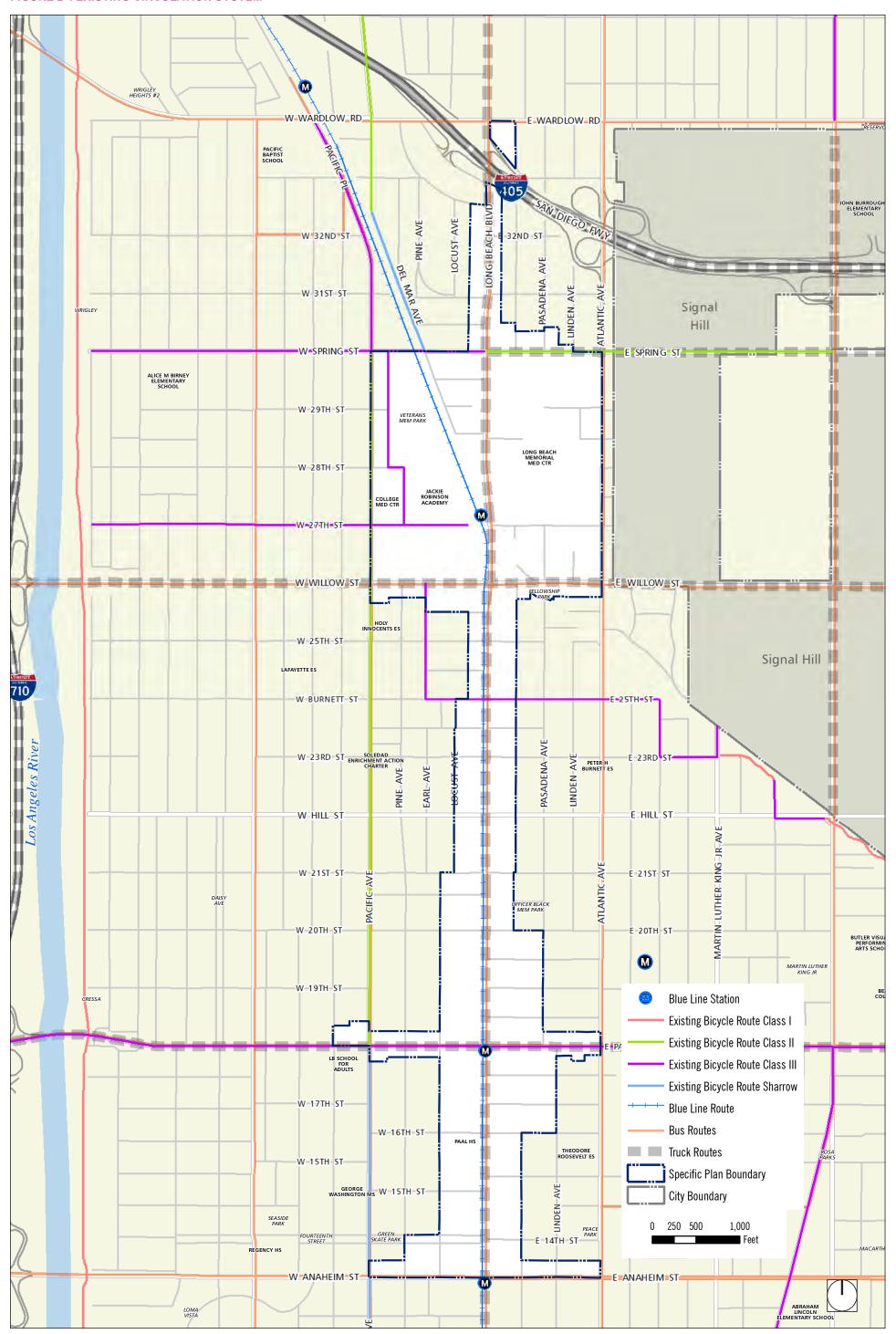
**Automobile.** For many years, Long Beach Boulevard focused on improvements and development geared to the automobile. Interstates 405 and 710 are just to the north and west, respectively, of the project area, providing access to the Southern California region.

Atlantic and Pacific Avenues were categorized for slower traffic speeds, and Long Beach Boulevard was used to accommodate more automobile traffic and served as a regional connector. The freeway interchanges conflict with this assignment of roles, because the partial cloverleaf on-/off-ramps at Atlantic Avenue are much easier and more convenient to traverse than compact and cross-traffic ramp systems at Long Beach Boulevard. Although Long Beach Memorial Medical Center's campus borders Long Beach Boulevard, the campus has very limited access from the street. Ease of access is one of the main reasons the Medical Center has favored Atlantic Avenue over Long Beach Boulevard over the years.

**Truck.** Truck traffic in Long Beach is primarily related to the movement of goods to and from the Ports of Los Angeles and Long Beach (accessed by using the I-710 and I-110 freeways), but trucks also use dedicated trucking routes along local roadways to provide shipping services to commercial and industrial businesses throughout the City.

Local truck routes include Long Beach Boulevard, Spring Street, Willow Street, and I-405. Typically, these routes direct trucks away from residential neighborhoods toward streets specifically designed and maintained to accommodate the weight of large trucks and commercial delivery vehicles. Mixed-use and multi-modal corridors integrate residential and non-residential uses in a context that embraces many modes of travel. Such corridors, including Long Beach Boulevard, that are also designated truck routes must be carefully designed to accommodate local truck traffic safely and efficiently without sacrificing the safety, efficiency, and attractiveness of other modes of travel or mixed-use settings.

# FIGURE 2-4 EXISTING CIRCULATION SYSTEM





**Transit.** Long Beach Boulevard is also well connected to the Southern California region through the Blue Line and several major bus lines. The Blue Line is the main hub for transit and its route runs directly along Long Beach Boulevard, with three stations in the project area: Willow, Pacific Coast Highway, and Anaheim. The Blue Line provides access to Downtown Los Angeles, other rail lines, and local and regional bus systems.

The Metro Blue Line was a trailblazing project in 1990 and remains one of the most successful transit lines in the country. The benefits of the transit line and its stations are obvious at a regional level. Locally, however, the community struggles at times with the impacts from the transit line.

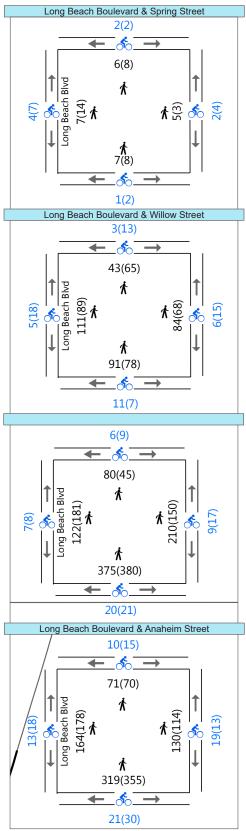
For example, a blue fence was installed around 2008, dividing the two-way movement of the Metro Blue Line as a safety measure to prohibit midblock crossing except in designated areas. This created a major disconnect between land uses on both sides of Long Beach Boulevard, and trash collects at the base of the fence, adding a blighted look to the corridor.

Additionally, the Metro Blue Line travels in a dedicated travel lane and widens the street area by over 20 feet, making it more daunting for pedestrians to cross the street and further disconnecting development and neighborhoods on the west and east sides of Long Beach Boulevard.

The corridor is also served by local and regional bus service by Metro and Long Beach Transit (LBT). Metro operates a limited number of local and express buses, and LBT provides numerous lines of local bus service along and near the corridor. These bus routes carry thousands of residents, employees, and visitors throughout the City and to and from surrounding areas, generating a substantial amount of pedestrian and bicycle activity along the roadways and at the intersections.

**Pedestrian and Bicycle Activity.** The corridor experiences a tremendous amount of pedestrian activity due to the existing development density, presence of transit, and widespread use of and dependency on transit in the project area. As expected, pedestrian crossings (measured in 2012 and depicted to the right) were highest at intersections near transit stations, with hundreds of pedestrians crossing the intersections during peak hours.

Midblock collision history along Long Beach Boulevard between Willow Street and 10th Street revealed that, of the 50 collisions between 2007 and 2012, 8 percent involved pedestrians and 18 percent involved bicyclists. The concurrent high volumes of pedestrian, bicyclist, and vehicular activity along Long Beach Boulevard present challenges for the safety and efficiency of all modes. Although the overall block structure and sidewalks are conducive to pedestrian and bicycle access, many parts of the corridor's public realm remain auto dominated, lacking features and amenities such as pedestrian lighting, waste receptacles, shade trees, bike racks, benches, and bus shelters.



2012 Bike and Pedestrian Counts along Long Beach Boulevard

AM (PM) Peak Hour Pedestrian Volume
AM (PM) Peak Hour Bicycle Volume



# 2.3.3 Infrastructure Systems

**Storm Water.** The project's storm water runoff is collected by existing storm drain facilities that generally flow westerly toward the Los Angeles River. Facilities are owned and maintained by various agencies, including LA County Flood Control District, City of Long Beach, and Caltrans. A few scattered, privately maintained systems can be found within the project area as well. Storm drain sizes vary from 12- to 96-inch reinforced concrete pipe. Existing catch basins throughout the project area intercept runoff and convey flows into the storm drain system.

In 2008, the City enacted a Low Impact Development Standards ordinance to control runoff and manage storm water on site. There is no large-scale regional treatment in place within the project area. Figure 2-5 displays a map of the existing storm water drainage system within and around the project area.

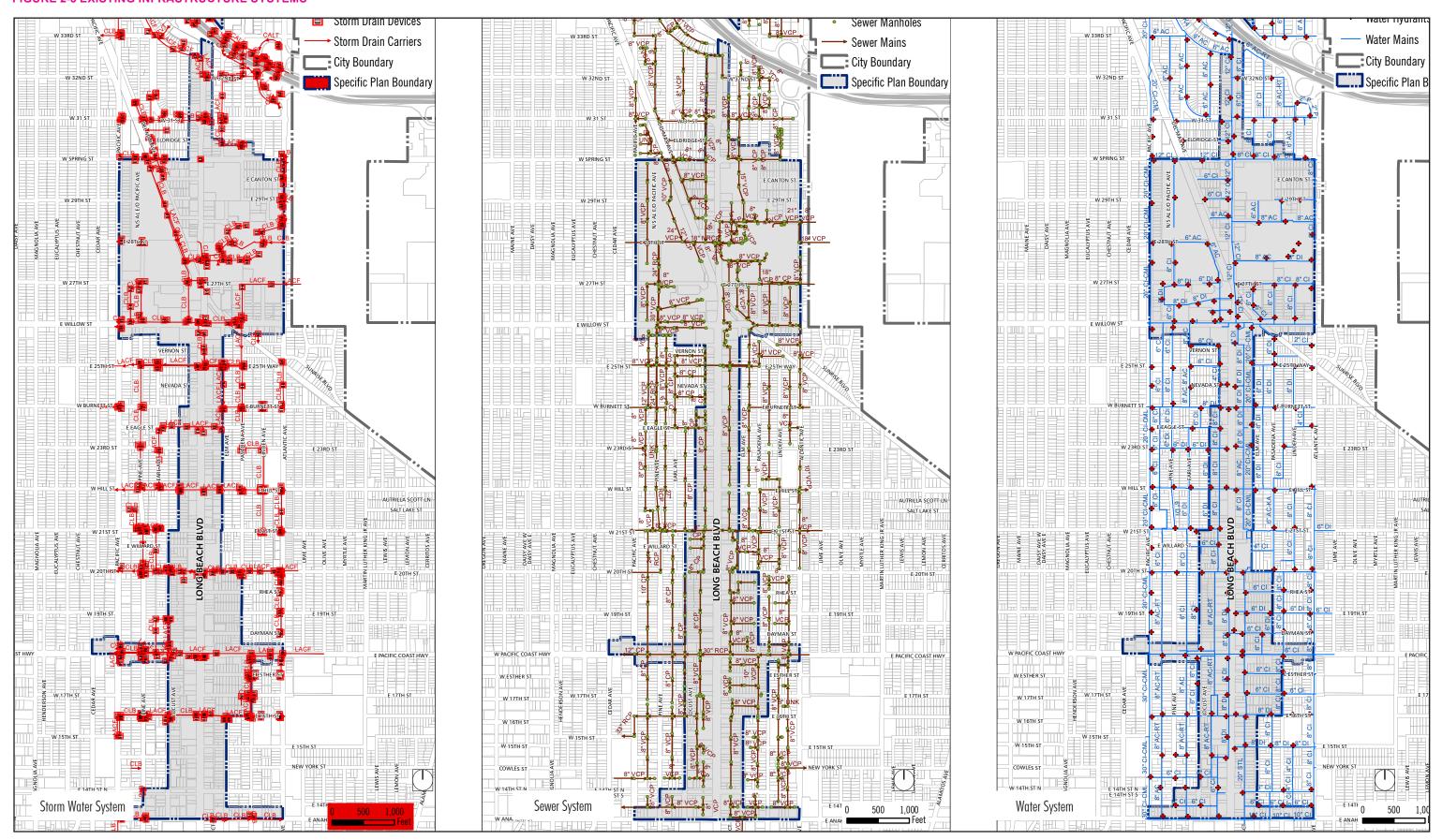
**Sewer Service.** Sewer service along Long Beach Boulevard has only a couple of small longitudinal-flowing sewer lines; however, sewer lines cross the boulevard at five locations. The general layout of the existing sewer falls southerly and mainly leaves the project site to the east and west. All sewer mains in the area ultimately discharge into a Los Angeles County Sanitation District trunk sewer crossing the Los Angeles River at 16th Street, flowing west and ultimately to the Joint Water Pollution Control Plant in Carson. Sewer lines are all gravity flow lines, and diameters vary from 8 to 18 inches. The type of material also varies: vitrified clay pipe, nonreinforced concrete pipe, and concrete pipe. Figure 2-5 displays a map of the existing sewer system in and around the project area.

City records do not show any force mains or lift stations in the project area; however, one siphon location is at the intersection of the alley due east of Long Beach Boulevard and 25th Street. There does not appear to be any deficient lines along Long Beach Boulevard or elsewhere in the project area. As of 2014, the City did not have any planned sewer maintenance and/or replacement projects for the area.

Water Service. Long Beach Boulevard hosts an 8-inch water line from 15th Street to 20th Street and a 12-inch water line from Willow Street to Wardlow Road. Within the project area, pipe sizes vary from 2 to 30 inches (2, 4, 6, 8, 12, 20, and 30 inches). The type of material also varies: asbestos-cement, cast iron, cast iron-cement motor lined, and ductile iron. Figure 2-5 displays a map of the existing water service system in and around the project area.

Aside from water mains along and crossing Long Beach Boulevard from Anaheim Street to Wardlow Road, City records do not show any other water facilities in the project area (booster pump stations, agency interconnections, storage tanks, etc.). The Long Beach Water District

# FIGURE 2-5 EXISTING INFRASTRUCTURE SYSTEMS







recently constructed a cast-iron replacement in Long Beach Boulevard between Willow Street and Wardlow Road, which was the only planned replacement project for the project area as of 2014. There did not appear to be any deficiencies with the current water system servicing the project area.

# 2.3.4 Market Conditions

Long Beach Boulevard enjoys great access to transit and offers a substantial amount of developable land. The market conditions for substantial investments have not been favorable for many years. Although the Blue Line represented an enormous public investment in the 1990s, substantial private investment is only now starting to progress north of the Downtown area. Additionally, the recent recession and vacancies in housing, retail, and office space made land values insufficient to entice new development. Finally, the State of California dissolved all redevelopment agencies in 2012 and removed one of the most effective tools cities had to spur new development.

To spur private development in the area, this Specific Plan presents strategies, plans, and improvements to build short-term value through subsidized and institutionally led development—with an emphasis on excellent design—and through public sector enhancements in the pedestrian environment and basic infrastructure.

**Subsidized Development**. Despite the loss of the redevelopment agencies and associated financing, opportunities remain for the City to participate. The City can contribute by either offering City-owned land for purchase or by offering favorable lease terms to help entice developers.

Another strategy for economic development is to build a full range of housing options, including units affordable to extremely low, very low, and lower income residents. Affordable housing projects can be eligible for federal and state subsidies, making them more likely to be built on the corridor. These projects can assist in revitalizing areas of the corridor and creating housing opportunities for the community. Over time, market rate, higher-density buildings, such as 4- and 5-story, wood-frame condominium buildings and midrise buildings, may become feasible without public subsidy.

Institutional Development. Partnering with anchor institutions may also spur redevelopment. The project area has many educational and medical institutions, including Pacific Hospital of Long Beach and Long Beach Memorial Hospital. These prominent organizations have voiced a desire to contribute to the corridor. Long Beach Memorial is currently completing a new master plan to comply with seismic retrofit regulations and adapt to changes in health care reform, future market dynamics, and community needs.



Phase 1 of the master plan includes improvements to the north campus area along Spring Street and Atlantic Avenue. Site improvements include the Miller Children's Hospital Outpatient Village and medical center offices. This type of investment is key because these institutions have a long-range view for their community, are generally the landowners, and tend to be less driven by profit than private developers, making them ideal partners for advancement of the corridor.

**Public Improvements.** Public contribution to streetscape improvements and linkages can greatly increase private investment in the project area. The existing public realm is not alluring to developers and would-be dwellers. Enhancing the public realm, including the sidewalk, landscaping, open space, and bicycle facilities, is critical to attracting developers and property owners to invest and reinvest in the area.

Improvement Districts. Another successful tool for public improvements in the area would be the formation of business improvement districts, in which business owners choose to assess themselves for public enhancement projects. This usually results in more numerous and more enhanced public improvements, which has been shown to increase property values and private investment in the area. Similar types of districts are property-based improvement districts, which includes property owners, maintenance assessment districts, and community facility districts.

**Focused and Creative Development Standards.** The future vision for Midtown contains mixed-use and high-density, transit-oriented development. Mixed-use buildings can be expensive to construct and may be deterred if overly constrained by inflexible development standards.

For example, if the Specific Plan requires ground-floor retail throughout the corridor, it is possible that some of the new buildings would have vacant retail space for many years. Throughout the nation, cities and developers have learned to minimize the percentage of retail in mixed-use buildings, unless located in Downtown areas or key activity nodes. The requirement for ground-floor retail should be limited to selected nodes, rather than for all projects in the corridor, to avoid overbuilding retail that cannot be easily tenanted. To avoid ground-floor vacancies in the short term before the corridor matures and the market demands continuous retail, the Specific Plan allows for other land uses to be on the ground floor, provided they are constructed with a floor height consistent with retail storefronts.

### 2.4 COMMUNITY INPUT

The City of Long Beach conducted a series of focused outreach meetings and follow-up interviews with roughly 40 stakeholders and multiple neighborhood groups dating back to 2012. The meetings generated significant input from residents, local business owners, property owners, community organizations, local and regional transportation agencies, the



school district, medical and educational institutions, and developers. The following summarizes the input from the outreach effort.

- Reduce Impacts of the Street Width: Long Beach Boulevard is auto dominated with heavy, fast-moving traffic and numerous vehicular lanes, making the street loud to walk along and difficult to cross. The physical and visual size of the boulevard can overwhelm the overall experience, minimizing positive impacts of new development. Although the Metro Blue Line is an important City and regional transit asset, the center median and blue fence create long stretches along the corridor that limit vehicular and pedestrian crossings for residents and workers.
- Enhance the Pedestrian Environment: There is a lot of foot traffic and bicycle use on Long Beach Boulevard, but the environment feels cold and uninviting to pedestrians, with predominantly gray concrete sidewalks and limited landscaping, art, and color. Palm trees offer a framed vista along the corridor but do not provide adequate shade for pedestrians and bicyclists. The boulevard should be lined with shops and restaurants that introduce areas filled with cafés and outdoor dining.
- Improve Bicycle Access: Bicyclists use the sidewalk because they feel unsafe or uncomfortable riding in the street among the cars, trucks, buses, and trains. Bike lanes currently stop at the edge of Downtown and could be extended into Midtown. Incorporating a Complete Streets approach to mobility could help to accommodate all transportation modes along the corridor: bicycles, pedestrian, automobiles, and transit.
- · Make It a Street Worth Its Namesake: Long Beach Boulevard is named after the City, but currently does not offer a strong positive impression of Midtown or provide an attractive gateway to Downtown. The boulevard needs improvements and branding to help create a reason for being on the corridor, to attract new residential and commercial investment, and to show that "somebody cares about this street."
- More Park Space throughout Midtown. Residents spoke uniformly in their desire for more parkland and open spaces in Midtown and along Long Beach Boulevard. Although the public understood that it can be difficult to create new open spaces in a built-out area, they looked to the City and this Plan to generate creative solutions for Midtown particularly if the Specific Plan proposes to add new residents.
- Show Progress on Innovative Ideas. The community understood that Midtown would not improve overnight, but they wanted more than a long-term plan that waits for the market to respond. Residents and businesses support the idea of demonstration projects, where something temporary can become successful and permanent. The community grew excited about possible improvements and felt comfortable testing them in a temporary fashion.

The following is a partial list of the community organizations and stakeholders involved in the development of this Plan:

Centro Shalom City Fabrick **Ecotech Environ Architecture** Hancock University Interstices JR van Dijs, Inc. Left Coast Sports Innovations Long Beach Central Project Area Council Long Beach Memorial Medical Center / Miller Children's Hospital Long Beach Rescue Mission

Los Angeles County Metro Meta Housing Corporation New City Public Schools

Sourcing International St. Mary Medical Center Urban Village



- Keep the Community Involved. Improving Midtown will require partnerships and coordination, not only among multiple governmental agencies, but also among local institutions, businesses, community organizations, and residents. Ultimately, the ideas and designs must be owned and shaped by the residents and businesses to have long-lasting cultural or aesthetic value in the community. Developing a plan that incorporates consistent participation by the community in the Plan's implementation will increase its chances for success. Local businesses suggested the creation of an improvement district that focuses purely on tasks, programming, and improvements for the betterment of Midtown.
- Live, Work, and Play in Midtown. Midtown residents and workers share many of the same attitudes and preferences as others in California. They want to shop close to where they live, work where they live, and play where they live. The community sees a strong employment and transit base in Midtown and believes the City can make improvements that enhance their ability to spend more of their life in Midtown. With the potential influx of new housing options, many residents want to see an opportunity to stay in Midtown and have access to housing that is affordable to the existing community.
- Leverage the Medical Center. The Long Beach Memorial Medical Center currently emphasizes its entrance along Atlantic Avenue, but plans on enhancing its presence along Long Beach Boulevard through the design and placement of buildings and streetscape. Branding for the hospital is shifting from sick care to healthcare environment with a tagline of "The Good Life." This theme focuses on wellness and preventative care and complements the land use plan and opportunities for Midtown.
- Make Midtown Safer. The community discussed safety concerns created by the physical environment and level of activity in Midtown. A lack of lighting along Long Beach Boulevard and its cross-streets was cited by many as one contributing factor to safety in Midtown. A more complex factor raised by the community was the lack of a reason to be in Midtown. Residents and businesses understood that more people needed to be on the street in Midtown shopping, working, and participating in community activities during the day and night.
- Reduce the Cost of Change. The business and property owners stated their support for and desire to participate in improving Midtown. The cost and development fees and the complexity of the development process were viewed as an area where the City could directly reduce barriers to change. The community understood that the fees paid for legitimate and necessary expenses but saw the need to incentivize improvements in as many ways as possible.



# LAND USE PLAN & DEVELOPMENT STANDARDS

MIDTOWN SPECIFIC PLAN

# 3.0 Land Use Plan and Development Standards

# 3.1 PROJECT VISION AND GUIDING PRINCIPLES

### 3.1.1 Vision: A Vibrant Midtown

Midtown will be a vibrant and thriving community for our children, family, and friends. Midtown will be known for its unique blend of parks, strong businesses, and transit-oriented housing. Additionally, Midtown will be an early leader in multi-modal transportation practices where a person can safely and easily travel by walking, riding a bike, catching a bus, taking a train, or driving a car.

# 3.1.2 Guiding Principles

Five principles accompany the vision to guide the Specific Plan and support citywide efforts to increase non-motorized transportation, promote healthy living options, and work toward a more sustainable future.

# 1. Enhanced Mobility and Complete Streets

Long Beach Boulevard must evolve to prioritize and enhance the walkability of the corridor, improve mobility options for bicycles and transit riders, and preserve functionality of the corridor as a thoroughfare for automobiles. The addition of trees, landscape, furnishings, and bikeways; improved pedestrian crossings; and small changes in travel lanes will enhance the public realm experience for all users.

# 2. Safety and Wellness

The physical environment plays a critical role in our community's overall health. Providing active and passive park spaces for urban neighborhoods along Long Beach Boulevard is critical to improve health and wellness. A well-designed street creates a safer and more appealing setting for families, bicyclists, and others along the corridor. Additionally, the Plan proposes physical and programmatic connections between health-related institutions, park areas, and the public right-of-way.

### 3. A Sustainable Future

The City of Long Beach supports a sustainable future for its residents, its businesses, and the environment. The Midtown area should improve and develop in a sustainable manner by decreasing the reliance on automobiles, reducing the urban heat-island effect, and promoting a balance of jobs and housing.

# 4. Supporting Urban Amenities

The supporting amenities serving Midtown must be improved to stimulate reinvestment and attract new development. Midtown must be an enjoyable place to live and do business. Improvements and new development will

# MIDTOWN VISION

Midtown will be a vibrant and thriving community for our children, family, and friends.

Midtown will be known for its unique blend of parks, strong businesses, and transit-oriented housing.

Additionally, Midtown will be an early leader in multi-modal transportation practices where a person can safely and easily travel by walking, riding a bike, catching a bus, taking a train, or driving a car.

# **GUIDING PRINCIPLES**

**Enhanced Mobility and Complete Streets** 

Safety and Wellness

A Sustainable Future

**Supporting Urban Amenities** 

Working with and for the Community

seek out urban amenities such as attractive rights-of-way, safe and efficient bikeway and pedestrian facilities, parks and parklets, and landscaping enhancements.

# 5. Working with and for the Community

The ideas and plans presented in this Specific Plan were generated by close coordination with the existing resident, business, property owner, and development communities. Working with and for the community does not stop after the adoption of the Plan. This Plan places special emphasis on coordinating public and private improvements and programming with Long Beach Memorial and other medical facilities in Midtown.

# 3.2 LAND USE DISTRICTS

The Specific Plan project area consists of 375 acres that cover a two and a half-mile segment of Long Beach Boulevard between Anaheim Street to the south and Wardlow Road to the north. The eastern and western boundaries generally range from roughly 300 feet at midblock locations to a quarter mile at transit nodes from Long Beach Boulevard.

The Midtown Specific Plan regulates the project area through the application of four development districts: Transit Node, Corridor, Medical, and Open Space. Each district has its own development standards and land use patterns.

Figure 3-1 and Table 3-1 summarize the development intensity and boundaries for each district, including the projected distribution of development potential by district subarea.

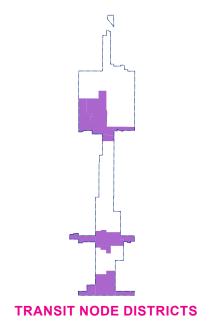
# Transit Node (TN)

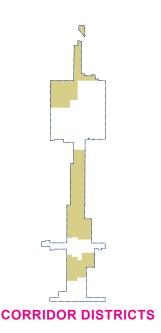
The Transit Node District supports compact, transit-oriented mixeduse and residential development centered on the three Metro Blue Line stations. This district is characterized by intense building types, including mid- and low-rise podium, mixed-use flex blocks, liners, stacked flats, and live-work units.

Building heights and lot coverage patterns reflect significant intensities, minimum height requirements of three stories maximum height limits of 10 stories. The district accommodates retail, restaurant, entertainment, and other pedestrian-oriented uses at street level, with offices or flats above in mixed-use buildings.

# Corridor (CDR)

The Corridor District is applied to properties along Long Beach Boulevard between Blue Line stations and the 405 Freeway. It is intended to provide housing options and neighborhood-serving uses within walking distance of a transit node.





Building types include lined block, stacked flats, courtyard housing, livework, rowhouses, and tuck-under units. Multifamily residential and mixeduse projects are in two- to four-story buildings. Single-use, neighborhoodserving uses occupy buildings between one and three stories. Mixed-use and non-residential projects are centered on key intersections while residential and public/quasi-public uses infill at midblock locations.

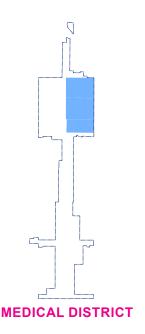
# Medical (M)

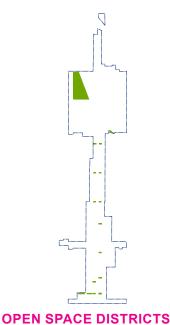
The Medical District establishes a comprehensive health campus based on the Long Beach Memorial Medical Center's master planning efforts. The district anticipates a campus that activates both Atlantic Avenue and Long Beach Boulevard with a mix of uses, connects physically to Veterans Memorial Park, and engages corridor businesses and the entirety of Midtown programmatically.

The district has the widest range of building types and multiple parking structures at varying heights and intensities. In addition to improved buildings, pedestrian access, and landscaping improvements on campus, the medical center is committed to improving the health and well-being of the community and will host events to strengthen its relationship with the local neighborhoods. Access to the campus, facilities, local events, and increased outreach will aid in creating a greater sense of community for the corridor.

# Open Space (OS)

The Open Space District identifies existing areas reserved for community and mini-parks, and creates new space for parklets. Proposed parklets provide much-needed active and passive open spaces for neighborhoods along Long Beach Boulevard to promote an active lifestyle, community gardening, art, and safe places for children and other residents. Future park improvements are planned for a portion of the existing Veterans Park in connection with Long Beach Memorial Medical Center programming. Additional open space is encouraged along the corridor in connection with new development.





# 3.3 OPEN SPACE PLAN

Integrating open space into an existing urban corridor can be challenging. This Specific Plan builds on existing amenities and capitalizes on the right-of-way to offer new park opportunities. Enhancing open space is not only important for serving the Midtown area, but also as part of the City's overall goal of providing 1,000 new acres of park space.

# 3.3.1 Existing Open Space

Midtown's neighborhoods are currently underserved when it comes to accessible open space. Existing park space is primarily in the northern portion of the Specific Plan area, and the largest number of residents are in the central portion of the Plan area.

### **Veterans Memorial Park**

This 14.7-acre park is the biggest continuous area of open space in Midtown and the only accessible large park space for many Midtown residents. Amenities in Veterans Park include sports fields/courts and a community recreation center. The park's proximity to the Memorial Medical Center and Willow Metro Blue Line station provides an opportunity for increased use of and connection to the park by residents, employees and visitors to the area.

# Fellowship Park and 14th Street Park

Small neighborhood parks account for approximately two acres of the Open Space District. Fellowship Park is a mini-park that offers a small area of recreation for nearby residents. 14th Street Park serves the southern portion of Midtown adjacent to Anaheim Avenue. This open space area is home to a skate park and connects to Seaside Park west of Pacific Avenue. 14th Street Park has the opportunity to serve additional users and better connect and integrate with surrounding land uses.

# 3.3.2 Proposed Open Space

Open space opportunities in Midtown include the expansion of active programming in Veterans Park, the creation of new "parklets," and the provision of other off-site and on-site open space.

This concept creates exciting outdoor spaces for recreation by capping side streets to create small street parks or parklets. This "Pavement to Plazas" concept is seen elsewhere in the City through on-street parking spaces converted into plaza space. The City's Mobility Element further reinforces the continued implementation of the "Pavement to Plazas" concept. Adding open space to an urbanized area is difficult, but this Specific Plan identifies 11 sites for parklets throughout Midtown.

The "Pavement to Plazas" concept allows unused or low-volume segments of roadways to be reclaimed and turned into small public plazas. In Midtown, parklets could consist of a quarter acre of street right-of-way at select neighborhood streets intersecting with Long Beach Boulevard. A parklet could provide space for a community garden or sports area such as a basketball or handball court. Other amenities could include tables and chairs, playground equipment, or even a screen area to show movies.

As depicted in Figure 3-2, parklets are also strategically placed at block crossings to improve pedestrian connections across the street and to add shade and resting places for pedestrians traveling along the corridor. These small street parks can be implemented incrementally with a demonstration parklet to showcase community involvement, collaboration with the City, and potential sponsorship by local businesses. The creation of the first parklet would serve as a template for the City, and the remaining 10 parklets could be programmed for implementation over time.

The Specific Plan also designs better connections between existing and proposed open spaces through public realm improvements. Such improvements will create more pedestrian- and bicycle-friendly facilities, shade trees, and resting places along the corridor. Figure 3-2 shows



A lively parklet could provide a space to take a work break or to meet up with neighbors. The illustrative above is shown for conceptual purposes only.

existing and proposed open space within and near the Midtown Specific Plan boundaries. Open space standards are covered in Section 3.6.

# 3.4 DEVELOPMENT STANDARDS

The development standards translate the Specific Plan vision and principles into prescriptive evaluation standards and guidelines, ensuring that new development projects activate the public realm, exhibit high standards of urban design and landscaping, and maximize flexibility and development feasibility for public and private projects.

### 3.4.1 Permitted Uses

Table 3-2 shall regulate land uses in the Midtown Specific Plan area. The table provides uses by district: Transit Node District, Corridor District, and Medical District. The uses are indicated by abbreviation: e.g., permitted (Y), not permitted (N), permitted by Conditional Use Permit (C), permitted as accessory use (A), and permitted as a temporary use (T).

All land uses not listed in Table 3-2 shall be prohibited, except that the Zoning Administrator has the authority to interpret, in cases of uncertainty, the intent of this ordinance as to whether an unlisted land use shall be designated Y, N, C, AP, A, or T, subject to verification by the Planning Commission upon appeal by the applicant, through the Classification of Use process provided in Division VI of Chapter 21.25 of the Zoning Regulations.

# **Affordable Housing**

As part of the redevelopment strategy for the former Central Long Beach Redevelopment Project Area, several parcels were assembled along the Long Beach Boulevard corridor to provide strategic investment for affordable housing development. These parcels are identified on Figure 3-3, Parcels Owned by the Long Beach Community Investment Company.

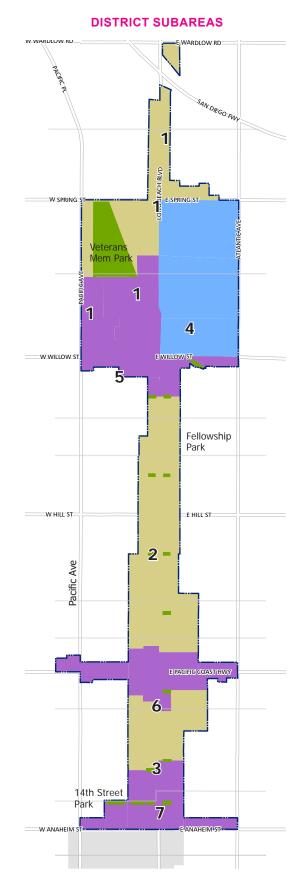
Key parcels remain under the ownership of the Long Beach Community Investment Company (LBCIC) and must be developed consistent with the regulatory requirements contained in the California Health and Safety Code, as amended by SB 341. Uses inconsistent with these requirements are prohibited, even on a temporary basis. The LBCIC intends to offer these parcels for development over the next year or two through competitive bid for low-, very low-, and extremely low-income affordable housing. The development of these parcels for affordable housing purposes is also consistent with the City's certified Housing Element for the period of 2013-2021.

Note:

### **Land Use Summary by District** Typical Comm/Employ Hotel Rooms/ Dwelling District | Acres | Density (per ac) Units Sq Ft **Hospital Beds Corridor Districts** 25 15-40 408 274,766 2 51 15-40 924 331,815 3 20 15-40 450 92,663 Total 96 1,782 699,244 **Medical District** 757,600 854 beds 63 20-30 300 Total 63 300 757,600 854 beds **Transit Node Districts** 175 rooms/ 924,296 5 44 30-60 774 148 beds 20 30-60 362 297,125 102 rooms 6 319,000 7 19 30-60 401 277 rooms/ Total 83 1,537 1,540,421 148 beds OS<sup>1</sup> 18 ROW 114 277 rooms/ 2,997,265 Total 375 3,619 983 beds

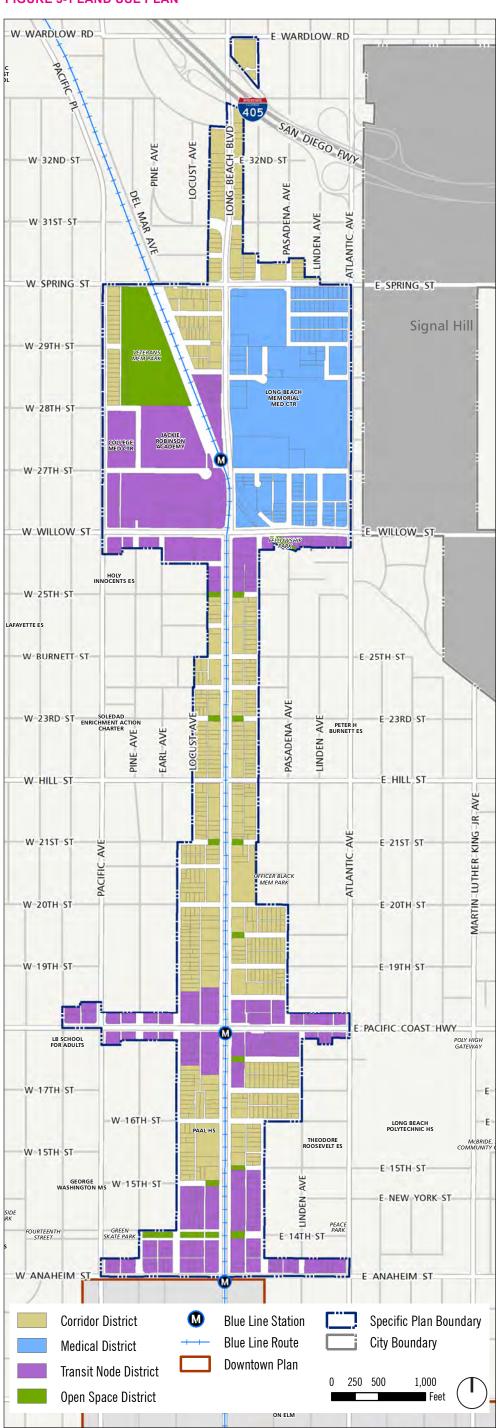
1. The Open Space District consists of 15.2 acres of existing park area plus 2.6 acres of

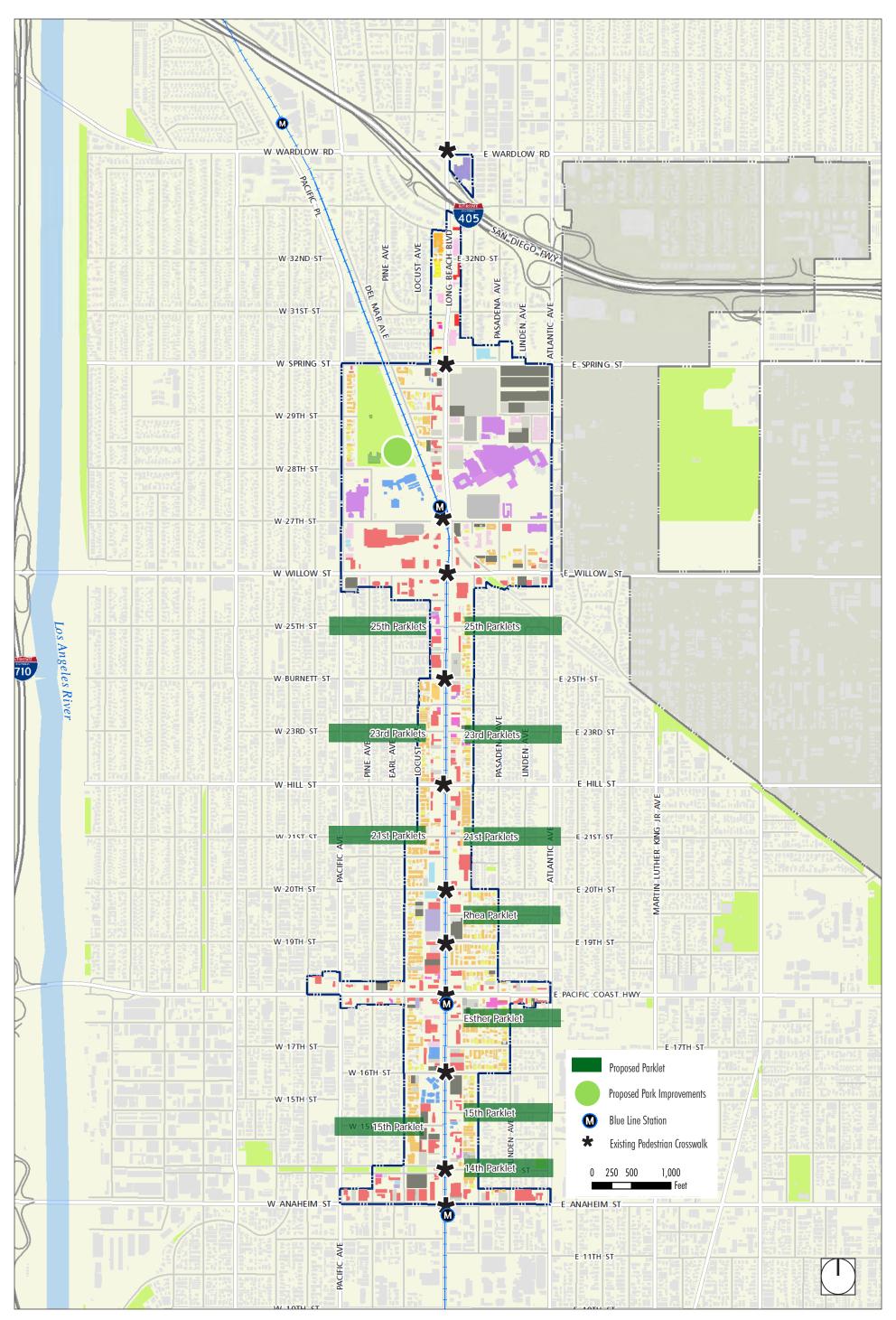
future parklets. Figures above subject to rounding.



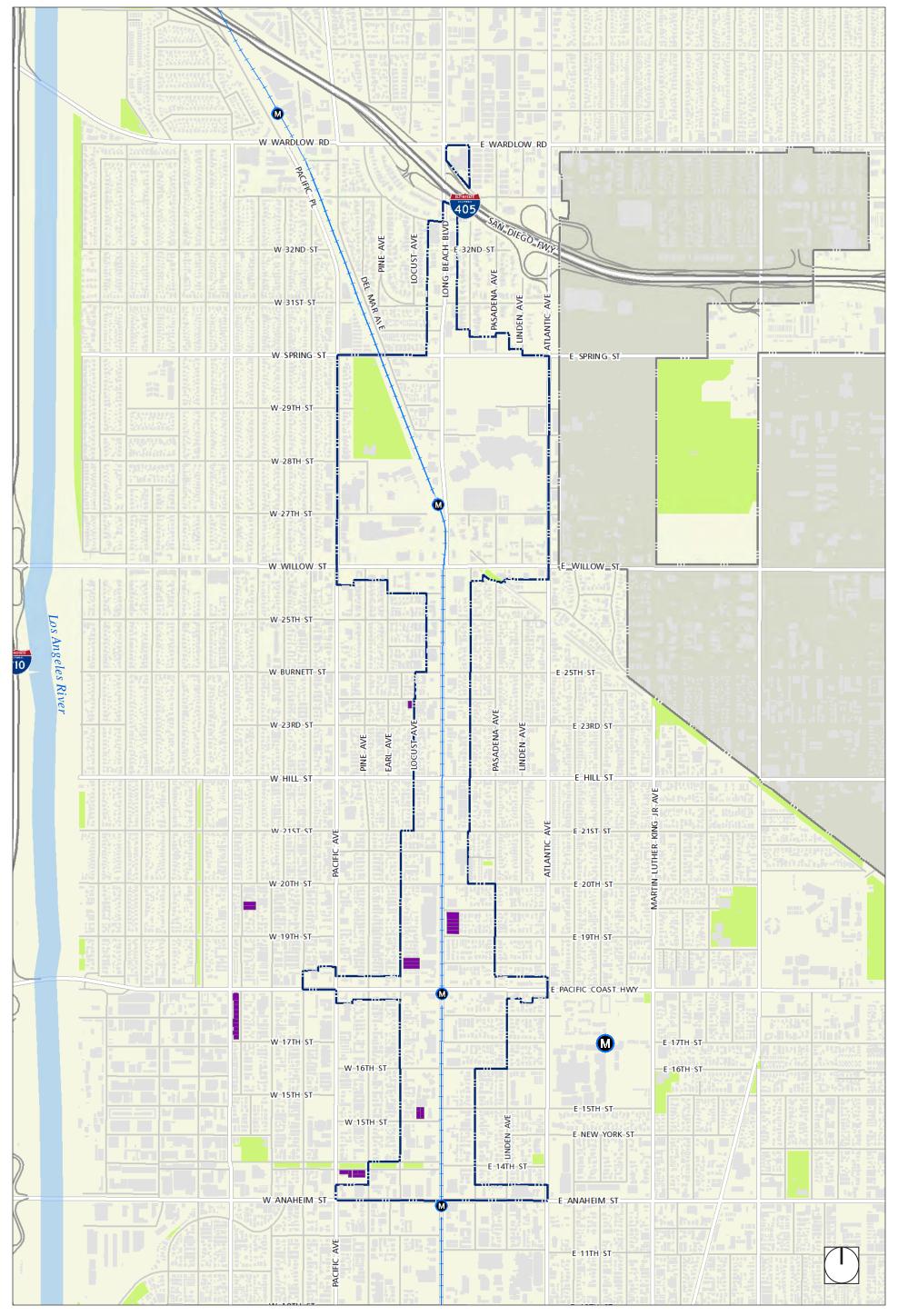
This map divides the land use districts into subareas to summarize the approximate distribution of development potential throughout the Midtown Specific Plan.

# **FIGURE 3-1 LAND USE PLAN**





# FIGURE 3-3 THE LONG BEACH COMMUNITY INVESTMENT COMPANY HOUSING DEVELOPMENT SITES



# **TABLE 3-2 PERMITTED USES**

Use and Key to Permit Requirements  Y = Permitted use N = Not permitted C = Conditional use permit AP = Administrative use permit A = Accessory use T = Temporary Use	Transit Node District	Corridor District	Medical District	Notes and Exceptions  Code section numbers reference the Long Beach Municipal Code
Alcohol Beverage Sales				
	С	С	С	see note (a)
On-premise sales	С	С	С	see note (a)
Automobile				
Auto detailing, with handheld machines only	AP	AP	Α	Inside parking structures or garages only
Bus yard	N	N	N	
Car wash	N	N	N	
Gasoline sales	N	N	N	
General auto repair	N	N	N	Body work, painting, major mechanical
Minor auto repair	AP	AP	N	Installation or sale of stereos and car alarms prohibited.
Limousine service	А	А	N	Accessory to hotel use only; no auto repair services
Motorcycle/scooter/jet ski sales	AP	AP	N	Conditional use permit when located above . Indoor showroom only. Dropand minor on-site repair of tires, lights, etc., are allowed; any engine repair is prohibited on-site. No engine demonstrations on-site.
Parking structure	A/C	A/C	A/C	Stand-alone and applicable as accessory use to multi-family, hotel, etc. (applies only to parking structure)
Recreational vehicle storage	N	N	N	
Rental agency	Α	N	N	Accessory to hotel use only; no auto repair services
Vehicle/automotive parts	AP	N	N	No installation services permitted
Vehicle sales	AP	AP	N	Indoor showroom only, no outdoor sales
Billboards				
	N	N	N	Regardless of size
Entertainment				
Amusement machines	А	А	А	Limited to four or fewer
Arcade, bowling alley, miniature golf, tennis club, skating rink, or the like	С	С	N	
Banquet room rental	A/AP	A/AP	N	Accessory use permit when accessory to restaurant or hotel; when not an accessory, an administrative use permit

TABLE OF TERMITTED OOLO	TABLE 3-2 FERMITTED 03E3				
Use and Key to Permit Requirements  Y = Permitted use N = Not permitted C = Conditional use permit AP = Administrative use permit A = Accessory use T = Temporary Use	Transit Node District	Corridor District	Medical District	Notes and Exceptions  Code section numbers reference the Long Beach Municipal Code	
Dancing	А	А	N	Accessory to restaurant, hotel, banquet room only	
Live or movie theater	Y	Y	N		
Private club, social club, night club, pool hall	С	С	N	City council hearing required for new and transferred business licenses	
Restaurant with entertainment	Υ	Y	N	City council hearing required for new and transferred business licenses	
Financial, Professional, and Personal Services					
Basic professional services, non-medical	Y	Y	С	Examples include: barber/beauty shop,catering (w/o trucks), pet grooming, dry cleaner, housing cleaning service, locksmith, mail box rental, nail/manicure shop, repair shop for small appliances or electronics, bicycle sales/repair, tailor, shoe repair, tanning salon, travel agent, accounting, advertising, architecture, artist studio, bookkeeping, business headquarters, computer programming, consulting, contracting, engineering, insurance, law, marketing, photography, real estate, tax preparation, or visitor information center	
Basic professional services, medical	Y	Y	Y	Examples include: chiropractors, dentistry, diet/nutrition center, medicine, medical laboratory, professional care providers, psychiatry, psychology, or veterinary clinic	
ATM	Y/AP	Y/AP	Y	Permitted (Y) when in building interior; Administrative use permit when on building exterior or as a freestanding, walk-up machine	
Bail bonds	N	N	N	Only within 600 feet of a police station, jail, or court	
Bank, credit union, savings and loan	Y	Y	Υ	Drive-thru windows prohibited	
Business support service	Y	Y	Υ	Copy, fax, mail box rental, supplies; business equipment rental, sale, and repair	
Check cashing, payday loans, cash for gold	N	N	N	Subject to 21.45.116	
Escrow, stocks, and bonds broker	Y	Υ	Υ		

Use & Key to Permit Requirements  Y = Permitted use N = Not permitted C = Conditional use permit AP = Administrative use permit A = Accessory use T = Temporary Use	Transit Node District	Corridor District	Medical District	Notes & Exceptions  Code section numbers reference the Long Beach Municipal Code
Fitness center, gymnasium, health club, personal training, martial arts studio, dance/ballet studio	Y	Y	Υ	
Laundromat	Υ	Υ	Α	
Massage therapy	A/C	A/C	A/C	Subject to 21.51.243; accessory use permit when accessory to other uses; as a principal use, a conditional use permit
Major appliance repair	С	С	N	. Stove, refrigerator, upholstery, lawn mowers, etc.
Self-storage, mini-warehouse, etc.	N	N	N	
Shoe-shine stand	Α	Α	Α	Indoor or outdoor
Tattoo parlor	С	С	N	Minimum 1,000 feet from any public school and 200 feet from any residential zone
Termite and pest control	N	N	N	
Vending machines (exterior)	N	N	N	
Institutional				
Adult day care	Υ	Υ	Υ	
Church or other house of worship	Υ	Υ	Υ	
College, university, business or professional school	Υ	Υ	Υ	
Convalescent hospital or home	N	N	Υ	
Day care or pre-school	Y	Υ	Α	When not accessory to a residence
Elementary or secondary school	Υ	Υ	N	
Emergency shelter	N	N	N	
courthouse, library, or other government facility	Υ	Υ	Y	
Hospital, medical center, urgent care facility	С	С	Y	
Industrial arts trade school or rehabilitation workshop	AP	AP	AP	
Museum	Υ	Υ	Α	
Mortuary or funeral home	N	N	N	Minimum 600 feet from any residential 1
Parsonage	Α	Α	N	Accessory to a house of worship
	С	С	С	distribution

Use & Key to Permit Requirements  Y = Permitted use N = Not permitted C = Conditional use permit AP = Administrative use permit A = Accessory use T = Temporary Use	Transit Node District	Corridor District	Medical District	Notes & Exceptions  Code section numbers reference the Long Beach Municipal Code
Residential				
Single-family detached	N	N	N	SP
Single-family attached or townhome	Υ	Y	Y	Only in a vertically mixed-use project in Transit Node District
Multi-family	Υ	Υ	Y	
Live-work / artist studio with residence / shopkeeper unit	Υ	Υ	Y	
Child day care, 14 or fewer children	А	А	А	Subject to 21.51.230
Child day care, more than 14 children	С	С	А	Subject to 21.52.249
Community correctional reentry facility	N	N	N	
Special group residence	С	С	С	21.52.271
Restaurants & Ready-to-Eat Foods				
Restaurants & ready-to-eat foods	Υ	Υ	Υ	Drive-thru lanes prohibited
Outdoor dining	А	А	А	
Vending cart (food only)	AP	AP	AP	Subject to 21.45.170
Retail Sales				
Basic retail sales	Υ	Υ	Υ	
Building supply or hardware store with lumber, drywall, or masonry	N	N	N	Hardware stores w/o lumber, drywall, or masonry are considered basic retail
Flower stand or newsstand	Y	Y/AP	Y/AP	Subject to 21.45.135, except subsection (B.I.); permitted (Y) when a principal use; Accessory use permit when an accessory to another use
Itinerant vendor	Т	Т	Т	
Major appliance sales	Y	Υ	N	Refrigerators, stoves, etc.
Manufacture of products sold on-site	А	А	N	
, plant, fruit, or vegetable sales	А	Α	А	Maximum of 6,000 Sq Ft
	Т	Т	N	
Thrift store, used merchandise, consignment	С	С	С	
Vending cart (non-food items)	AP	AP	AP	
Temporary Lodging				
Bed and breakfast inn	AP	AP	N	Subject to 21.52.209; inns with fewer than seven guest rooms are exempt from AP requirement

Use & Key to Permit Requirements  Y = Permitted use  N = Not permitted  C = Conditional use permit  AP = Administrative use permit  A = Accessory use  T = Temporary Use	Transit Node District	Corridor District	Medical District	Notes & Exceptions  Code section numbers reference the Long Beach Municipal Code
Hotel	Y	Υ	Υ	
Motel	N	N	N	
Youth hostel	AP	AP	N	
Miscellaneous and Other Uses				
Adult entertainment business	N	N	N	
Cargo/shipping container for residential and non-residential uses	С	С	С	Permitted as building material for residential and non-residential uses when all other zoning and building code regulations are
Carnival, event, fair seasonal sales, trade show, and the like	Т	Т	Т	Subject to 21.53.109 and 21.53.113
Cellular or wireless facility	Y	Υ	Υ	Building or roof-mounted only, subject to 21.45.115; freestanding monopoles are prohibited
Electric distribution station/substation	N	N	N	
Firearms or other weapons sales or repair	N	N	N	
Medical marijuana dispensary, medical or recreational marijuana retail outlet, THC-laced foods or other edible or consumer product manufacture or sales, marijuana cultivation or grow facility, cannabis collectives or cooperatives, and other similar or related uses	N	N	N	Unless preempted by National, State or local legislation including ballot initiatives impacting Title 5 of the Long Beach Municipal Code
Park, community gardens, parklets	Υ	Υ	Υ	
Recycling center	N	N	N	. Subject to 21.51.265, no more than four vending machines at one location; excludes attended centers
Transportation facilities	С	С	С	Bus terminals, cab stands, heliports/ helistops, train stations, etc.
Towing – accessory or principal use	N	N	N	

<sup>(</sup>a) The following alcoholic beverage sales may be exempted from the Conditional Use Permit requirement:

<sup>1.</sup> Restaurants with alcoholic beverage service only with meals. This generally means any use with a bar is not exempt. A service bar is not bar. For example, a sushi bar, where alcoholic beverages are served at the same bar where meals are served, is considered serving alcoholic beverages only with meal service. A cocktail lounge without a bar, but with primarily service of only hors d'oeuvres and alcoholic beverages is not exempt. Any restaurant with more than 30 percent of gross sales consisting of alcoholic beverages shall lose its exemption and be required to obtain a Conditional Use Permit to continue to sell alcohol.

<sup>2.</sup> 

<sup>3.</sup> A

<sup>4.</sup> Grocery stores of 20,000 square feet or greater with accessory sale of alcoholic beverages.



Mixed-use buildings with ground floor retail uses create an active, pedestrian-friendly environment.

#### 3.4.2 **Development Intensity**

Within the Midtown area, development intensity is regulated by standards for height, floor area ratio (FAR), unit size, and lot size. Table 3-3 and Figure 3-3 provide the minimum and maximum intensity standards. The Transit Node District is divided into two areas, reflecting the need to transition between the more intense development immediately surrounding the transit stations and the surrounding neighborhoods.

To encourage lot consolidation and through-block development, the maximum building height and FAR standards are staggered based on parcel depth. Parcels that are currently at least 200 feet in depth are qualified to reach the maximum development intensity. Parcels of less than 200 feet in depth are permitted to reach a lower level of intensity, but are encouraged to consolidate with adjacent parcels to maximize development potential and avoid orphaned parcels. Development created through lot consolidation shall be developed as a unified site.

The standards in this Plan have been developed to foster an urban street environment. A minimum streetwall height has been established along key streets to maintain a consistent "public room" (as shaped by building

#### TABLE 3-3 DEVELOPMENT INTENSITY STANDARDS

Standard	Transit Node High	Transit Node Low	Corridor	Medical
Maximum building height 1,2,3				
On parcels <200 feet deep	4 st / 50 ft	3 st / 36 ft	3 st / 36 ft	No Limit
On parcels ≥200 feet deep	10 St / 100 ft	5 st / 65 ft	5 st / 65 ft	NO LITTIL
Minimum streetwall height		See Fig	jure 3-4	
7	18 ft	18 ft	14 ft	14 ft
Maximum FAR 3,4				
On parcels <200 feet deep	2.0	1.5	1.5	4.0
On parcels ≥200 feet deep	4.0	3.0	3.0	4.0
Minimum unit size 5,6	600 sf			
Minimum lot size	10,000 sf none			none

#### Notes:

- 1. Architectural projections are building elements (e.g., towers, cupolas) that are added to building faces to provide architectural interest without The maximum height of any architectural projection is 10 feet above the maximum building height.
- 2. If a project straddles two or more height areas, each height area shall remain in on Figure 3-4, unless approved by the Site Plan Review Committee.
- 3. Parcel depth shall be measured from the property line parallel to and/or fronting Long Beach Boulevard, Spring Street, Willow Street, Coast Highway, or Anaheim Street. If a parcel cannot be consolidated with an adjacent parcel (e.g., adjacent parcels are outside of the Plan or adjacent parcels have already been developed under the Plan), exceptions can be made by the Site Plan Review Committee. The Site Plan Review Committee shall also consider exceptions for parcels larger than 20,000 square feet where available lot depth is less than 200 feet however a mix of uses at increased height and density may be accommodated consistent with the design guidelines contained in Chapter 5.

- 5. Up to 15 percent of a project's units may be a minimum of 450 sq ft if approved through the Site Plan Review process and if the Site Plan Review Committee that the reduced-size units are high-quality dwelling units with amenities to be livable, desirable dwelling units, to be determined at the sole discretion of the Site Plan Review Committee. A variety of housing unit types and sizes is required for all development projects.
- 7. The Site Plan Review Committee may reduce the minimum ground

height to 15 feet if architectural treatments are included to accentuate

on both sides of the street). Minimum streetwall heights are provided on Figure 3-4. Streetwalls vary by district—shorter multi-story buildings in the Corridor District, a tier of more intense heights in Transit Nodes (dividing this district into two categories, high and low), and larger institution buildings in the Medical District.

The streetwall is the most visible component of a building. The design of the streetwall is what the user of the street will experience most intimately from the public realm; it is one of the biggest contributors to Midtown's character. See Chapter 5, Design Guidelines, for streetwall design standards.

## 3.4.3 Building Placement

The placement of buildings plays an important part in creating character and a sense of place in Midtown. Along Long Beach Boulevard and around the transit stations, the standards reflect an urban, walkable atmosphere where dense commercial, residential, and mixed-use buildings are placed close together and create a consistent streetwall that shapes the experience of pedestrians, bicyclists, and passing motorists.

Elsewhere, the setback standards emphasize minimum setbacks to provide attractive landscaping and a buffer from street activity for pedestrians. Standards are identified in Table 3-4 and on Figure 3-4.

TABLE 3-4 BUILDING PLACEMENT STANDARDS

Build-to Line / Setback <sup>1</sup>	Min	Max
Street Fronting		
Zero-foot build-to line <sup>2</sup>	0 ft	5 ft
6-foot setback	6 ft	none
10-foot setback	10 ft	none
Interior		
	5 ft	none
Adjacent to side or rear yard of property	5 ft	none
Adjacent to an alley <sup>5</sup>	10 ft	none
Building to building on same lot	0 ft (shared wall) or 10 ft	none

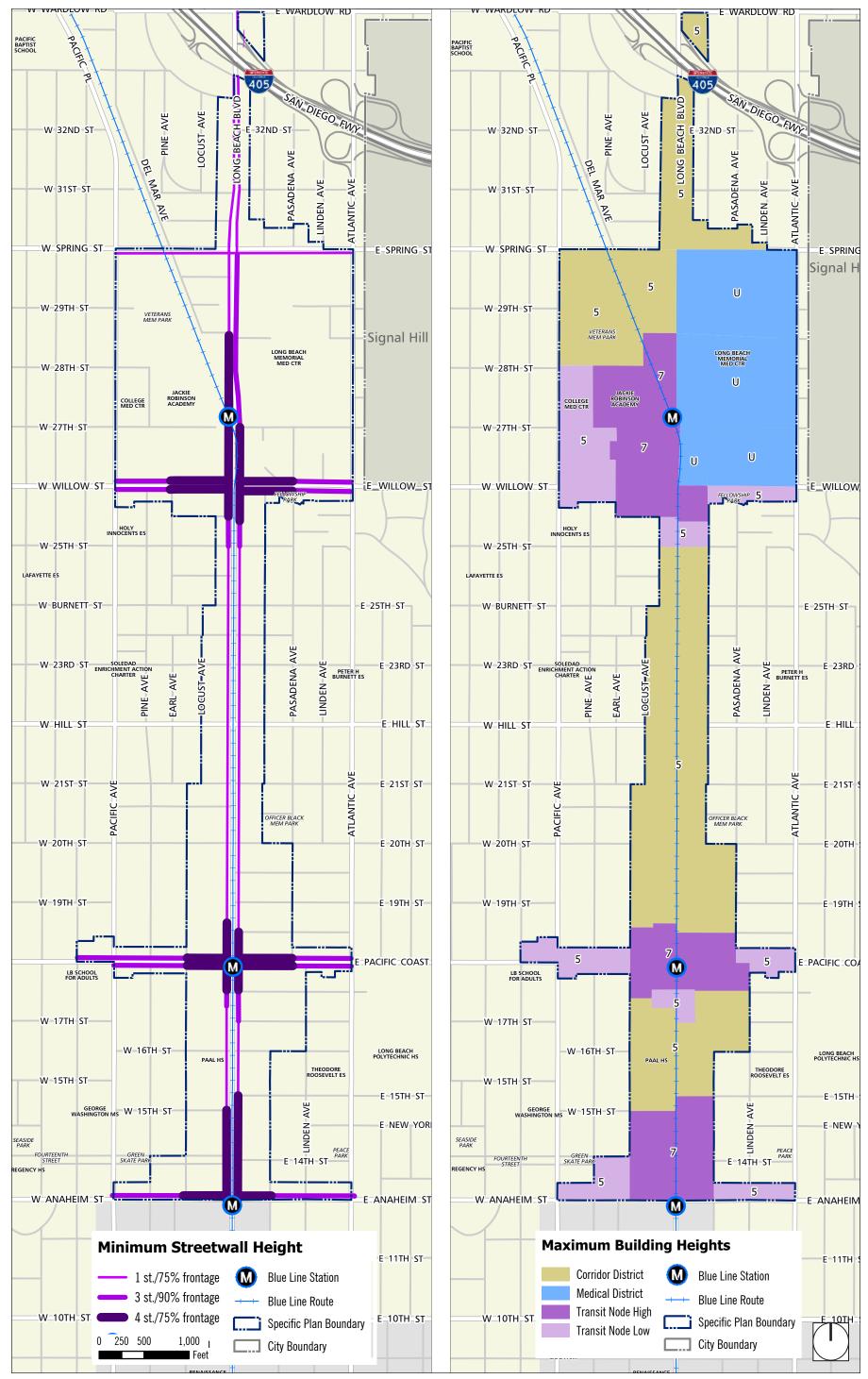
#### Notes:

- 1. Setbacks are measured from the closest point of a building to the property line.
- 2. Up to 20 percent of the building frontage may be set back more than 5 feet.
- 3. All uses are allowed to be attached horizontally. Accordingly, the setback requirement at the point of the shared wall is zero.
- 4. No setback is required for commercial or residential above residential, and 5-foot side an 8-foot front street setback is required for
- 5. Required alley setbacks are measured from the centerline of the alley.

Other building placement standards include:

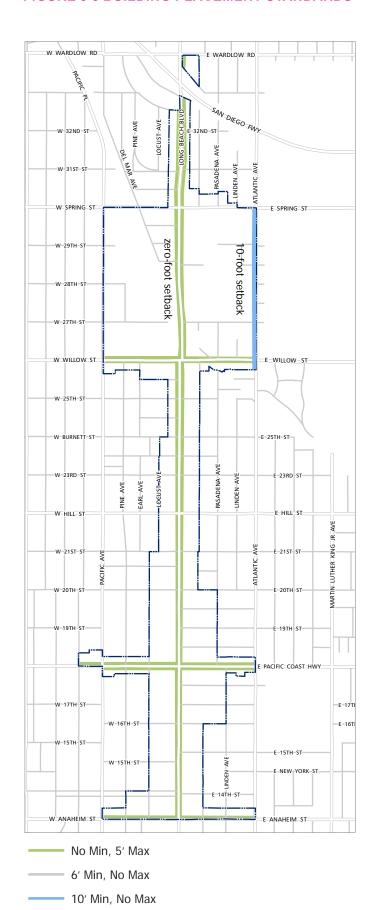
- Additional setbacks for entry plazas or courtyards, or to meet adjacent structures, may be permitted subject to additional design review.
   Arcades and colonnades may be used to satisfy setback requirements.
- Stoops, patios, gardens, balconies, and outdoor dining may be located within the setback and are encouraged along the street edge.
   Projections are permitted into the required setbacks in accordance with Section 21.32.220(C) of the Municipal Code.
- Additional standards for a required corner cut-off apply in accordance with Section 21.15.660 of the Municipal Code.
- The Site Plan Review Committee may consider context-sensitive setbacks, deviating from the required setbacks or build-to lines on individual projects for both additions and new construction, if those deviations would be consistent with the intent of this Plan.

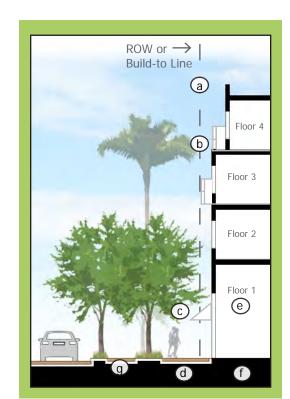
FIGURE 3-4 BUILDING AND STREETWALL HEIGHT STANDARDS (CONFIRM MAX HEIGHT IN TRANSIT NODE HIGH (7 OR 10 STORIES))



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#### FIGURE 3-5 BUILDING PLACEMENT STANDARDS

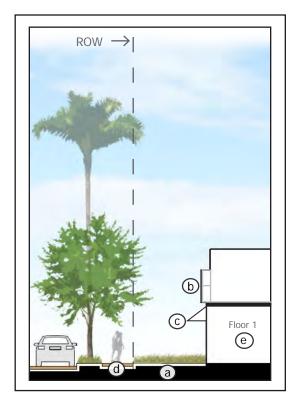




#### **ZERO-FOOT BUILD-TO LINE**

Portions of Midtown, primarily along Long Beach Boulevard, are designated as having a zero-foot build-to line.

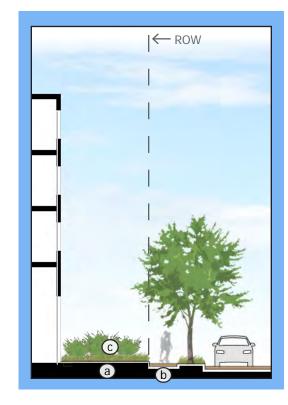
- a. A zero-foot build-to line requires no minimum setback with a maximum 5-foot setback.
- b. Projecting or recessed balconies are encouraged.
- c. Awning or canopy entry may encroach into the setback area.
- d. The sidewalk is the primary pedestrian walkway. Where building façades abut the property line, pots or planters should be provided on the sidewalk, out of the primary pedestrian path.
- e. Active uses, such as residential, live-work spaces, commercial, and retail uses, are permitted on the first floor.
- f. Below-grade or podium parking is encouraged along Long Beach Boulevard and in the Transit Node Districts. Access to parking, entrances, and exits should be located on streets intersecting Long Beach Boulevard.
- g. A separated bike lane flanked by landscaping planters providing buffers creates a safer street for automobiles, bikes, and pedestrians.



### **6-FOOT SETBACK**

The majority of neighborhood and non-transit-oriented streets in Midtown use a 6-foot setback.

- a. A minimum 6-foot setback with no maximum limitation.
- b. Projecting or recessed balconies are encouraged.
- c. Awning or canopy entry may encroach into the setback area.
- d. The sidewalk is the primary pedestrian walkway.
- e. Active uses, such as residential, live-work spaces, commercial, and retail uses are permitted on the first floor.



#### **10-FOOT SETBACK**

Atlantic Avenue between Willow Street and Spring Street, along the Medical District, requires a minimum 10-foot setback.

- a. A minimum 10-foot setback with no maximum limitation.
- b. The sidewalk is the primary pedestrian walkway.
- c. Additional landscaping is encouraged in the setback.

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#### 3.5 **PARKING**

#### 3.5.1 Off-Street Parking

Table 3-5 provides the residential and non-residential parking requirements for development within Midtown. If different land uses are part of the same project (e.g., mixed-use development combining retail and residential), the parking requirements for each land use are applicable and shall be added together to determine the total parking requirements for the project.

Parking and loading requirements not provided in this section shall be subject to review by the City Traffic Engineer, who may require additional studies prior to approval. All parking reduction requirements shall be approved at the discretion of the Site Plan Review Committee, which will determine the appropriate level of parking demand reduction generated by these strategies on a project-specific basis.

In the calculation of parking requirements, fractional numbers of parking spaces shall be rounded up to the nearest half or whole number, depending on the requirement.



Off-street parking may be accommodated by surface parking lots or parking garages. The size, scale, and type of garage (underground vs. above ground) may vary with the type of project. See Chapter 5 for design guidelines pertaining to corridor parking.

TABLE 3-5 MINIMUM OFF-STREET PARKING REQUIREMENTS

Use	Corridor & Medical	Transit Node	Notes
Residential			
0-1 bedroom	1.0	1.0	per unit
2 bedrooms	1.25	1.05	per unit
3 or more bedrooms	1.5	1.25	per unit
Special group residence, assisted living, congregate care	1.0	0.75	per 3 bedrooms
Senior housing			
Market rate/rent	1	0.75	per bedroom
Income restricted/low rent	0.5	0.33	per bedroom
Shopkeeper or live-work	1.5	1.25	per unit
Guest parking	1.0	1.0	per 4 units
Non-residential			
Hotel	0.5	0.5	per room
Medical office	5	3	per 1,000 sq ft
Hospital	2	2	per bed
All other uses	2.0	2.0	per 1,000 sq ft In the Transit Node District, this requirement only applies to non- residential building space in excess of 4,000 sq ft Restaurants calculated based on sq ft of dining area; no additional parking requirement for the first 250 sq ft of outdoor dining space.



Additional bicycle parking may help to foster a multi-modal street environment.

Off-street parking spaces can be satisfied through the provision of smaller spaces designed specifically for motorcycles or motorized scooters:

- Up to 2 spaces for projects with up to 20,000 square feet of gross floor area of non-residential space or 50 residential units.
- Up to 5 spaces for projects with more than 20,000 square feet of gross floor area of non-residential space or 50 residential units.

Development in the corridor is required to provide electric vehicle charging facilities:

- For all new development at least 3 percent of the total parking spaces, but not less than one, shall be capable of supporting future electric vehicle supply equipment.
- A label stating "EV Charge Capable" shall be posted in a conspicuous place at the service panel or subpanel and the EV charging space.
- It is recommended that other off-site parking areas accommodate Level
   2 electric vehicle charging stations in anticipation of changes to the
   California Building Code requirements.

#### 3.5.2 Bicycle Parking

Table 3-6 describes the bicycle parking requirements for the Midtown planning area. Bicycle parking may consist of several types of facilities, hitching posts/staple racks, "A" frames, stand-alone racks, bicycle lockers, etc. Bicycle parking facilities are encouraged to be used as functional public art and should be located in convenient, visible, and well-lit areas. Non-residential property and business owners are also encouraged to

#### **TABLE 3-6 ON-SITE BICYCLE PARKING REQUIREMENTS**

Use	Minimum Bicycle Capacity	Type of Parking Facility	Location
Residential, shopkeeper unit, or live-work unit	1.0 space per 2 units, 1 enclosed locker required for every 50 dwelling units	A-frame or freestanding rack	Near main entrance with good visibility, not to obstruct auto or pedestrian movement
Commercial	1.0 space per 5,000 sq. ft. of building area	Staple or new technology	
Retail	1.0 space for each 7,500 sq. ft. of building area	Staple or new technology	
Schools	8.0 spaces per 40 students	A-frame, freestanding racks	Near office entrance with good visibility, in fenced area
Public facilities	8.0 spaces per location	Staple or freestanding racks	Near office entrance with good visibility
Transit stations	1.0 space per 30 parking spaces	Lockers	Near platform or security guard

consolidate bicycle parking into clusters within the public right-of-way along the street frontage.

#### 3.5.3 Transportation System Demand Management

Midtown is served by the Metro Blue Line light rail, local and regional bus services, and shuttle service. In addition, bicycling opportunities and the mixed-use character of Midtown decrease the need for parking spaces from what was required in the past.

New development projects (residential and non-residential), additions, demolitions, rebuilds, and remodels (refer to Sections 21.15.065, 21.15.750, 21.15.2250, and 21.15.225 of the Municipal Code, respectively) are eligible for a parking reduction by incorporating Transportation Demand Management (TDM) strategies. While TDM may reduce parking requirements, all development projects will be required to provide on-site parking. Transportation demand management strategies for Midtown will accomplish two broad objectives:

- · Reduce reliance on automobiles and associated congestion and emissions.
- · Provide economic incentives for residential, office, and employment projects in Midtown.

TDM strategies applicable to reduce parking requirements, subject to the discretion of the Site Plan Review Committee, include:

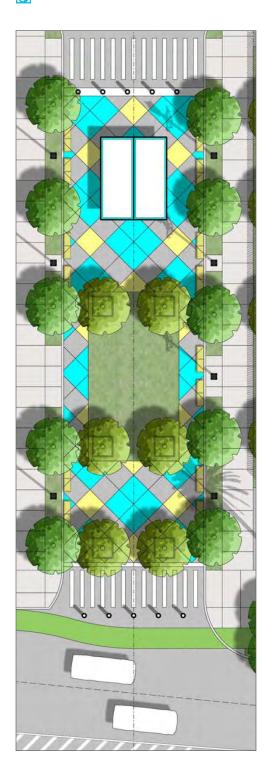
- · Carpool/vanpools.
- Garage lifts (stacked parking).
- · Unbundled parking (parking spaces are rented or sold separately, rather than automatically included with the rent or purchase price of a residential or commercial unit).
- Off-site parking within 1,000 linear feet walking distance of the property line (a shared parking agreement may be required).
- Joint use (shared parking).
- Transit/bicycle/pedestrian system improvements.
- On-street parking rates and time restrictions (adequately monitored).
- Transit passes (provide free or reduced-price transit passes to residents or employees). An incentive program could be developed for developers, property managers, and employers to substitute a percentage of required parking spaces. A maximum limit will be determined.
- · Other proposals.



Garage lifts (stacked) parking may help to increase the capacity of a parking structure.



Paid parking lots are a form of Transportation Demand Management by encouraging drivers to park once and walk, bike, or take transit to their Midtown destinations.



Parklets are street parks of about a quarter acre. The Specific Plan would add 11 of these parklets.

The illustrative above is shown for conceptual purposes only.

All parking reduction requirements shall be approved at the discretion of the Site Plan Review Committee, which will determine the appropriate level of parking demand reduction generated by these strategies on a project-specific basis; however, a TDM program shall not reduce parking to zero.

A "park once" policy shall also be promoted for Midtown. Rather than driving from one Midtown use to another, visitors are highly encouraged to park once and walk, bike, or take transit to one or more destinations within Midtown. Similarly, residents and employees are encouraged to walk, bike, or take transit from nearby residences or workplaces to Midtown destinations.

#### 3.6 OPEN SPACE STANDARDS

Open space is a key feature in any urban place, offering residents, workers, and visitors places to relax, gather, and exercise. Additionally, open space provides visual relief and a connection to the natural environment. Finally, open space may be used for community gatherings and festivals. Though Midtown enjoys a variety of small and large open space amenities, many residents and workers lack easy access to open space.

Adding open space to an urbanized area is not easy. Open space standards often focus on privatized open space and offer in-lieu fees that may get spent outside the neighborhood. The City also recognizes that private property owners and the development community do not have endless funds to satisfy requirements for public parks, on-site common open space, on-site private open space, and ROW improvement.

The Midtown Specific Plan emphasizes improvement of the public realm through the provision of public park space and improved public rights-of-way and requiring new development to pay an in-lieu park fee that will go toward park improvements within the corridor boundary. This Plan also requires new development to provide on-site open space; however, it offers flexible alternatives for projects near parklets.

#### 3.6.1 Public Park Space

Public park space serves the community at large and may consist of a variety of recreational amenities, including parklets, playgrounds, open grass fields, gardens, and plazas. This type of open space is available on publicly accessible land for all residents and visitors. Existing examples include Green Skate Park, Fellowship Park, and Veterans Memorial Park.

All new development in the Midtown planning area is required to contribute an in-lieu fee equivalent toward the City's public open space requirement. The in-lieu fee payments will be collected by the City with the goal of applying those funds toward the creation of open space and recreation

amenities in the same general area where the fees were generated. Park fees and the creation and improvement of traditional park space is in addition to reconfiguration of public right-of-way into new Parklets. In many circumstances new development will be subject to both separate fee and/or improvement requirements.

#### 3.6.2 Public Right-of-Way

Midtown's rights-of-way are one of its most visible features. For many visitors and Long Beach residents and workers, the rights-of-way define the image of Midtown. The Midtown Specific Plan establishes substantial improvements for the rights-of-way so that they are more attractive, safe, and functional for all to use and see.

Open space in the public right-of-way may consist of pedestrian and bicycle space, outdoor dining, landscaping, benches, and public art. The concepts and standards in this Plan require high quality design, materials, and landscaping for the right-of-way areas. Project applicants should treat the rights-of-way as an extension of public park space.

#### 3.6.3 On-Site Open Space

On-site open space is required for residential and non-residential development projects within the Midtown Specific Plan. Projects within 500 feet of a proposed parklet may pay an in-lieu fee to waive the on-site open space requirement.

Requirements for development projects in Midtown are provided in Table 3-7. Up to 50 percent of required residential open space may be provided as common open space, subject to Site Plan Review Committee discretion on the quality and amenities provided in the common open space. Private residential open space may include balconies, patios, private roof decks and similar.

A property owner may provide on-site open space (common or unit-based) within their development as a desirable property amenity and a way to distinguish their project. However, the provision of such open space shall not offset or satisfy any portion of the public park space or ROW improvement requirements. Required build-to lines and street setback areas cannot be used to satisfy required open space areas.

#### TABLE 3-7 ON-SITE OPEN SPACE REQUIREMENTS

Use	On-Site Open Space Requirement	Minimum Dimensions
Residential	50 sq ft per unit	5 ft
Non-residential	10% of the project area	10 ft

#### Notes:



A green roof at Park Landing in Buena Park, California, provides on-site open space for building residents.



oto Credit: Green Fitness Studio, NYC

A rooftop can also provide a space for active recreation.

<sup>1.</sup> Mixed-use projects are subject to the requirements of this table in an additive manner, residential and non-residential requirements apply to the proportionate area of each use within the project.

<sup>2.</sup> All requirements apply to on-site open space attached to a unit or building.





Filoto Credit. RoadsideArchitecture.com

Packard Motors Building at 205 East Anaheim Street is a designated historic landmark and could be a candidate for an adaptive reuse project.

#### 3.6.4 Green and Active Roofs

Green roofs, also known as eco-roofs, are encouraged in the Midtown Specific Plan area. These roofing solutions can create additional on-site open space, reduce stormwater runoff, lower energy consumption, and provide for a visually interesting roofscape. Green roofs can support community gardens, small gathering spaces for barbecues, and areas for play. Rooftops also provide an opportunity to offer on-site amenities such as fitness equipment, a small running track, and even a pool or basketball court. With temperate weather in Long Beach, these types of amenities could be enjoyed by building occupants year round.

#### 3.7 ADAPTIVE REUSE

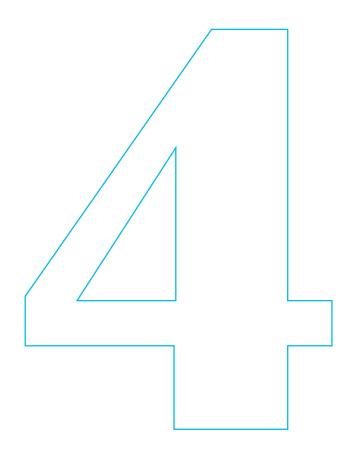
Adaptive reuse refers to a construction or remodeling project that reconfigures a site to accommodate a new use or a purpose other than for what it was originally designed. The City seeks to encourage adaptive reuse to allow for the conversion of existing structures into new land uses that maintain or enhance the character of the community and further extend the life of a building or space.

Examples include the conversion of an old office building into residential lofts, or the conversion of a historic home for office or retail space. The Midtown area contains some buildings, including the Packard Motors Building, that may be a candidate for adaptive reuse. Buildings of potential historical significance were studied in the EIR for this Specific Plan, see Chapter 7 Administration and Implementation, Section 7.3.2 Cultural Resources for information regarding development or redevelopment of these buildings, which includes adaptive reuse.

The City actively identifies structures that exhibit a special architectural and historical value as historic landmarks. The City Council designates historic landmarks, districts, places, and objects by ordinance. However, a building does not need to be a designated landmark to comply with the City's Adaptive Reuse Incentive Program.

Property owners and developers are encouraged to seek creative solutions when proposing new projects in Midtown. Adaptive reuse projects should maintain or enhance the character of the community and further extend the life of a building or space.

The City's Adaptive Reuse Program and Ordinance streamline the planning process, provide a framework for sustainable development and allow greater flexibility to better serve the needs of the changing community. The City offers preliminary consultations to facilitate adaptive reuse projects and applicants should also consult the City's alternative building standards which includes components from the Long Beach Municipal Code, the California Building Standards Code, and the State's Historic Building Code.



# MOBILITY & STREETSCAPE

MIDTOWN SPECIFIC PLAN



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#### 4.0 Mobility and Streetscape

The mobility and streetscape plan for Midtown is guided by the City's General Plan Mobility Element. Creating an efficient, balanced, multimodal mobility network is a priority for both plans. Although Long Beach Boulevard is already a multi-modal corridor, this Plan puts an emphasis on integrating autos, public transit, bicycles, and pedestrians into a complete street. Synchronizing traffic signals, reconfiguring streets and freeway ramps, and applying a context-sensitive approach to balance the mobility system along the boulevard are just a few of the strategies that will help to create an enjoyable area for all users of the corridor.

The City put a new focus on mobility starting with the 2013 update to the General Plan Mobility Element. The Element presents future plans for improving the way people, goods, and resources move within and across the City. New features of the Plan include improving the quality of life for residents and protecting the natural environment—for today and into the future.

One component of improving quality of life is to increase active transportation. Modes of active transportation include walking, cycling, and skating. Promoting these types of alternative transportation modes can help to alleviate roadway congestion, reduce greenhouse gas emissions, and improve air quality, while helping residents to improve their own health and wellness. The majority of bicycle and pedestrian infrastructure improvements in Midtown capitalize on active living transportation. These infrastructure upgrades are designed to change the physical environment and improve the way people interact with and move along the corridor.

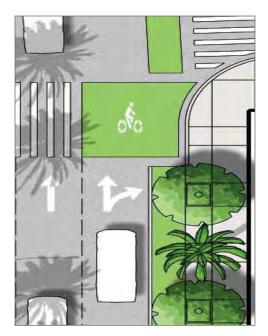
#### 4.1 COMPLETE STREETS

A complete streets roadway network provides safe and convenient access for all users—motorists, bicyclists, pedestrians, and transit riders. Complete streets are accessible to all ages and abilities. They are designed and operated to make it easier to cross the street, walk to shops, and bicycle to work. Ultimately, they improve safety for all users. The complete streets network for Midtown consists of four types of facilities—pedestrian, bicycle, vehicular, and public transit.

Each design for a complete street is unique. The updated street designs for the Midtown Specific Plan area combine the existing amenities along the corridor with new features such as additional bike lanes, wider sidewalks, landscaping buffers, and improved intersection crossings. This corridor benefits from access to the Metro Blue Line and a future connection to the Green Line. Special care has been taken to improve access to the Metro stops for multiple modes of transportation.

Mobility is the movement of goods and people through an area. For Midtown, mobility starts with feet first. The network of sidewalks, bike paths, streets, and transit lanes has been designed to make it safe for all modes of transportation. In a transit-oriented area, connections to transit nodes are particularly important.

The mobility plan in this chapter provides redesigned street sections and pedestrian and bicycle enhancements to improve multi-modal transportation for the corridor.



Bike boxes are a roadway treatment applied to improve bike safety at intersections. They give cyclists priority at an intersection by bringing awareness and visibility of bikes on the road to other users of the street.

A context-sensitive street classification system categorizes streets into a hierarchy organized by both function and community context, taking into account all road users and the character of adjacent properties and buildings.



#### 4.2 STREET CLASSIFICATIONS

Streets within the Midtown Specific Plan are divided into six classifications: Regional Corridor, Boulevard, Major Avenue, Minor Avenue, Neighborhood Connector, and Local Street. These classifications are consistent with the General Plan Mobility Element and reflect the roadway character from a context-sensitive approach. Table 4-1 provides a description of each classification, and Table 4-2 identifies the classifications for each of the major streets within the Specific Plan area. Figure 4-1 maps the street classifications in and around the Midtown Specific Plan.

TABLE 4-1 GE	ENERAL PLAN STREET CLASSIFICATIONS
Regional Corridor	Designed for intraregional and intercommunity mobility include signalized pedestrian crossings. The adjacent land uses should provide continuous mixed-use and
Boulevard	Characterized by a long-distance, medium-speed corridor that traverses an urbanized area, boulevards consist of four or fewer vehicle travel lanes, a balanced multi-modal function, landscaped medians, onstreet parking, narrower travel lanes, more intensive land use oriented to the street, and wide sidewalks. Buildings uniformly line the edges.
Major Avenue	A Coods may see to two in the limited to local newton and delivering
B.6. 0	Goods movement is typically limited to local routes and deliveries.
Minor Avenue	A between neighborhoods. Avenues serve as a primary bicycle route and may serve local transit routes as well.
Neighborhood Connector	A neighborhood connector street serves trips generated in surrounding or adjacent neighborhoods and should discourage through-trips that do not end within the neighborhood. Goods movement is restricted to local deliveries only.
Local Street	Local streets primarily provide access to individual residential parcels. The streets are generally two lanes with on-street parking, tree planting strips, and sidewalks. T on that street or on a connecting local street or to a connector.

Source: City of Long Beach General Plan Mobility Element, 2013.

TABLE 4-2 MIDTOWN STREET CLASSIFICATION				
Regional Corridor				
Boulevard	Long Beach Boulevard from 31st Street to Anaheim Avenue Willow Street			
Major Avenue	Long Beach Boulevard from Wardlow Road to 31st Street Atlantic Avenue Spring Street between Atlantic Avenue and Long Beach Boulevard			
Minor Avenue	Avenue between Spring Street and Hill Street  Avenue			
Neighborhood Connector	Hill Street			
Local Street	Neighborhood streets not noted above			

Source: City of Long Beach General Plan Mobility Element, 2013. Note: For segments of the streets within the Specific Plan boundaries.

#### 4.3 TRANSIT

Three Transit Node Districts have been created to support the existing Metro stations and foster transit-oriented development around them. The Willow, Pacific Coast Highway, and Anaheim stations all provide access to the Blue Line and serve as transit hubs for multi-modal access in Midtown. The City's General Plan Mobility Element proposes future expansion of the Metro Green Line through Willow Station.

In addition to light rail, Long Beach Transit bus routes offer another transportation option connecting Midtown to the rest of the City. Eastwest routes connect through the transit nodes at Willow Street, Pacific Coast Highway, and Anaheim Street. North—south routes run along Pacific Avenue, Long Beach Boulevard, and Atlantic Avenue. Figure 4-2 displays current transit routes and stations.

Transit improvements to the corridor include the installation of bicycle racks and lockers, helping to add options for riders to complete their "last mile" (a transit term that refers to connecting people from a transit hub to their final destination). Pedestrian and bicycle access could also be improved through implementation of plans such as the Willow Station Bike Access Transit Plan. The City could also work with Metro on other facility upgrades to visually enhance existing Blue Line stations.

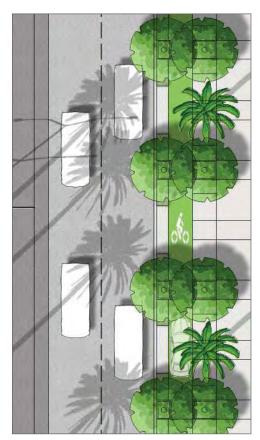
#### 4.4 BICYCLES

Bicycle improvements to Midtown will help to connect existing bicycle infrastructure throughout the City, strengthening Long Beach's commitment to being the nation's most bicycle-friendly city. Bicycles are a popular transportation mode in Midtown; however, existing bicycle access is unsafe and not clearly defined. Many bicyclists are forced to use the sidewalk, which impacts the pedestrian experience and safety. Additionally, existing palm trees offer little shade for bicyclists or pedestrians. Figure 4-3 maps existing and proposed bike facilities.

This Plan recommends inclusion of an improved Class III or IV bikeway and bike boxes along Long Beach Boulevard where and when feasible. Bicycle improvements to Long Beach Boulevard will be determined in the Bicycle Master Plan Update. As conditions change along the boulevard, new bikeways would add connectivity to other transit options, such as the Metro Blue line, and other bicycle connections in the City. Where feasible and when on-street parking is deemed unnecessary, new bike lanes could be physically separated from pedestrian and vehicular traffic. Curb extensions could also be considered to create space for the new lanes by reducing on-street parking and right turn pockets. This treatment creates safer environments for pedestrians and bicyclists while encouraging healthy alternative transportation options for people living and working in the area. The streetscape layouts in Section 4.6 illustrate the proposed bicycle enhancements for each street type in the corridor.



The Blue Line is a major transit connection between Midtown and Downtown Long Beach



A class IV bike lane, also known as a cycletrack (protected bike lane), could be considered for Long Beach Boulevard if onstreet parking is no longer needed.



Other streetscape improvements include the addition of canopy trees to provide shade throughout Midtown. Canopy trees will be added to the street between the existing palm trees in an additional buffer zone along designated sections of the bike lane and in bulb-outs. Guidelines for landscaping are discussed in Chapter 5, Design Guidelines.

Bike facilities will also be improved along the corridor. Bike-sharing programs are encouraged. The City is rolling out a bike share program that will conveniently rent bikes at on-street stations and allow them to be returned to another destination in Long Beach. Midtown is a candidate for possible expansion of this program.

Improvements to areas around transit stations have already been proposed in the Metro Blue Line Bicycle and Pedestrian Access Improvement Plan. The Blue Line Bicycle and Pedestrian Access Plan assesses and recommends physical infrastructure and safety improvements to increase bicycling and walking. The improvement plan includes new crosswalks and countdown signals, a wayfinding plan, resurfacing of designated bikeways, improved lighting, and more bike parking.

The Willow, Pacific Coast Highway (PCH), and Anaheim stations along the corridor are included in this improvement plan.

Recommended improvements for the Anaheim and PCH stations include:

- Enhanced access at the southern end of the station.
- Widening sidewalks and installing buffers, such as bike lanes and landscaping, to protect pedestrians.
- Intersection improvements, including high-visibility crosswalks and bicycle loop detectors.
- Development of bicycle boulevards along 12th Street, 15th Street, and 20th Street.

Recommendations for the Willow Station include:

- Adding trees, street furniture, and increased lighting to create a buffer zone between pedestrians and street traffic.
- Repaving sidewalks and installing curb ramps with truncated domes at all intersections.
- Installing high-visibility crosswalks and increasing pedestrian crossing time.
- Increasing the link between the station and Veteran's Park by installing wayfinding signs and converting the existing sidewalk into a Class I shared use path.

- Development of a bicycle boulevard along Pasadena Avenue.
- Installation of bike parking in the plaza adjacent to the station.

Additionally, this Specific Plan proposes installing new bike lockers and racks throughout Midtown, with the largest concentration in Transit Node Districts and at Metro stations.

#### **PEDESTRIANS** 4.5

Despite poor pedestrian conditions, walking is popular in Midtown. The existing pedestrian environment is uninviting, with predominantly narrow concrete sidewalks, limited landscaping, and a lack of art and color. Without safe bicycle systems, bicyclists use the sidewalks, making them less safe for pedestrians. Limited crossings along Long Beach Boulevard make it hard to navigate the corridor by foot.

Pedestrians will benefit from many of the bicycle improvements with some additional feet-friendly options. The creation of separated bike lanes will improve safety, and widening the sidewalk will increase usability. Pedestrian scale lighting will also improve safety and activate night-time use of restaurants offering outdoor dining and sidewalk cafes. The addition of canopy trees will provide much-needed shade and add color to the public realm.

Other enhancements include parklets that will serve as oases amid the corridor and a pedestrian bridge linking the Medical Center, Veterans Park, and Willow Transit Station. Implementation for many of these enhancements are proposed partnerships between the City, Memorial Medical Center, and/or Metro. Figure 4-3 maps existing and proposed pedestrian pathways. Section 4.7 provides detailed street sections, including the pedestrian enhancements described above, for the roadways in Midtown. Implementation and financing mechanisms are discussed in Chapter 7, Administration and Implementation.

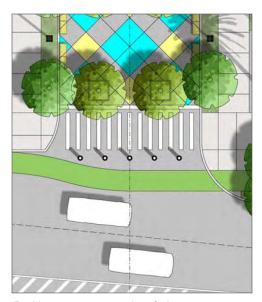
#### 4.6 VEHICULAR STREET CLOSURES FOR PARKLETS

The Environmental Impact Report for the Midtown Specific Plan included a transportation impact analysis, also referred to as a traffic study. The purpose of the traffic study was to evaluate the potential transportation and traffic impacts implementation of the Midtown Specific Plan would have in the City of Long Beach. Additionally, the analysis evaluated the potential impacts of closing a portion of 11 streets to vehicular traffic to create parklets along Long Beach Boulevard.

The study assumed that vehicular traffic volumes from roadways proposed to be converted to parklets were redistributed to nearby intersections since motorists will need to find a new route to access each closed location. The redistributed trips associated with the parklets generally did not affect the



Wide sidewalks and well lit pathways provide safe and comfortable spaces for pedestrians.



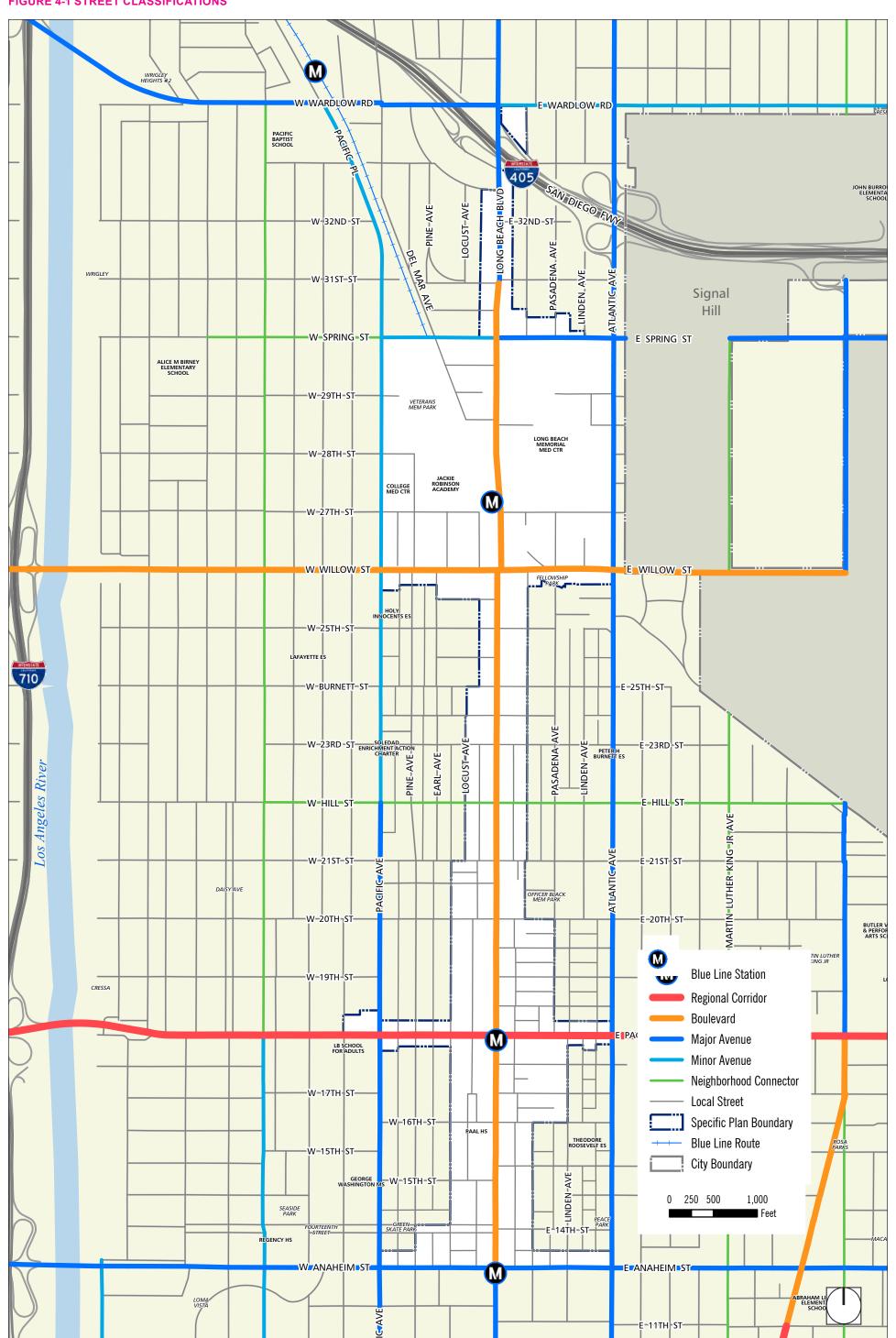
Parklets are street parks of about a quarter acre. The Specific Plan proposes the addition of 11 parklets to Midtown by closing through traffic on low volume streets that intersect Long Beach Boulevard.

The illustrative above is shown for conceptual purposes only.



operations of the study intersections given the relatively low contribution of traffic associated with those roadway closures.

Figure 4-3, Pedestrian Paths and Bike Facilities shows the locations of the proposed parklets in relation to other pedestrian and bike facilities in Midtown. See Chapter 3, Section 3.3.2, Proposed Open Space for additional information on parklets.





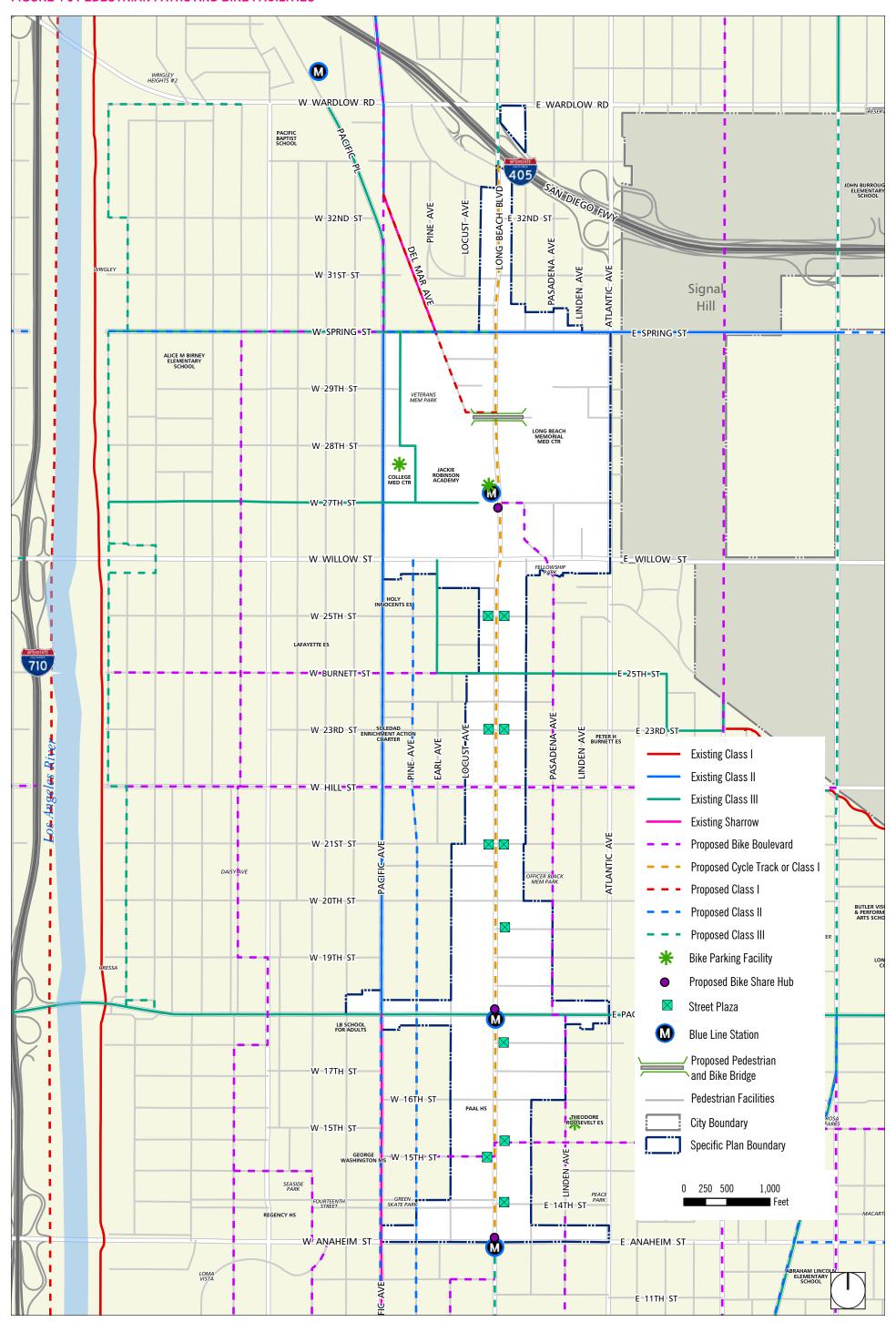
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#### FIGURE 4-3 PEDESTRIAN PATHS AND BIKE FACILITIES





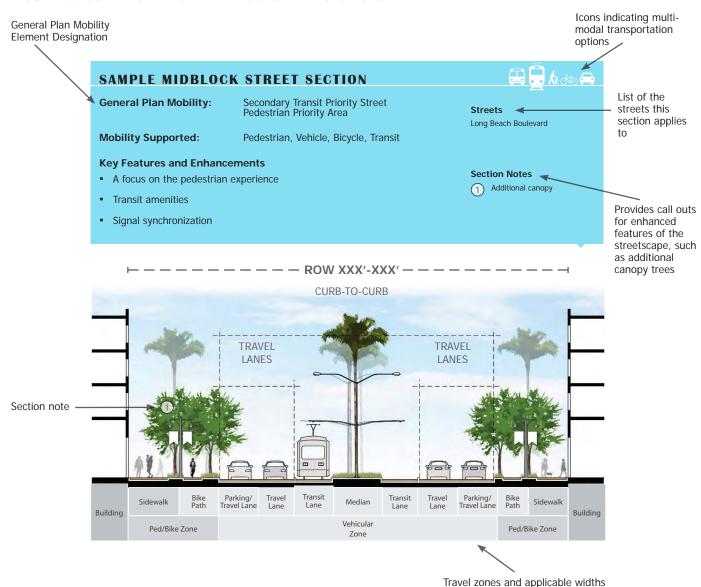
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#### 4.7 STREET SECTIONS

The streetscape layout is one of the most important aspects of this Plan. To improve connectivity and safety for multiple modes of transportation, modifying existing streets may involve expanding one part of the roadway and reducing another. For example, adding a bicycle lane will require additional street right-of-way. This additional space may be acquired by eliminating street parking or narrowing the travel lanes.

The street sections in this document are illustrations depicting typical conditions for the streets shown. Right-of-way may vary along the street. The following pages provide typical midblock sections for the street designations in the planning area (see Table 4-2). Each street section is provided on a single cutsheet. This page is a guide to street sections that follow.

#### FIGURE 4-4 GUIDE TO TYPICAL MIDBLOCK STREET SECTIONS





#### FIGURE 4-5 BOULEVARD (WITH SEPARATED BIKE PATHS)

# BOULEVARD TYPICAL MIDBLOCK STREET SECTION (MULTI-MODAL WITH SEPARATED BIKE LANE OR PARKING)



General Plan Mobility: Primary Transit & Pedestrian Priority Street

Mobility Supported: Bus and Rail Transit, Pedestrian, Bike, Vehicle

#### **Key Features and Enhancements**

- A focus on the pedestrian experience
- Transit amenities
- Transit only and shared transit lanes
- New bicycles lanes
- Signal synchronization

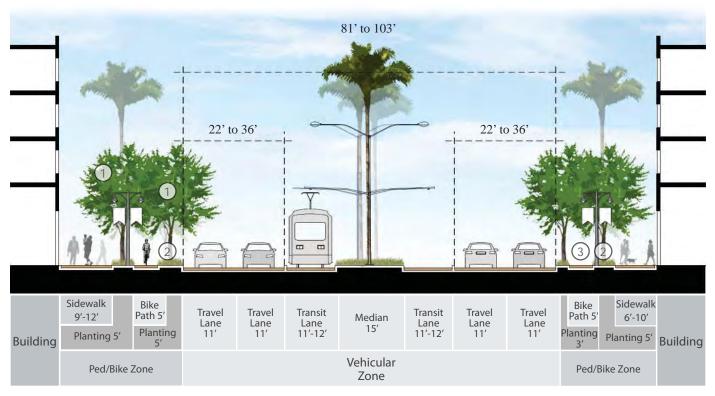
#### **Streets**

Long Beach Boulevard between Willow Street & Anaheim Street

#### **Section Notes**

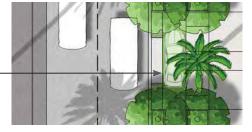
- 1 Additional canopy trees
- 2 Landscaping buffer zone
- 3 Enhanced separated bike lane at curb level (if onstreet parking is no longer needed)

F - - - - - - - - - ROW 111'-130' - - - - - - - - - - - - - -



Note: Typical conditions for the streets shown; right-of-way may vary along the street. The portions of the public ROW that fall outside the Plan boundary

A class IV bike lane, also known as a cycletrack (protected bike lane), could be considered for Long Beach Boulevard if on-street parking is no longer needed.



#### FIGURE 4-6 BOULEVARD (WITHOUT SEPARATED BIKE PATHS)

# **BOULEVARD TYPICAL MIDBLOCK STREET SECTION** (WITH OR WITHOUT BIKE PATHS)



**General Plan Mobility:** Secondary Transit Priority Street

Pedestrian Priority Area

**Mobility Supported:** Pedestrian, Vehicle

#### **Key Features and Enhancements**

- A focus on the pedestrian experience
- Transit amenities
- Signal synchronization

#### **Streets**

Willow Street

Long Beach Boulevard between Wardlow Road & Willow Street

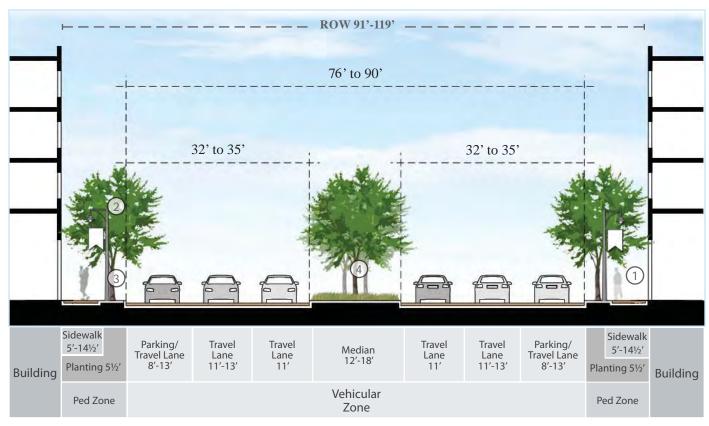
#### **Section Notes**

Wider sidewalks

Additional canopy trees

Landscaping buffer zone

Planted center median



Notes: Typical conditions for the streets shown; right-of-way may vary along the street. The portions of the public ROW that fall outside the

Consistent with the City's General Plan and/or Bicycle Master Plan an on-street bike path may be designated on LBBM north of Willow Street.



#### FIGURE 4-7 REGIONAL CORRIDOR

# REGIONAL CORRIDOR TYPICAL MIDBLOCK STREET SECTION



General Plan Mobility: Transit & Pedestrian Priority Street

**Mobility Supported:** Bus and Rail Transit, Pedestrian, Bike, Vehicle

#### **Key Features and Enhancements**

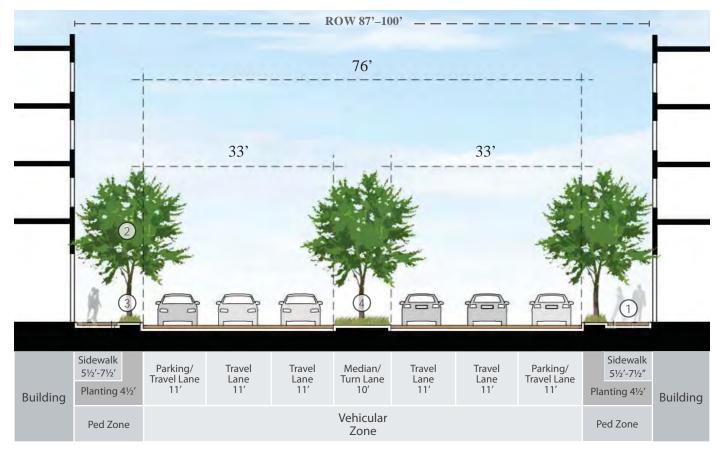
- A focus on the pedestrian experience
- Transit amenities
- Transit only and shared transit lanes
- Signal synchronization

**Streets** 

Pacific Coast Highway

#### **Section Notes**

- Wider sidewalks
- 2 Additional canopy trees
- 3 Landscaping buffer zone
- A Planted center median



Note: Typical conditions for the streets shown; right-of-way may vary along the street. The portions of the public ROW that fall outside the

#### FIGURE 4-8 MAJOR AVENUE (WITH BIKE LANE)

# MAJOR AVENUE TYPICAL MIDBLOCK **STREET SECTION (WITH BIKE LANES)**



General Plan Mobility: Varies

**Mobility Supported:** Bus, Pedestrian, Bike, Vehicle

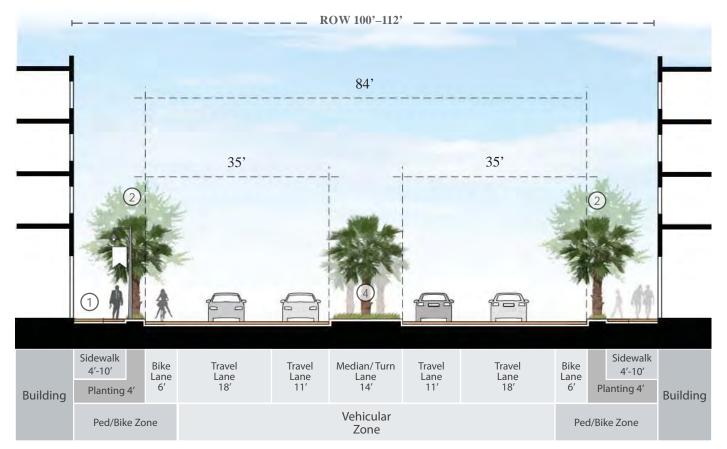
#### **Section Notes Streets**

- Wider sidewalks
- Additional canopy trees
- 3 Landscaping buffer zone
- Planted center median

Spring Street between Long Beach Boulevard & Atlantic Avenue

### **Key Features and Enhancements**

- A focus on the pedestrian experience
- Shade for sidewalks & bicycle lanes
- Incorporation of planting areas along curb



Note: Typical conditions for the streets shown; right-of-way may vary along the street. The portions of the public ROW that fall outside the



#### FIGURE 4-9 MAJOR AVENUE (WITHOUT BIKE LANE)

#### MAJOR AVENUE TYPICAL MIDBLOCK STREET SECTION (WITHOUT BIKE LANE)



General Plan Mobility: Varies

Mobility Supported: Bus, Pedestrian, Vehicle

Section Notes Streets

1) Wider sidewalks Atlantic Avenue

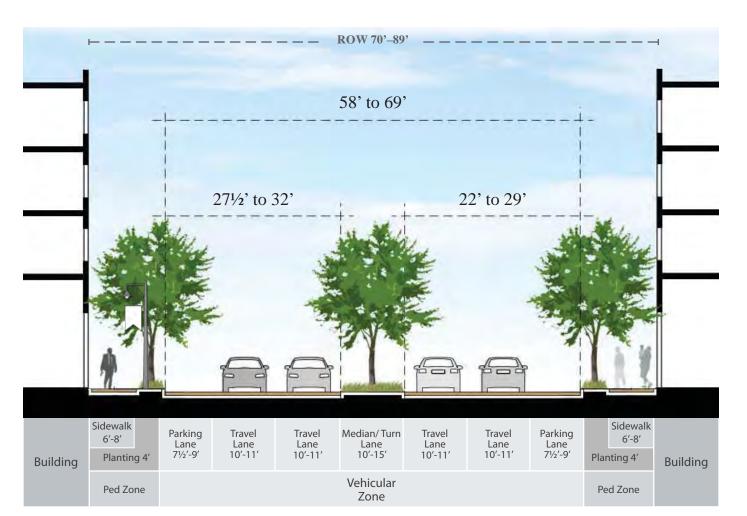
Additional canopy trees Anaheim Street

3 Landscaping buffer zone

4) Planted center median

#### **Key Features and Enhancements**

- A focus on the pedestrian experience
- Bicycle Lanes
- Signal synchronization



Note: Typical conditions for the streets shown; right-of-way may vary along the street. The portions of the public ROW that fall outside the

#### **FIGURE 4-10 MINOR AVENUE**

#### MINOR AVENUE TYPICAL MIDBLOCK STREET SECTION

General Plan Mobility: Not a Priority Street

**Mobility Supported:** Bus, Pedestrian, Vehicle

**Section Notes** 

(1) Additional canopy trees

Pacific Avenue

**Streets** 

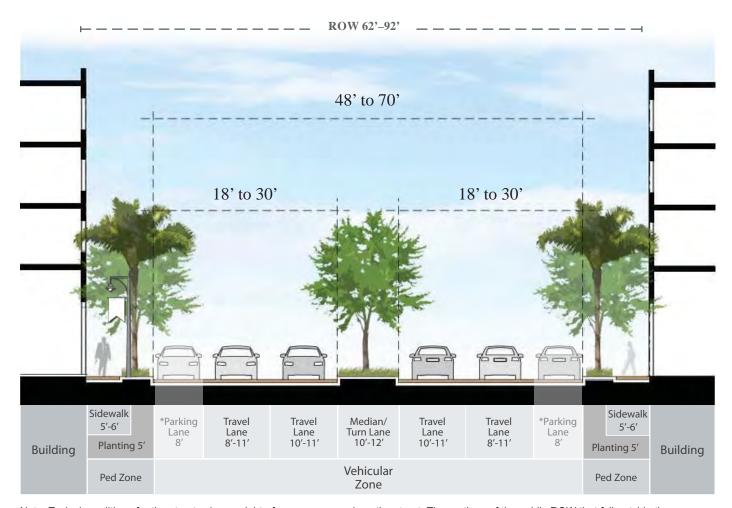
**Key Features and Enhancements** 

A focus on the pedestrian experience

Signal synchronization

(2) Landscaping buffer zone Planted center median

Spring Street between Pacific Avenue & Long Beach Boulevard



Note: Typical conditions for the streets shown; right-of-way may vary along the street. The portions of the public ROW that fall outside the

Avenue.



#### FIGURE 4-11 NEIGHBORHOOD CONNECTOR AND LOCAL STREET

## NEIGHBORHOOD CONNECTOR AND LOCAL STREET TYPICAL MIDBLOCK STREET SECTION



General Plan Mobility: Not a Priority Street

Mobility Supported: Pedestrian, Bike, Vehicle

#### **Key Features and Enhancements**

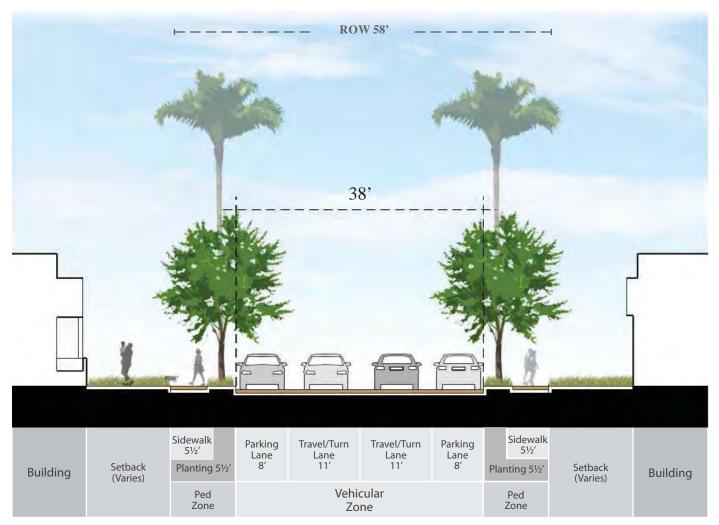
A focus on the pedestrian experience

#### **Section Notes**

- 1 Wider sidewalks
- Additional canopy trees
- 3 Landscaping buffer zone
- 4 Enhanced separated bike lane at curb level

#### Streets

Streets not otherwise noted



Note: Typical conditions for the streets shown; right-of-way may vary along the street. The portions of the public ROW that fall outside the



MIDTOWN SPECIFIC PLAN



#### 5.0 Design Guidelines

#### 5.0.1 Purpose

The design guidelines are intended to promote quality design, consistent with overall vision, while providing a level of flexibility to encourage creative design. The guidelines direct the physical design of building sites, architecture, and landscape elements within the Specific Plan boundary. This comprehensive approach represents a more understandable and predictable role in shaping the physical future by emphasizing building form and landscape design that reinforce urban and transit-oriented development patterns.

These design guidelines are established to create a distinct character for Long Beach Boulevard and to ensure that new development is designed with a pedestrian emphasis that will cultivate a vital and active street life while creating an overall positive architectural aesthetic.

#### 5.0.2 Applicability

The provisions of this chapter shall apply to all development within the Specific Plan boundary. Any addition, remodeling, relocation, or construction requiring a building permit that is subject to review by the Site Plan Review Committee shall adhere to these standards and guidelines where applicable.

#### 5.0.3 Interpretation

Compliance with a design guideline written as a "shall" or "must" is required. A design guideline written as a "should" requires compliance unless a legitimate reason or acceptable design substitute is deemed acceptable through the design review process. A design guideline written with an action verb (e.g., provide, use, locate, create, establish, employ) is highly recommended.

A design guideline written as a "may" is permitted, but requires explanation of its necessity that is deemed acceptable through the design review process. Finally, a design guidelines written as "prohibited" or "not allowed" identifies an action or design that is not permitted.

#### 5.1 **BUILDING DESIGN**

#### 5.1.1 Massing and Scale

- 1. Quarter-block, half-block, and full-block development projects should all adhere to the character and objectives of the guidelines. Large and scaleless building masses should be avoided.
- 2. Substantial projects should be designed as a collection of suitably scaled buildings instead of a singular mass.

#### **Design Context**

Building design should be compatible with or sensitive to structures within the block, especially when existing buildings are historically significant. Compatibility and or sensitivity can be expressed by architectural style, materials, floor heights, window placement, etc.

#### **Cultural Resources & Adaptive Reuse**

Buildings approaching 50 years of age could be considered cultural resources. These and other buildings may also be suitable candidates for adaptive reuse repurposing a building to accommodate a new use. For additional information on adaptive reuse see Chapter 3, Section 3.7 Adaptive Reuse. To verify if a property is of potential historical significance see Chapter 7, Section 7.3.2 Cultural Resources.



Massing defines the scale and overall theme of a building.



A large, mixed-use project should be designed as a collection of buildings.



Architectural detailing should be used to create shadows and façade relief.



Special attention should be paid to corner features of buildings at prominent intersections.



The roof should enhance the style of the building and be in harmony with the building's architecture.

- 3. Buildings greater than three stories should provide variation by using balconies, fenestration, and sunshades to create an interesting pattern of projections and recesses, light, and shadow.
- 4. Building mass should be articulated to reflect a human scale, both horizontally and vertically. Examples of such building elements include articulated façades, corner elements, inset windows, highlighted entry features, and prominent cornices and rooflines.
- 5. Building mass should be placed towards the public realm, forming a distinctive street wall that outlines and characterizes the corridor.
- When adjacent to existing single-family homes, buildings over four stories should be made less imposing by stepping back from the street level on elevations above the fourth floor.
- 7. Courtyards and atriums should be used to bring light and air into interior spaces, where appropriate.

#### 5.1.2 Corner Treatment

- Buildings with special architectural elements (examples listed below) should be positioned on corners of significant intersections, entries, or near the center of grouped buildings.
  - a. Clock towers
  - b. Diagonal walls at the corner
  - c. A substantial art form or fountain
  - d. A taller, prominent rooftop element
  - e. Significant stepbacks on upper floors
- 2. Renovations to existing corner buildings with blank walls should include additional articulation and detail, display windows, and extended facade material, colors, and treatments.
- Vertical focal elements, such as towers, spires, and domes become landmarks and serve as orientation points for the community. Vertical focal elements are encouraged, especially for buildings adjacent to intersections and transit nodes.

#### 5.1.3 Roof Treatment

- 1. The style of the roof should be in accordance with the building's architectural character to enhance the value of the building design.
- 2. A variety of roof planes and ridge heights may be used.
- 3. Rooftop and other building mechanical equipment should be screened from public view and comply with the following:

- a. The building mechanical equipment should be housed within the building or enclosed in a penthouse structure that is incorporated with the design of the building.
- b. When mechanical equipment is placed on a rooftop, it should be located below the highest vertical element of the building wherever possible to avoid the use of penthouse structures or other special screening devices.
- c. When mechanical equipment is added to an existing building, it should be screened in such a way as to match the architectural style and materials of the existing building without giving the appearance of being added on.
- 4. Roof drains should be designed as an integral part of the structure.
- 5. Roof access should be provided from the interior of the building. Exterior roof access ladders are not appropriate.

#### 5.1.4 Building Colors and Materials

- 1. Buildings shall use durable, high quality materials to develop longlasting buildings that can be adaptively reused over time.
  - a. Brick, natural stone, precast concrete, and factory-finished metal panels (heavy gauge only, in corrugated or flat sections) are preferred.
  - b. Alternatives to stucco are preferred. When stucco is used it should be applied with a smooth finish. Stucco seams should be used to create visual interest for the building's façade and form.
  - c. The finish, texture, and color of materials should be compatible with the overall architectural theme.
- 2. Greater attention to detail and quality should be used at the lower levels of a building to contribute to an enhanced streetscape.
- 3. Encourage buildings to express a variety of architectural styles, but with full awareness of, and respect for, the height, mass, articulation, and materials of the high quality (desirable) older buildings that surround them.
- 4. Architectural style and use of quality materials shall be consistent throughout an entire mixed-use project; however, variations in materials and details may be used to differentiate between the residential and commercial portions of the project.
- 5. Construction details should be authentic and applied with consistency. Faux architecture that mimics a past era is strongly discouraged.



High quality materials should be used and emphasis placed at the pedestrian level.



Variation in materials and color should be used to express form changes.



Stone, granite, precast concrete, and other high quality materials are encouraged.



The design and rhythm of windows is an important architectural element that should be used to enhance the building's visual appearance and should provide pedestrian interest.



Balconies may enhance a building's aesthetic by adding to the variety of building face articulation.



High quality materials are encouraged for residential buildings. Windows should allow for a shadow line and depth.

- 6. Materials and colors should be used to imply form changes, particularly for entrance lobbies, massing changes, and different uses or tenants.
- 7. Bright color palettes should be tested on-site to verify appropriateness for the site and block.
- 8. Garage openings, entrance canopies, scuppers, downspouts, and metal railings should follow the aesthetic of the building theme.
- The use of concrete is allowed as long as it is part of an overall architectural composition and should have a finished architectural expression.
- 10. Façade elements constructed of foam or foam molding are prohibited on the ground floor of buildings and should be avoided overall. If used, they should be well proportioned and constructed to avoid appearing glued to the building.
- Concrete masonry units should only be used if they are fundamental to the building design and have a suitable appearance at the ground floor.
- 5.1.5 Windows, Doors, Balconies, and Walls
- 1. The rhythm of windows and entrances should provide interest and engage pedestrians.
- 2. Clear glass should be used on the ground floor of façades with marginal obstruction from window signs, permanent shades, or interior displays.
- 3. Balconies and bay windows in upper stories are encouraged to enhance activity and provide "eyes on the street."
- 4. The design, size, type, and location of windows should enhance interior daylight and potentially decrease the size/type of required heating/cooling systems.
- 5. For nonresidential storefronts, curtain wall, metal panel, frameless glass porch wall systems, and high quality glass storefront wall systems should be used.
  - a. Installation using a vertical cavity system and reinforced fiber cement panels is acceptable.
  - b. Windows and glass curtain wall systems should be transparent. Highly reflective or very dark glass is not allowed.
- For residential buildings, windows should be of high quality and afford a shadow line and depth. This may be achieved through inset windows with an integral frame or insetting the window into the exterior wall.

- 7. Walls should have breaks, recesses, and offsets, especially at entries and important intersections. Long walls shall be made more attractive and visually interesting through the incorporation of surface articulation, pilasters, and view fencing, where appropriate.
- 8. Murals, trellises, or vines and espaliers should be placed on large expanses of walls at the rear or sides of buildings to soften the wall and create interest.

#### 5.1.6 Architectural Lighting

- 1. Lighting should enhance the building's architecture and augment the street and sidewalk experience at night.
- 2. Direct lamp glare from unshielded floodlights is not permitted.
- 3. Lighting that aims light directly into the night sky is prohibited.
- 4. Internal and external storefront lighting should be designed for ground floor retail and restaurant spaces to augment the pedestrian space and encourage window shopping even when stores are closed.
- 5. Special illumination should be used to highlight main building entrances and add interest to the building façade. Subtle lighting to accent the architecture and special architectural elements (such as distinctive building rooftops) is encouraged.
- 6. Secondary building entrances and parking/loading/service access points should have lighting compatible with the project's lighting to maintain a safe environment around the entire project, especially where pedestrians and other building tenants circulate.
- 7. Warm white light is encouraged. Blinking, flashing, and oscillating lights are prohibited. Colored lights are not encouraged unless they contribute to the theming of commercial areas or establishments. Overly bright or glaring lights should be avoided.
- 8. Automatic timers should be programmed to maximize personal safety at night while conserving energy. They should be reset seasonally to match the flux of dusk/dawn.
- Exterior lighting should be designed and located to not project offsite or onto adjacent uses. This is especially critical with neighboring residential uses.

#### 5.2 FAÇADES AND STREETWALLS

#### 5.2.1 Articulation and Details

1. Streetwalls should be consistent along Long Beach Boulevard, with articulation used primarily for entrances and outdoor dining areas.



Illumination should augment the architecture of the building and add to the pedestrian experience.



Lighting should be used to highlight architectural features of a building.



Individual buildings along the street wall should be defined by providing differences in materials, colors, and embellishments.





Variety in fenestration, materials, texture, and color should be used to avoid a monolithic street face.



Entrances to storefronts should stand out from the store façade.



Storefront signage should be minimized so as not to obscure the transparency of the windows which adds to the liveliness of the streetscape.



Awnings are encouraged, as they augment the pedestrian experience.

- Individual buildings along the streetwall should be delineated. Provide slight differences in materials, coloration, and embellishment while keeping consistent floor heights, structural bay patterns, and upperstory window placements.
- The highest level of details should occur on the ground floor's front façade and façades visible from public streets. However, similar and complementary massing, materials, and details should be incorporated into side and rear façades.
- Building façades should be articulated with a building base, body, and roof or parapet edge. This creates a shared point of reference that allows different buildings to relate to each other, regardless of individual architectural styles or approaches.
- Monolithic building wall façades should be broken by horizontal and vertical articulation, including variation in the wall plane (projecting and recessing elements), variation in wall height, and roofs containing different forms and located at different levels.
- 6. Openings in the streetwall should be restricted to those needed to provide for pedestrian paseos, public plazas, entry forecourts, and permitted vehicular access driveways.
- 7. Building façades should include three-dimensional detailing such as cornices, belt courses, window moldings, bay windows, and reveals to create shadows and facade relief. Ample, articulated doors and windows create visual interest and allow one to see inside.
- 8. Materials, texture, patterns, colors, and details on building façades should vary to diminish the perceived mass of large buildings and to create the impression of smaller-scale buildings.

#### 5.2.2 Entrances and Storefronts

- 1. Active uses along the streetwall should be focused at the sidewalk level with the greatest concentration at the intersection of two streets.
- 2. Entries to stores and ground-floor commercial uses should be visually distinct from the rest of the store façade, with inventive use of scale, materials, glazing, projecting or recessed forms, architectural details, color, and/or awnings. These entries should have direct at-grade access from the sidewalk.
- 3. Individual storefronts should be clearly defined by architectural elements, such as piers or changes in plane and/or materials.
- 4. Live-work or shopkeeper units should be designed to appear like a commercial storefront, gallery, or urban light industrial, compatible to the area it is most affiliated with in character.

- 5. Between 3 and 12 feet above the sidewalk, a minimum of 60 percent of the façade should contain windows of clear or lightly tinted vision glass that allows views of indoor space. Heavier tinted or mirrored glass should not be permitted.
- 6. Incorporate Crime Prevention Through Environmental Design (CPTED) design measures to design safer environments in all new development. Physically intimidating security measures such as window grills or spiked gates should be avoided; security concerns should be addressed by creating well-lit, well-used streets and active residential frontages.
- 7. The residential units must be designed to ensure the security of residents through the provision of secured entrances and exits that are separate from the non-residential uses and are directly accessible to resident parking areas.

#### 5.2.3 Awnings, Canopies, and Marquees

- 1. Awnings, canopies, and marguees enhance the pedestrian environment by providing visual interest and a human scale. Their use is encouraged, but care must be taken so they do not negatively impact the pedestrian zone.
- 2. Ground supports for encroachments are prohibited.
- 3. A continuous series of awnings, canopies, or other coverings is encouraged along all retail street frontages. Awnings and canopies should be designed to correspond to individual storefront structural bays and should convey the outline and proportion of storefront window openings.

#### **OPEN SPACE** 5.3

#### 5.3.1 Public Space

- 1. Public open spaces, such as plazas, arcades, and paseos, should be incorporated into the public right-of-way.
- 2. Public open spaces should be surrounded by attractively designed buildings and landscape elements, as well as uses that promote pedestrian activity.
- 3. Outdoor dining areas are encouraged within plazas to encourage activation of the pedestrian realm.
- 4. Buildings, signs, landscaping, and outdoor furniture should work together to create a pleasant pedestrian environment. Trees that provide shade are especially important and should be incorporated within public outdoor spaces.



Open space with pedestrian amenities such as seating, shade, landscaping, and water features are ideally located at intersections.





Outdoor dining areas are encouraged along pedestrian pathways and within plazas.



Pedestrian paseos should be constructed when blocks are greater than 400 feet.



Intersections and vehicle access should be designed to be attractive and efficient, but also safe for pedestrians and bicyclists.

- Site amenities, such as seating areas, drinking fountains, provisions for bicyclists, water features, and public art should be incorporated into the public right-of-way and should complement its architectural character.
- A perimeter feature such as a low hedge or seat wall may be included along the edge of a park or plaza, but fencing is prohibited unless hours are restricted.
- 7. String lights (non-blinking), can be used to accent trees or trellises within public spaces to create a festive atmosphere at night.

#### 5.3.2 Pedestrian Pathways

- Safe and convenient pedestrian connections should be provided between buildings, public open spaces, and parking areas. These areas should be visually emphasized through the use of landscaping, lighting, and/or distinctive paving.
- Public paseos should be made available where blocks are greater than 400 feet in length or where a destination, view, or pedestrian path warrants a midblock pedestrian link.
- 3. The on-site pedestrian circulation system should be directly connected to off-site public sidewalks.
- 4. Pedestrian connectivity should be preserved and emphasized when transitioning between neighborhoods and differing land uses.
- 5. Walkways and paseos should be lit to ensure safe nighttime conditions.
- 6. Lighting should be scaled for pedestrians and of a style consistent with the surrounding architectural theme.
- 7. Where appropriate, pocket lighting may be incorporated into walls, stairs, or bollards.

#### 5.4 CIRCULATION AND PARKING

#### 5.4.1 Access

- Vehicular access to each site must be designed to minimize conflicts between pedestrians, autos, and service vehicles. Sight lines, pedestrian walkways, and lighting are factors to consider in final site designs. Entrance and exit points should be well marked with streetscape and landscape features.
- 2. The number of site access points should be minimized. Curb cuts should be located on minor secondary streets, which assists in eliminating pedestrian and vehicular conflicts.
- 3. Parking lot access points should be located as far as possible from street intersections to allow adequate stacking room.

- 4. Dead end drive aisles should be avoided.
- 5. Colored, textured, and/or permeable paving treatments at entry drives are encouraged.
- 6. The main vehicular access into a multi-family development should be through an entry drive rather than a parking drive.

#### 5.4.2 Service and Loading Areas

- 1. Service and loading access points and doors should be designed as integral components of the façade and should use materials fitting with other materials used throughout the building.
- 2. Service and loading areas should be carefully designed, located, and integrated into the site plan so they do not detract from the street scene or create a nuisance for adjacent property owners or vehicle traffic.
- 3. Service and loading areas should be behind the primary structure out of public view whenever possible. Otherwise, they shall be shielded with berms, landscaping, attractive walls, or decorative screening.
- 4. When commercial properties are adjacent to residential properties, loading and delivery facilities should be away from the residences or screened with vegetation.
- 5. The location of the service and loading areas should consider noise impacts to adjacent properties, which may necessitate enclosing the service or loading area.
- 6. Service and loading areas should be designed so that service vehicles have clear and convenient access and do not block adjacent vehicular or pedestrian circulation.

#### 5.4.3 Parking

- 1. The site area adjacent to the street should not be dominated by parking. Surface parking lots shall not front Long Beach Boulevard. Vehicular parking is encouraged to be hidden from view.
  - a. Parking should be concentrated in areas behind buildings and away from the street. Parking can be provided underground, in above-ground garages, or behind street-facing buildings in interior parking courts.
  - b. Parking lots should be screened from adjacent street views but should not be hidden from the view of passersby and police. Headlight walls used to screen parking should provide breaks to allow pedestrian circulation. The walls should be low enough for safety and security purposes.



Service areas should be located behind the building, away from public view.



Parking structures should be screened so that they enhance the pedestrian environment.



Parking should be placed behind buildings and landscaped to help reduce the heat island effect.



Garage openings should adhere to the overall aesthetic of the building's architecture.

- c. Parking structures and surface lots should be located or screened to enhance the pedestrian environment rather than detract from it and shall comply with landscaping standards in Chapter 21.42 of the Municipal Code.
- Large projects should break up parking areas into a series of smaller connected parking areas to create visual interest.
- Where parking structures are provided, shops, offices, or other commercial spaces should be incorporated on the ground level of the parking structure along street frontages to maintain a pleasant pedestrian experience.
- 4. Garages should be designed as an integral part of the architecture of the development. They should be of the same materials, color, and detail as the principal buildings of the development.
- The functional façades of parking structures should be screened using architectural solutions and/or a landscaping that is integrated and visually consistent with the existing or proposed streetscape.
- 6. Sufficient tree coverage should be provided within surface parking lots to mitigate the heat island effect and improve views from adjacent streets and buildings.
- 7. Landscape elements such as green screens or shrub massings at least five feet wide should be provided along parking lots adjacent to a street. Landscape planters should be provided adjacent to garage entries along drive aisles to help soften the built environment.
- 8. Shared access to parking courts with neighboring parcels is highly encouraged.
- 9. Short-term parking should be on-street when permitted by the street design.
- 10. Accessible, secure, and lockable bicycle parking should be provided at strategic locations throughout the development.
- 11. Parking area lighting should be designed using many small-scaled lights versus fewer, excessively tall lights.
- 12. Lighting fixtures should be a continuation of the theme of surrounding architectural styles and in keeping with the quality of surrounding buildings.

#### 5.5 LANDSCAPING

- 1. Trees should be used to create an intimate scale, enclose spaces, and frame views, but placement should respect the long-range views of surrounding neighbors.
- 2. Seasonal shading from trees and shrubs on southern and western façades should be used when developing planting schemes for courtyards and required setback areas. Deciduous trees provide solar control during summer and winter while providing fall color, seasonal flowers, and other desired effects.
- 3. Vines and potted plants should be used to provide façade texture and color, as well as to accentuate entries, plazas, and paseos.
- 4. Accent planting should be used around entries and key activity hubs.
- 5. Formal planting designs are encouraged in courtyards, plazas, and tree wells along the street frontages. Water features should be used with landscaping and natural materials in courtyards and plazas.
- 6. Vines, espaliers, and potted plants should be used to provide wall, column, and texture and color and to accentuate entryways, plazas, and paseos.
- 7. Incorporate roof gardens where possible. Soil depths, roof drainage, and waterproof membranes should be considered during the structural design of the building.
- 8. Irrigation systems should be designed to apply water slowly, allowing plants to be deep watered and reducing runoff. Low-volume irrigation drip systems should be used in all areas except turf irrigation and small ornamental planting. Each street tree should be watered by at least two deep watering bubblers separate from all other irrigation.
- 9. Landscaping directly below the eaves or at a rain gutter outlet should be sturdy and able to tolerate heavy sheet flow and periodic saturation.
- 10. Landscaping should be used to screen trash enclosures, parking areas, storage areas, loading areas, and public utilities.
- 11. The selected plant species and design and placement of landscaping should provide for natural surveillance of pedestrian areas and should avoid the creation of hiding places.
- 12. Trees and shrubs should be located and spaced to allow for mature and long-term growth of canopies and root spaces.



Trees and landscaping should be used to enhance the pedestrian environment and buffer the setback.



Potted plants may be used to provide articulation and color to entryways, paseos, and plazas.



Formal planting designs and water features are encouraged in courtyards, plazas, and entry areas.



Residential signs should be compatible with the building's architecture.



Creative signs that relate to the architecture add to a building's appeal.

#### 5.6 SIGNAGE

#### 5.6.1 Overall

- Signs should be compatible with or complementary to the building's character, including the architecture and landscape. Signs should enhance the overall theme of the site and building.
- 2. If multiple signs are on a single façade, the signs should be arranged in a hierarchical order and should be situated toward varying viewpoints.
- A shared sign program should be used if multiple tenants are displayed on a single sign. Names should be of a consistent typeface, size, and color palette.
- 4. A joint sign program should be designed for multi-building sites or buildings that are part of corporate campuses.
- 5. Mixed-use projects with ground floor commercial should adhere to the standards for nonresidential signs.

#### 5.6.2 Placement

- Signs should typically be above the ground floor storefront and just below the second floor windows, or below the building cornice of onestory buildings.
- 2. Signs should be affixed so that they relate to the building design. If new bolt holes or brackets are needed, care should be taken that installation does not damage the building.
- 3. Signage attached to storefront windows should be kept to a minimum.

#### 5.6.3 Design and Content

- 1. Signs should be cohesive with the building's architecture and landscape and express a well-defined hierarchy of information.
- 2. A sign's message should be as brief as possible.
- 3. Lettering on a sign should be legible and of an appropriate scale to be read by the intended user.
- 4. Typefaces, characters, and graphics for signage at the street level should be appropriately scaled for viewing by pedestrians.
- Letters should be spaced an appropriate distance from one another to be easily readable. Letters spaced too close together or too far apart are difficult to read.
- 6. Lettering styles should be limited to three or less on a single sign to maximize legibility.

- 7. Symbols and logos may be used in place of words and are often a more efficient and effective way to display information.
- 8. A substantial contrast between the letters or symbols and the background will improve a sign's legibility.
- 9. A sign should typically include no more than three colors to be easily legible.

#### 5.6.4 Structure and Materials

- 1. All raceway should be hidden from view. If this is not possible, then it should be finished to match the background wall.
- 2. Signage should be of a permanent type, neatly designed, wellconstructed, and properly weather-proofed, and should incorporate original designs.
- 3. Signs should be constructed of durable materials.
  - a. Metal: formed, etched, cast, and/or engraved and powder-coated or otherwise protected
  - b. Wood: carved, sandblasted, or etched and properly sealed, primed, and painted or stained
  - c. High density preformed foam or similar materials
- 4. Rectangular sign cabinets and plastic are not recommended.
- 5. Signs composed of individual letters and/or symbols are desirable. Cut-out or open three-dimensional letters are encouraged.

#### 5.6.5 Illumination

- 1. Signs should be externally illuminated by ambient lighting, lights attached to the façade, or exposed neon on the top. External illumination should use focused, low-intensity equipment.
- 2. Additional illumination should be used when street lights or display window lights do not provide adequate illumination.
- 3. Channel letters that are individually illuminated are desirable, but internally illuminated plastic cabinets are discouraged.
- 4. Signs illuminated by downward directed, wall-mounted lights with fully shielded lamps are encouraged.
- 5. Projecting light fixtures used for externally illuminating signs should not obscure the graphics of the sign.



Symbols may be used instead of words and are often more effective.





Signage should be of a permanent type, neatly designed, well-constructed, and properly weather proofed, and should incorporate original designs. Channel letters that are individually illuminated are encouraged.







Signage that is internally illuminated is easy to read at night and strengthens the identity of the individual store and overall area. External lighting sources should be focused and low intensity. Additional creative elements can be added that serve during the day and night.

Walls may be made more visually interesting by incorporating art work or other surface articulation.



Utilities should be outside of the public rightof-way and should be screened.

#### 5.6.6 Temporary Signs

- 1. A banner sign attached to a building wall should be the only type of temporary sign allowed.
- Banners should be understated and observe the design standards of all permanent signs. Banners should remain only for a time period necessary for a specified event.
- 3. Banners should comply with Section 21.44 of the Municipal Code. Banners should not be displayed in any other fashion. Balloons, flags, etc., are not permitted.

#### 5.7 PUBLIC ART

- Public art should be developed in the most accessible and visible places and considered in relation to other visual elements and cues (signage and other elements that may impede or heighten its enjoyment).
- 2. Public art should reflect Long Beach Boulevard's visual and cultural setting. New installations shall provide a contextual understanding of and be clearly related to the City's overall network of public art.
- 3. Artists should create sustainable, maintainable works of art that aspire to the highest standards of innovation and aesthetic quality.
- 4. Public art shall be integrated into the project's design at an early stage of development to ensure cohesiveness of site design, architecture, art, landscape, and public space.

#### 5.8 UTILITY, TRASH, AND RECYCLING AREAS

- All utilities, such as backflow prevention devices, groupings of meters, etc., shall be located outside the public right-of-way within a building recess, utility room, or landscaped area and be fully screened from view of the public right-of-way.
- The utility components of future commercial occupants (e.g., grease traps, exhaust chutes, air conditioning) should be thought of in advance, during the initial building design, to avoid problems when retrofitting buildings after construction.
- 3. A combination of elements should be used to screen utility, trash, and recycling areas, including solid masonry walls, berms, and landscaping.
- 4. Materials used on trash, recycling, utility, and mailbox enclosures and screens should be the same as or compatible with the primary building. Enclosures connected to or separate from buildings should have a solid, architecturally compatible roof structure.
- 5. Drainage from adjoining roof and pavement should be diverted around the trash and recycling area.

#### 5.9 RESOURCE CONSERVATION

#### 5.9.1 Energy Efficiency

- 1. Projects and buildings are encouraged to be more energy efficient than required by local and state codes.
- 2. Energy efficient building materials should be used whenever possible and appropriate.
- 3. EPA "Energy Star" labeled windows with low-e coatings are encouraged.
- 4. Energy-efficient and natural lighting should be used wherever possible. Maximize daylighting and views through window placement and design. Passive solar design can be used to reduce heating requirements by 30 percent to 50 percent, thus saving money and energy.
- 5. Materials that reduce the transfer of heat into and/or out of the building should be used. For example, the use of light-colored roofing materials to reflect heat and reduce cooling in buildings is encouraged.
- 6. South- and west-facing windows should be shaded with an overhang, deciduous trees, or awnings to reduce summer exposure.
- 7. Parking structures should integrate sustainable design features such as photovoltaic panels (especially on top parking deck), renewable materials with proven longevity, and stormwater treatment wherever possible.
- 8. Non-toxic, recycled-content materials should be used whenever

#### 5.9.2 Landscaping and Drainage

- 1. Projects are highly encouraged to use native and low-water-use plants consistent with the landscaping palettes recommended by the Long Beach Water Department.
- 2. Irrigation systems should incorporate water conserving methods and water efficient technologies such as drip emitters, evapotranspiration controllers, and moisture sensors. Explore opportunities to reuse rain water and/or gray water for irrigation.
- 3. Landscaping areas should use minimal water resources and impermeable surfaces. Drought-tolerant grasses should be used for lawn areas where possible, while lawn or turf shall be limited to areas that serve a functional purpose.
- 4. Drainage should be directed to permeable areas to minimize discharge to the storm drain system. Use pervious or open grid paving for parking areas whenever possible to reduce the negative effects of stormwater runoff and to facilitate groundwater recharge.



Solar orientation of the building, overhangs. and other devices placed on the exterior of buildings reduce direct sunlight into interiors. lowering heat gain and the amount of energy needed for cooling.



Native and drought-tolerant landscaping should be used in parkways and setbacks.

#### 5 DESIGN GUIDELINES



Active commercial uses should make up the majority of the building's ground floor, to serve residents, visitors, and transit users.

Light poles should be out of the public rightof-way and should be a similar style with the architecture of surrounding buildings.

#### 5.10 TRANSIT STATION AREAS

- Transit amenities such as bus stops, seating, bike racks, bike storage, and showers should be integrated into new projects to promote the use of alternative transportation.
- The ground floor of buildings should comprise mostly active commercial uses to enliven the pedestrian environment and provide retail experiences and services to transit users.
- 3. Enhanced pedestrian lighting should be incorporated into the design of new projects to augment the safety of the station areas.
- 4. The design of plazas, with seating and landscape elements, at the corners of buildings adjacent to transit station areas is encouraged to provide public open space for residents, visitors, and transit users.
- 5. The provision of publicly accessible restrooms as part of a new project in a transit station area is strongly encouraged.
- 6. Proposed projects within 100 feet of a Metro facility shall supply written notice to Metro upon filing of their Site Plan Review Application. Projects within 100 feet of a Metro facility shall be designed consistent with Metro policy and guidelines and shall offer the appropriate noise easement to the benefit of Metro.

#### 5.11 OUTDOOR LIGHTING

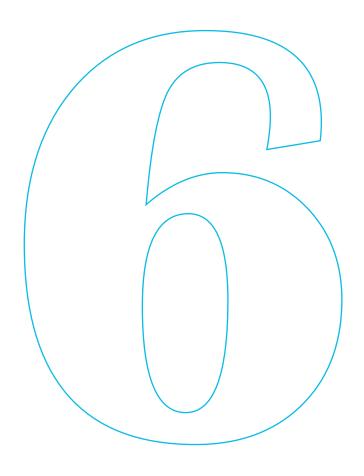
- 1. Lighting fixtures should be compatible with the architecture of surrounding buildings to maintain a consistent and cohesive theme.
- 2. Light fixtures shall be made of materials that have long life spans and are able to withstand constant use and exposure to the elements.
- 3. Pedestrian-scale lighting shall be provided at building entryways, vehicle and bicycle parking areas, seating areas, transit stops, common open space areas, and pedestrian paths. The type, style, and intensity of lighting should reflect the use and character of the area.
- 4. The height, brightness, and spacing of lighting elements should be appropriate to the scale and classification of the roadway.
- 5. Pedestrian lights shall be placed at consistent height and interval to sufficiently illuminate pedestrian path of travel.
- 6. Lighting levels shall be adequate for safety while minimizing light spillage and glare.
- 7. Light poles and freestanding fixtures shall be placed outside of pedestrian walkways.

- 8. Lighting shall not be directly aimed onto adjacent properties. Outdoor lighting adjacent to residential areas should be shielded and directed away from the surrounding residential use.
- 9. Lighting of surface parking areas and common open space areas should be aimed downward and/or shielded to minimize light pollution and preserve views of the night sky.
  - See Section 5.6.5 for guidelines pertaining to the Illumination of Signage.



Lighted bollards provide pedestrian-scale lighting by illuminating a safe path of travel.





# INFRASTRUCTURE

MIDTOWN SPECIFIC PLAN



#### 6.0 Infrastructure

#### 6.1 WATER

The City of Long Beach provides water service and distribution to all of the City's residents and businesses. The Long Beach Water District (LBWD) receives water from three main sources: imported water from Metropolitan Water District (MWD), groundwater pumped and treated from municipal wells, and recycled water. The LBWD operates the largest groundwater treatment plant in the United States and has the capability to treat up to 62.6 million gallons of water per day (MGD). MWD is the City's wholesale supplier and the primary source of imported water originates from the Colorado River and the State Water Project.

The Midtown Specific Plan area is served by a variety of lines (from 2" to 30") located in the public streets, alley ways, parks, and parking lots. Using the existing hydraulic water model LBWD did not identify any existing deficiencies or fire flow issues in or around the Specific Plan area. Additionally, no major water infrastructure improvements are planned in the area beyond the standard maintenance and replacement program currently implemented through the LBWD's Capital Improvement Program. However, new development within the Specific Plan area may require the construction of new on-site water lines. Projections using the current water model identified that an existing 8" line in Transit Node 6 may require upsizing dependent upon additional development in Corridor 3 and Transit Node 6. Additional fire flow and pressure tests are required for projects serviced by this 8" line. Figure 6-1 illustrates the water system for Midtown and location of possible future pipe upsizing.

#### 6.2 SEWER

Long Beach provides sewer/wastewater service to the area addressed by the Midtown Specific Plan. The majority of the sewer system in this area is within design capacity under both existing and potential buildout conditions. The findings of the analysis conducted for this Specific Plan are consistent with the City's 2013 Sewer Master Plan, which did not identify any deficiencies within the main sewer lines of the Specific Plan area.

While a few segments are currently flowing above the design capacity, replacement and upsizing are not immediately required and are instead identified as needing additional study. No segments are known to flow significantly above the design capacity. Transit Node Districts 5 and 6 contains lines suggested for further study (project specific flow monitoring and modeling) prior to the construction of new development projects. Figure 6-2 identifies existing lines and the areas requiring additional evaluation.



#### **6.3 STORMWATER**

The Midtown Specific Plan area is served by two primary flood control and drainage systems. The City of Long Beach operates and maintains a storm drain system of catch basins and pipes that range from 12" to 90", while the Los Angeles County Flood Control District (LACFCD) operates and maintains flood control facilities, including pipes ranging from 48" to 93". All runoff from the Specific Plan is ultimately discharged into the Los Angeles River via three separate pump stations: Cerritos, Hill Street, and Willow.

The City's 2005 Master Plan of Drainage identified four areas of deficiency in the Specific Plan area, including two City lines in the Medical District (District 4) and two LACFCD facilities within Corridor District 2. Implementing the improvements already identified in the 2005 Master Plan will adequately accommodate the potential buildout of the Specific Plan area. Figure 6-3 shows existing lines and recommended improvements.

### 6.4 RECLAIMED WATER, LOW IMPACT DEVELOPMENT, AND BEST MANAGEMENT PRACTICES

The City's 2010 Recycled Water master Plan identifies Veterans Park Community Center (within Veterans Park) and Memorial Medical Center as two large potential recycled water customers, along with about 20 other small potential recycled water customers in the Midtown Specific Plan area. There are no existing recycled water pipelines within the Specific Plan area. Since the area does not have capacity today major infrastructure projects and major private development projects may trigger the need to re-evaluate a connection to recycled water for Midtown.

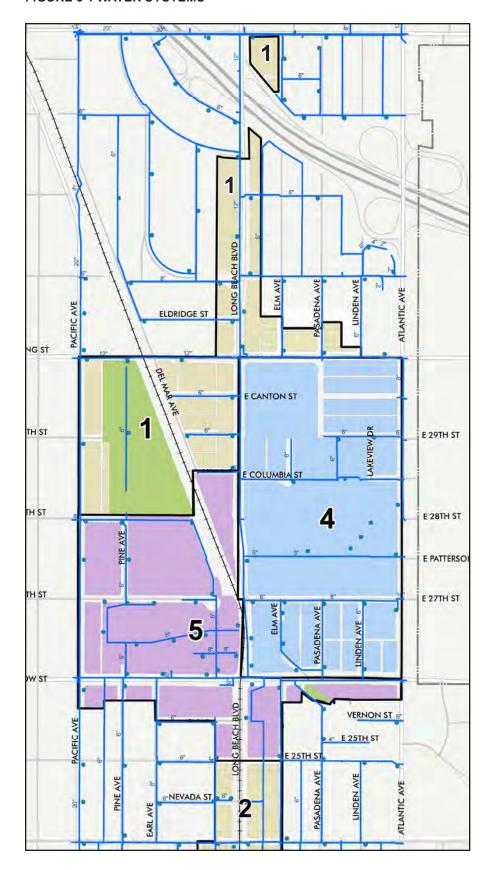
The City's Low Impact Development (LID) Best Management Practices (BMP) Design Manual was developed in 2013, it includes land development policies pertaining impacts to water retention and runoff caused by changes in land use. LID and BMP are used to preserve a site's ability to retain water by minimizing the loss of natural water through conservation such as infiltration, evaporation, and runoff detention.

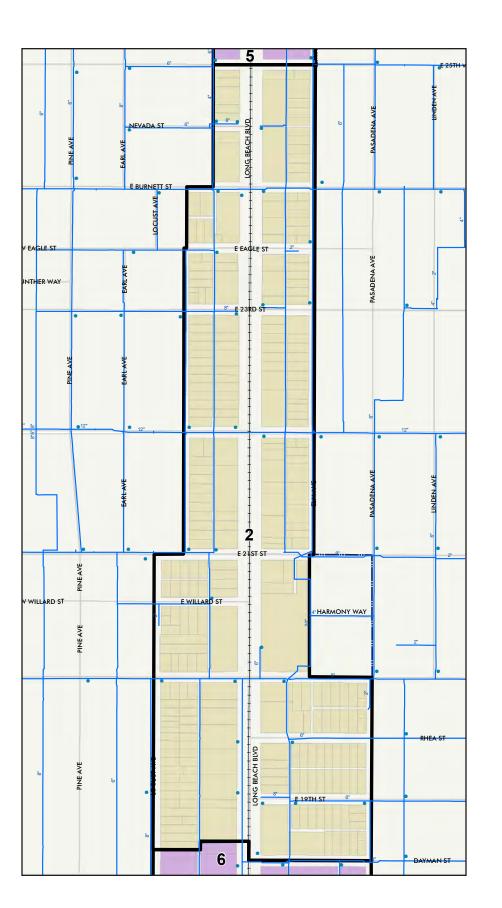
#### 6.5 INFRASTRUCTURE IMPROVEMENTS

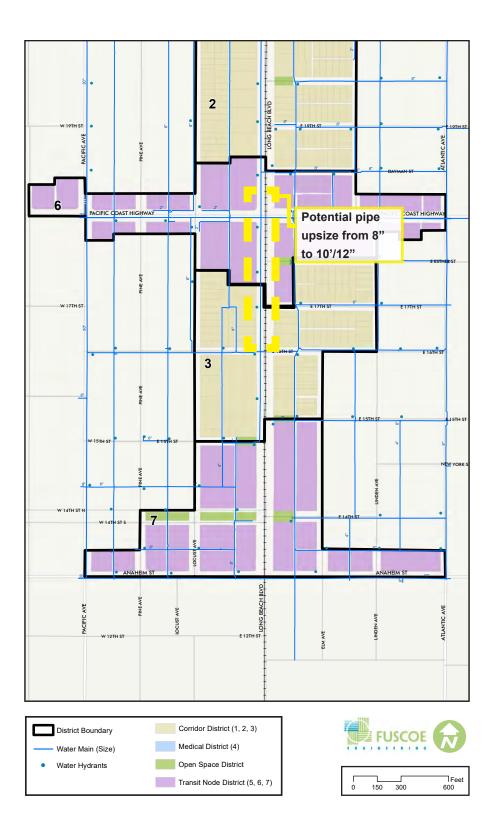
Improvements outlined in Chapter 4, Mobility and Streetscape, of this Plan also benefit water retention for the corridor through LID and BMP. The addition and/or retention of medians, street trees, parklets, and landscaping zones not only aesthetically improve the corridor and provide safety but they also provide areas for stormwater recharge through water infiltration and detention.

Infrastructure improvements that will increase safety include the possible creation of separated bike lanes, wider the sidewalks and pedestrian scale lighting. These improvements are also discussed in Chapter 4, Mobility and Streetscape as well as Chapter 7, Administration and Implementation.

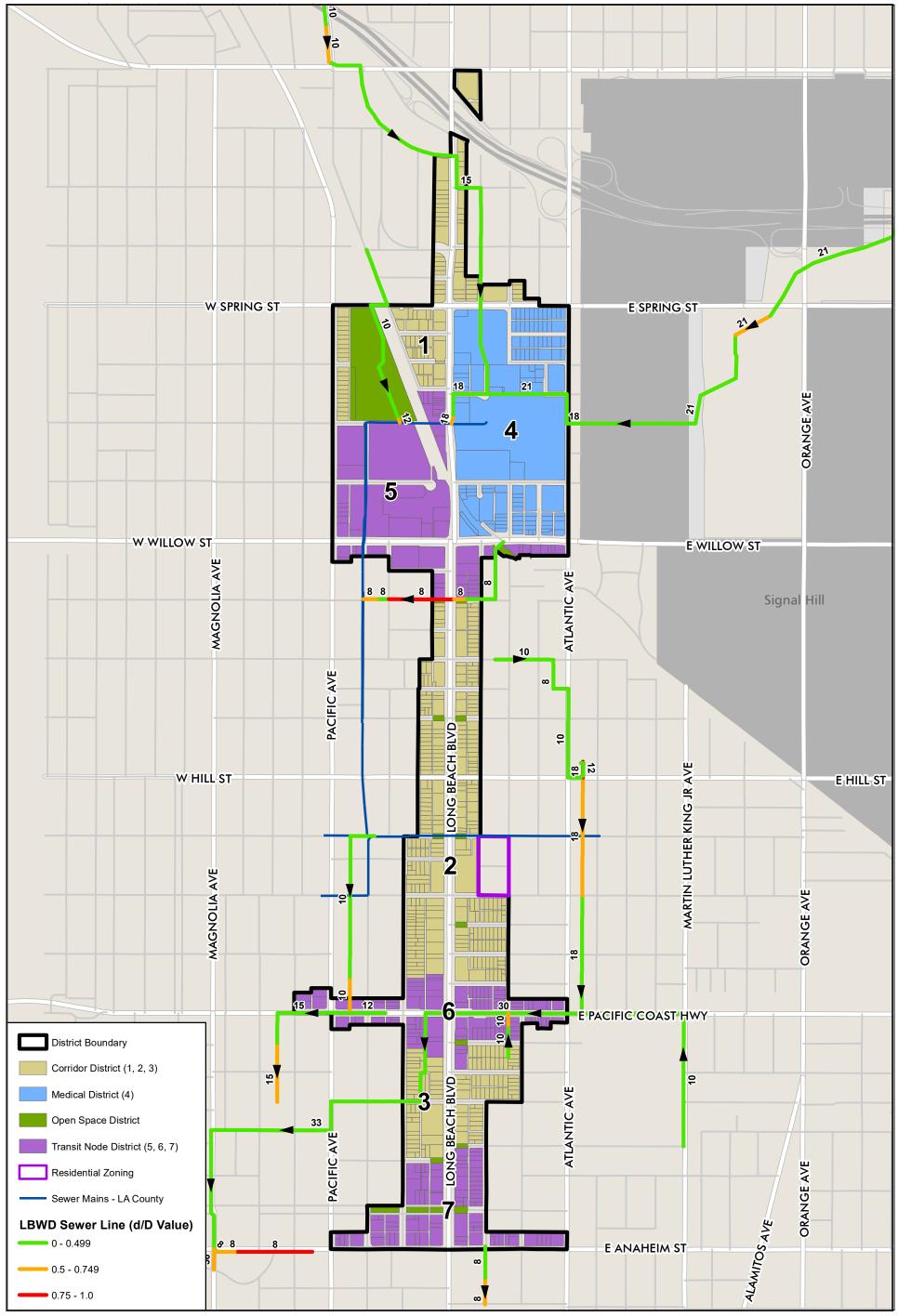
#### FIGURE 6-1 WATER SYSTEMS







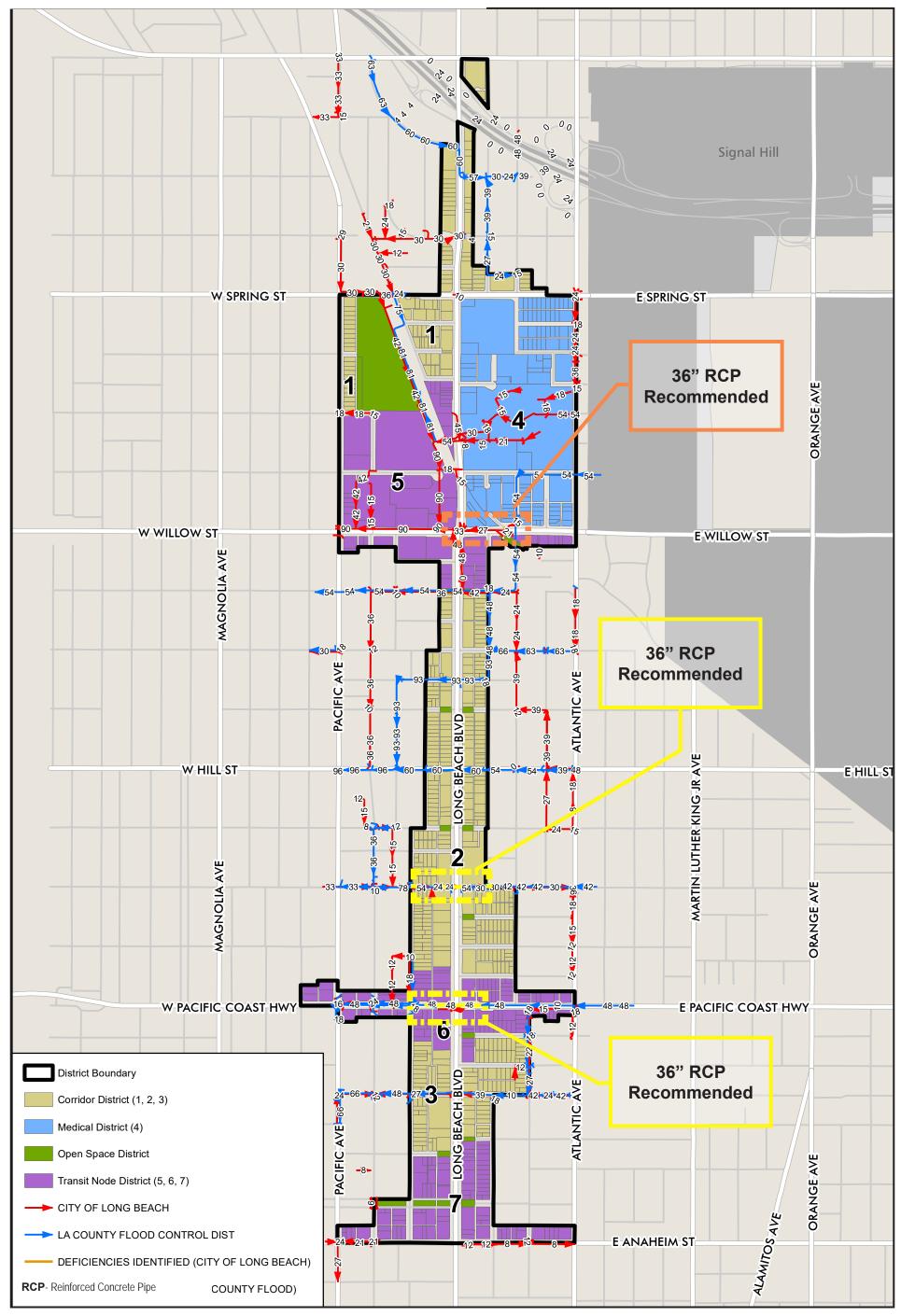




Note: Areas needing further evaluation as development occurs fall within the 0.5-1.0 d/D Value



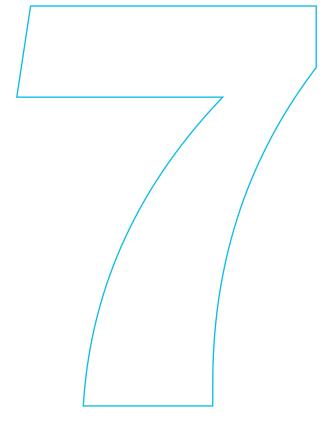




Note: The recommended improvements necessary for buildout of the Specific Plan area are already included in the City's 2005 Master Plan of Drainage.







# ADMINISTRATION & IMPLEMENTATION

MIDTOWN SPECIFIC PLAN

#### 7.0 Administration and Implementation

#### 7.1 GENERAL ADMINISTRATION

#### 7.1.1 Authority

The City of Long Beach initiated and prepared the Midtown Specific Plan pursuant to the provisions of California Government Code, Title 7, Division 1, Chapter 3, Article 8 (Sections 65450 through 65457). The law allows the preparation of specific plans as required for the implementation of the General Plan. Specific plans act as a bridge between the general plan and individual development proposals. They combine development standards and guidelines, capital improvement programs, and financing methods into a single document that is tailored to meet the needs of a specific area. Jurisdictions may adopt specific plans by resolution or ordinance.

The Midtown Specific Plan is the regulatory document guiding land use and development within the boundaries identified in this Specific Plan. Upon adoption by ordinance, this Specific Plan will serve as zoning for the properties involved. It establishes the necessary plans, development standards, regulations, infrastructure requirements, design guidelines, and implementation programs on which subsequent project-related development activities are to be based. It is intended that local public works projects, design review plans, detailed site plans, grading and building permits, or any other action requiring ministerial or discretionary approval applicable to this area be consistent with this Specific Plan.

#### 7.1.2 Interpretation, Conflict, and Severability

#### Interpretation

In case of uncertainty or ambiguity to the meaning or intent of any provision of this Specific Plan, the Director of Development Services and/ or the Zoning Administrator has the authority to interpret the intent of the provision.

The Director may, at his/her discretion, refer interpretations to the Planning Commission for consideration and action. Such a referral shall be accompanied by a written analysis of issues related to the interpretation. All interpretations made by the Director may be appealed to the Planning Commission in accordance with the appeal procedures in the Long Beach Municipal Code (LBMC).

#### **Conflict**

In the event of a conflict between the provisions of the Midtown Specific Plan and the provisions identified in the LBMC, the Specific Plan shall prevail. For any other topical issue, development standard or design guideline, and/or regulation not addressed or otherwise specified in the Midtown Specific Plan, regulation and approval shall be carried out

# Tiering for future projects consistent with the Midtown Specific Plan and EIR

2013 CEQA Guidelines § 15183 (excerpt):

- (a) CEQA mandates that projects which are consistent with the development density established by existing zoning, community plan, or general plan policies for which an EIR was certified shall not require additional environmental review, except as might be necessary to examine whether there are project-specific significant effects which are peculiar to the project or its site. This streamlines the review of such projects and reduces the need to prepare repetitive environmental studies.
- (b) In approving a project meeting the requirements of this section, a public agency shall limit its examination of environmental effects to those which the agency determines, in an initial study or other analysis:
- (1) Are peculiar to the project or the parcel on which the project would be located,
- (2) Were not analyzed as significant effects in a prior EIR on the zoning action, general plan, or community plan, with which the project is consistent,
- (3) Are potentially significant off-site impacts and cumulative impacts which were not discussed in the prior EIR prepared for the general plan, community plan or zoning action, or
- (4) Are previously identified significant effects which, as a result of substantial new information which was not known at the time the EIR was certified, are determined to have a more severe adverse impact than discussed in the prior EIR.
- (c) If an impact is not peculiar to the parcel or to the project, has been addressed as a significant effect in the prior EIR, or can be substantially mitigated by the imposition of uniformly applied development policies or standards, as contemplated by subdivision (e) below, then an additional EIR need not be prepared for the project solely on the basis of that impact.

in accordance with the provisions of the LBMC, particularly Chapter 21 (Zoning Code). The particular section of code shall be based on the most appropriate or closely matching land use type or procedure, as determined by the Site Plan Review Committee or Zoning Administrator.

#### Severability

If any chapter, subsection, sentence, clause, or phrase of this Specific Plan, or future amendments or additions hereto, is for any reason held to be invalid or unconstitutional by the decision of any court, such decision shall not affect the validity of the remaining portions of the plan.

#### 7.1.3 Environmental Clearance

The EIR is primarily a source of environmental information for the City of Long Beach, the lead agency for the project. The EIR describes the potential impacts from the adoption of the Midtown Specific Plan. Subsequent development projects within the Specific Plan are anticipated as it builds out. The EIR has been prepared as a Program EIR (PEIR), as defined by Section 15168 of the CEQA Guidelines, and subsequent projects that are within the scope of this EIR may be subject to a more limited environmental review process, as determined by the Planning Bureau of the City of Long Beach.

Use of a PEIR provides the City with the opportunity to consider broad policy alternatives and program-wide mitigation measures and provides the City with greater flexibility to address project-specific and cumulative environmental impacts on a comprehensive basis. Agencies generally prepare PEIRs for programs or a series of related actions that are linked geographically; are logical parts of a chain of contemplated events, rules, regulations, or plans that govern the conduct of a continuing program; or are individual activities carried out under the same authority and having generally similar environmental effects that can be mitigated in similar ways.

This approach is consistent with the tiering provision in California Public Resources Code Section 21083.3 and CEQA Guidelines Section 15183 for "Projects Consistent with a Community Plan or Zoning." This tiering opportunity is only available for plans (e.g., specific plan) for which an EIR has been prepared.

Note that tiering under these provisions will require environmental review and documentation to substantiate that a subsequent project does not result in any new potentially significant impacts. Such review (under 21083.3/15083) could be documented in the form of an Initial Study to ensure "topic by topic" review and substantiation. Once consistency has been substantiated and review shows that the project would not result in new significant impacts, neither a mitigated negative declaration nor an EIR would be required. Additionally, no formal public review would

be required. Projects may also be exempt from CEQA review pursuant to other sections of CEQA (e.g., exemptions for residential infill projects, statutory exemptions, or categorical exemptions) depending on the size of the project and type of development. The type of CEQA review needed for each project will be determined by the City staff during their review of the type of project or development proposed.

In addition to a more limited review process, infill projects may qualify for streamlining. Streamlining for Infill Projects (Section 15183.3) allows eligible projects to streamline the environmental review process by limiting the topics subject to review at the project level.

#### 7.2 REVIEW AND APPROVAL PROCESS

One of the primary goals of the Midtown Specific Plan is to enhance the area as a more vibrant, livable, and walkable area with well-designed, pedestrian-friendly streets. This will be achieved by allowing greater flexibility in the application of context-sensitve development standards oriented to a human scale rather than an automobile scale.

#### 7.2.1 Consistency with Guiding Principles

Five guiding principles embody the vision of the Midtown Specific Plan. They were developed through extensive public input and are reflected throughout this document.

- 1. A Sustainable Future
- 2. Enhanced Mobility and Complete Streets
- 3. Supporting Infrastructure
- 4. Safety and Wellness
- 5. Working with and for the Community

#### 7.2.2 Approval Authority

The responsibilities of the Director shall include administering, interpreting, and enforcing all requirements and standards of the Midtown Specific Plan, including the acceptance and processing of all land use permit applications.

The Director or designated representative may approve, conditionally approve, or deny applications that meet the requirements of this Specific Plan and do not require a conditional use permit. The Director holds final approval authority for and enforcement of building permits, certificates of occupancy, sign permits, and temporary use permits.

The Zoning Administrator shall have the authority to consider and act on requests for Standards Variances and Administrative Use Permits. The Zoning Administrator may approve, conditionally approve, or deny a request, or refer the application to the Planning Commission in accordance with Chapter 21.25 of the LBMC. The Zoning Administrator's actions may be appealed to the Planning Commission.

The Site Plan Review Committee shall have the authority to consider alternative configurations and compliances with certain development standards in this Plan, as noted throughout the Plan document, provided that these alternatives meet the fundamental intent of this Plan and further the goals of this Plan.

**The Planning Commission** shall have the authority to consider Conditional Use Permits and Site Plan Review applications, hear appeals on Zoning Administrator decisions, as well as make recommendations on Specific Plan Amendments (Zoning Code Amendments) to the City Council.

The City Council may decide upon Specific Plan Amendments (Zoning Code Amendments) upon recommendation by the Planning Commission, as well as hear appeals of Planning Commission decisions.

#### 7.2.3 Site Plan Review

For all specific procedures not modified or otherwise specified within the Midtown Specific Plan, all planning entitlement and permitting processes for projects requiring said permits within the plan area shall be carried out in accordance with the procedures in Chapter 21.25 of the LBMC.

The Midtown Specific Plan establishes alternate thresholds for Site Plan Review, superseding the thresholds in Chapter 21.25 of the LBMC, as follows:

- 1. Nonresidential Development: 1,000 square feet or more of new building area.
- Residential Development: Addition of or conversion into one or more new dwelling units, including the conversion of nonresidential space into residential unit(s) or the replacement of a dwelling unit demolished as defined in Section 21.15.750 of the LBMC.
- 3. Façade remodel: Any façade remodel consisting of 25 or more linear feet of façade. The 25 linear feet are counted cumulatively over the entire building frontage and need not be contiguous.
- 4. Thresholds for requiring Conceptual Site Plan Review and Site Plan Review approval by Planning Commission include projects of 50,000 square feet or more of new building area or projects of 50 or more new dwelling units.

#### 7.2.4 Specific Plan Amendments

Approval of this Specific Plan indicates acceptance by the City Council of a general framework for community development. Part of that framework establishes specific development standards that constitute the zoning regulations for the Midtown Specific Plan. It is anticipated that certain modifications to the Specific Plan text, exhibits, and/or project may be necessary during the development of the project.

Any modifications to the Specific Plan shall occur in accordance with the specific plan amendment process and are required to be reviewed for approval by the Planning Commission and the City Council. In all cases, specific plan amendments must be found to be in conformance with the objectives and intent of the Midtown Specific Plan.

Amendments may be requested at any time pursuant to Section 65453(a) of the Government Code. Depending upon the nature of the proposed specific plan amendment, a supplemental environmental analysis may be required, pursuant to the California Environmental Quality Act (CEQA), Section 15162.

#### 7.2.5 On-site Improvements

On-site improvements are intended to increase the value of a property and to provide public realm improvements as described in this Plan. They can occur within the parcel boundaries or within the ROW adjacent to the property. The City will require applicants to install or consent to onsite improvements through a development agreement or as a condition of approval, on subject property or in the ROW adjacent to the property bound by the centerline of the street.

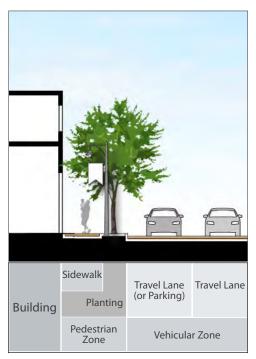
#### 7.3 IMPLEMENTATION

Because the City has limited resources for public realm improvements, one of the most effective ways to create successful mixed-use environments along Long Beach Boulevard is to begin implementation in concentrated activity nodes to maximize both the speed and the impact of the improvements. The implementation strategy identifies specific geographies on the corridor for infrastructure investments in the shorter term, prioritizing the following types of places:

- · Locations that have already exhibited some market strength or experienced recent development activity, such as the Anaheim and Long Beach Boulevard node (Transit Node 7).
- · Locations that are receiving public investments in the short term (projects already identified in the City's Capital Improvements Program or other public works project).
- · Locations that offer opportunities to partner with private developers, nonprofits, and/or institutions (schools, hospitals, and colleges).

#### On-site ROW improvements could include but are not limited to:

- Street Furniture
- · Landscaping
- · Curb/gutter upgrades
- · Expanded sidewalks
- Bicycle facilities (e.g. racks)
- Lighting
- · Pavement enhancements



Possible streetscape improvements include pedestrian scale lighting as well as a planting area to provide a buffer between vehicles on the street and people on the sidewalk.

#### 7.3.1 Mobility, Streetscape and Infrastructure Enhancements

This two-mile corridor of Long Beach Boulevard has the opportunity to connect people with a multitude of uses through several forms of transportation. Enhancements to infrastructure for bicycles, pedestrians, and transit riders will provide improved access to Midtown, while still adequately accommodating automobiles.

Additionally, adding open space areas such as parklets will increase parkland while providing a place for the community to gather. Parklets will complement mobility enhancements by offering bicyclists and pedestrians a shady place to rest as well as safer crossings along the corridor. A summary of enhancements to improve mobility, the streetscape, and general infrastructure are provided below. More detailed information can be found in corresponding chapters of this Plan.

**Parks and Parklets.** Midtown's neighborhoods are in need of open space and park areas. Open space opportunities in Midtown include:

- Creating 11 new "parklets" (street parks about a quarter acre in size).
- Introducing more active programming in Veterans Park.
- New requirements for other off-site and on-site open space as development occurs.

**Mobility and Streetscape**. Proposed infrastructure enhancements will create safer environments for pedestrians and bicyclists while encouraging healthy alternative transportation options for people living and working in the area. Improvements include:

- Designating bikeways and boxes along Long Beach Boulevard.
- Adding curb extensions to create space for the new lanes by reducing on-street parking and right turn pockets.
- Planting new canopy trees in the landscaping zone between the existing palm trees to create a buffer along designated sections of the bike lane and in bulb-outs.
- Building a pedestrian bridge across Long Beach Boulevard connecting Long Beach Memorial Medical Center to Veterans Park and the Willow Transit Station.
- Adding new pedestrian scale lighting along the sidewalk of Long Beach Boulevard.

**Transit.** This Plan creates three Transit Node Districts to foster multi-modal transportation in Midtown. Transit-related improvements complement pedestrian and bicycle enhancements as well as station improvement plans that the City is already implementing, these include:

- Adding bicycle racks and lockers to existing Metro Blue Line Stations.
- Encouraging bike rental or sharing programs.
- Improving bicycle and pedestrian access at each station.

#### 7.3.2 Cultural Resources

Cultural resources include places, objects, and settlements that reflect group or individual religious, archaeological, architectural, or paleontological activities. Such resources provide information on scientific progress, environmental adaptations, group ideology, or other human advancements. Since many buildings in the Midtown Specific Plan area are nearing 50 years of age and one building (the Packard Motors Building) has already been designated on the National Register of Historic Places a historic resources study was conducted as a part of the EIR for this Specific Plan.

66 Properties were identified in the Historic Resources Report for the EIR as "potential historical resources". These properties require further evaluation on a case by case basis if they are proposed to be altered or demolished as part of future development or redevelopment activities that would be accommodated under this Specific Plan. See Table 7-1 below for the list of buildings that require additional evaluation.

Evaluation of discretionary projects at any properties within the Midtown Specific Plan area not listed in the table below would be subject to evaluation by the Development Services Department based on the standards of the City's Cultural Heritage Ordinance and the criteria of the California Environmental Quality Act.

TABLE 7-1 LIST OF PROPERTIES RECOMMENDED FOR FUTURE EVALUATION

Reference Number	APN	Street Number	Street Name	<b>Build Date</b>
1	7209010002	00350	20th Street	1919
2	7209011014	00330	20th Street	1923
3	7209011017	00405	20th Street	1928
4	7209011012	00425	20th Street	1939
5	7206005901	00101	28th Street	1952
6	7269014009	00141	Anaheim Street	1930
7	7269015018	00233	Anaheim Street	1946
8	7269029022	00501	Anaheim Street	1927
9	7269029021	00535	Anaheim Street	1929
10	7207010041	02801	Atlantic Avenue	1959
11	7207009030	02865	Atlantic Avenue	1960
12	7206023025	00220	Canton Street	1913
13	7206023001	00208	Columbia Street	1908
14	7209008013	00407	Dayman Street	1933
15	7269027006	01331	Elm Avenue	1915
16	7269023013	01551	Elm Avenue	1910
17	7269023012	01561	Elm Avenue	1906
18	7269023011	01567	Elm Avenue	1910
19	7269023009	01585	Elm Avenue	1919
20	7208022021	02219	Elm Avenue	1912
21	7208022019	02225	Elm Avenue	1895
22	7208022016	02255	Elm Avenue	1915
23	7208022900	02295	Elm Avenue	c1930s
24	7208010015	02425	Elm Avenue	1922
25	7208010014	02433	Elm Avenue	1915
26	7208010013	02443	Elm Avenue	1922
27	7269021017	00324	Esther Street	1926
28	7269020021	00351	Esther Street	1910
29	7269021039	00400	Esther Street	1913
30	7269021026	01711	Linden Avenue	1923
31	7269021028	01723	Linden Avenue	1915
32	7269021029	01731	Linden Avenue	1916
33	7269021030	01741	Linden Avenue	1922
34	7269020031	01765	Linden Avenue	1912
35	7207009051	02898	Linden Avenue	1959
36	7269014004	01333	Locust Avenue	1925
37	7269014800	01331	Locust Avenue	c1920s
38	7269016147	01427	Long Beach Boulevard	1946
39	7209015009	01883	Long Beach Boulevard	1954
40	7209015003	01885	Long Beach Boulevard	1923
41	7209013009	02069	Long Beach Boulevard	1925
42	720901104	02070	Long Beach Boulevard	1925

TABLE 7-1 LIST OF PROPERTIES RECOMMENDED FOR FUTURE EVALUATION (CONTINUED)

Reference Number	APN	Street Number	Street Name	Build Date
43	7209013037	02073	Long Beach Boulevard	1923
44	7208027011	02160	Long Beach Boulevard	1948
45	7208023018	02247	Long Beach Boulevard	1907
46	7208022004	02268	Long Beach Boulevard	1964
47	7208014028	02301	Long Beach Boulevard	1958
48	7208003013	02500	Long Beach Boulevard	1959
49	7207019018	03012	Long Beach Boulevard	1967
50	7206011029	03069	Long Beach Boulevard	1948
51	7269005009	01320	Pacific Avenue	1928
52	7206025029	02632	Pacific Avenue	1960
53	7206025028	02650	Pacific Avenue	1952
54	7206025027	02654	Pacific Avenue	1953
55	7206024016	02776	Pacific Avenue	1955
56	7206005024	02800	Pacific Avenue	1956
57	7269020053	00304	Pacific Coast Highway	c1930s
58	7209007013	00401	Pacific Coast Highway	1911
59	7269035015	000550	Pacific Coast Highway	1931
60	7269005017	01301	Pine Avenue	1960
61	7209009007	00330	Rhea Street	1907
62	7209009008	00332	Rhea Street	1907
63	7209009012	00340	Rhea Street	1925
64	7209013016	00200	Willard Street	1923
65	7209013011	00237	Willard Street	1922
66	7206025032	00101	Willard Street	1967
Source: GPA Consulting 2015.				

#### 7.3.3 Implementation Tasks

The following six tasks are intended to guide the City through near-term implementation of the Midtown Specific Plan.

#### Task 1. General Plan Amendment

In order for the Midtown Specific Plan to be implemented, the City's General Plan may need to be amended for consistency.

Land Use Element Changes. If the current effort to update the City's General Plan Land Use Element has not been adopted within 12 months of adoption of the Midtown Specific Plan, the City shall initiate a General Plan Amendment. An amendment to the Land Use Element is required as some of the current General Plan land use designations do not allow for a mix or the density/intensity of uses as proposed in this Plan. The General Plan Land Use Map also needs to be amended to change the current land use designations for the area to the designation of Midtown Specific Plan.

**Mobility Element Changes.** If implementation of the parklets move forward an amendment to the City's General Plan Mobility Element will be necessary to memorialize the closures and update roadway classifications consistent with the mobility plan in Chapter 4 of this Specific Plan. There is not a time frame for completion of this task as a General Plan Amendment to the Mobility Element will only be necessary if and when parklet projects are implemented.

#### Task 2. Adopt Interim Development Agreement Policy

It is likely that property owners and developers will propose new developments after the Specific Plan is adopted, but before other components of the public realm improvement implementation program are completed. In such cases, the City should negotiate with those developers to provide on-site and public right-of-way improvements and/or pay fees commensurate with the expected level of development impact fees.

In no case shall a development agreement be used to alter or in any way vary from any of the regulatory standards, design guidelines, or other requirements of the Specific Plan. The City shall adopt the interim development agreement policy either in conjunction with the adoption of the Specific Plan or within approximately 36 months of its adoption.

Project proposals occurring prior to the interim development agreement policy shall be subject to both payment of Park and Recreation Fees (as established in Chapter 18.18 of the City's Municipal Code) and a separate requirement to construct parklets and/or pay fair-share fees toward that construction within the public right-of-way.

### Task 3. Prepare Development Impact Fee Nexus Studies and **Adopt Impact Fee Ordinance**

To assess the costs of public improvements to new development through impact fees, the City must conduct a nexus study to determine the proportion of improvement costs attributable to new development and then adopt an ordinance establishing the fees. Subsequent to the adoption of the Specific Plan, the City will prepare nexus studies for the implementation of parklets and other public realm improvements throughout the corridor.

Based on the outcome of these nexus studies, the City will adopt an ordinance establishing development impact fees for the Specific Plan area. The ordinance shall be submitted for public hearing by the City Council within six months of the completion of the nexus studies. In preparing the ordinance, the City will establish when the improvements will be made, how the City will pay the upfront costs, and how and when the City will be repaid through the collection of impact fees. The City shall determine whether or not a special fund is needed for the improvements paid through impact fees.

#### **Task 4. Demonstration Project**

Within a year of adoption of this Specific Plan the Planning Bureau should partner with the Public Works Department to include one or two demonstration projects from the Midtown Specific Plan in the City's Capital Improvement Program. Small sections of streetscape improvements to Long Beach Boulevard and/or a parklet could be implemented as a demonstration project to spur change along Long Beach Boulevard and within Midtown (see section 7.3.1 Mobility, Streetscape and Infrastructure Enhancements, for a complete list of proposed improvements).

As the lead for this task the Planning Bureau should also use this as an opportunity to develop relationships with the community to foster the creation of a contractual assessment district or sponsorship by the neighborhoods, local businesses or a community group to aid in maintenance and ongoing programming of these areas. This task can also help the City to test the implementation of designs from tasks 4 and 5 below.

## Task 5. Prepare Ultimate Roadway Design and Specifications for Long Beach Boulevard in the Specific Plan area

The City shall prepare design and specifications for the ultimate roadway improvements, including on-street parking and/or bike lanes, sidewalk widening, and curb extensions. The design and specifications shall indicate which improvements are required as a condition of approval for new development. The City should also consider addressing other roadways at this time.

The design and specifications shall also indicate which improvements may be provided through a contractual assessment district and which the City may construct or install on its own using City revenues. The City should complete the ultimate roadway design and specifications within one year of adoption of the Specific Plan, dependent on funding availability.

#### Task 6. Create a Streetscape Plan

The City shall prepare a streetscape plan, covering street lighting, pedestrian lighting, street furniture, and landscaping. The plan shall indicate the improvements are required as a condition of approval for new development, which improvements may be provided through a contractual assessment district, and which the City may construct or install on its own using City revenues.

The City should identify funds for and complete the streetscape plan within one year of adoption of the Specific Plan, dependent on funding availability.

#### Task 7. Create a Contractual Assessment District(s)

The City should work with area businesses to create contractual assessment districts where appropriate along the corridor. See section 7.4.2 Funding and Financing Strategy for more information on property-based financing tools including contractual assessment districts such as business improvement district (BID) or other special assessment districts. The City could work with a consulting firm that specializes in creating community development tools such as BID. A third party firm could assist the City to facilitate a participatory process with property owners, merchants, residents and other stakeholders to determine priorities and develop an overall management plan for Midtown or select districts along the corridor.

#### 7.3.4 Funding and Financing Strategy

The funding and financing strategy for Midtown prioritizes the mobility, open space, and infrastructure improvement projects in Table 7-2. These projects represent important initial steps that can be taken to encourage new development. In addition to improving the public realm on Long Beach Boulevard, these projects can also boost investors' confidence by demonstrating the City's ongoing commitment to the neighborhood and the infusion of new ideas and life along the corridor.

The funding for the infrastructure improvements associated with each project are challenging because the majority of them (excluding potentially the transit improvements) do not generate revenues to pay for construction, operations, or maintenance. Access is free and unrestricted, and the benefits are spread throughout the community. Furthermore, the City is fiscally constrained, and new development is limited in its ability to contribute toward these improvements. Given these challenges, the

following text describes the funding and financing options available for the improvement projects in the Midtown Specific Plan.

# **TABLE 7-2 IMPLEMENTATION STRATEGIES**

Improvements and Funding						
Improvement	Timing	Responsible Party	Funding Source	Notes		
Parks:						
Parklets	Identify 1 or 2 parklets to start with as demonstration projects	City and possible partnership with local community groups or business associations	In-lieu fees, PBID or BID, Developer Agreements			
New Parks	As development occurs	City, Developer	Impact fees, developer agreements			
Existing Park Enhancements	As development occurs	Possible partnership between the City and Long Beach Memorial Medical Center	Grants, Public-Private Partnership	Veterans Park Enhancements: In conjunction with the expansion of Memorial Medical Center Campus		
Mobility and Streetsca	ape:					
Short-Term Bicycle Network Enhancements	As funding becomes available	City and possible partnership with business improvement district	General Fund, CIP, Grants	Determine if bike paths should be designated along Long Beach Boulevard in the Bicycle Master Plan; Create temporary bike path as a demonstration project		
Long-Term Bicycle Network Enhancements	As funding becomes available	City and possible partnership with business improvement district	General Fund, CIP, Grants	Implement bikeways within the Specific Plan area per the City's Bicycle Master Plan		
Streetscape	As funding becomes available	Creation of a PBID or BID, Developer Agreements	PBID or BID, Developer Agreements	Refers to the addition of street furniture, landscaping, lighting, etc.		
Pedestrian Enhancements	As funding becomes available	General Fund, Grants, Developer Agreements	General Fund, Grants			
Transit:	Transit:					
Metro Station Upgrades	As funding becomes available		Metro, Grants	Includes improving bicycle facilities (bike lockers, rental stations, etc.)		

There are two basic ways to approach paying for infrastructure: "pay-as-you-go" and debt financing. In a pay-as-you-go approach, an improvement is made only after sufficient revenue is collected to cover the entire cost of the improvement. In a debt financing approach, the improvement is paid for immediately, typically by borrowing against future revenues—in other words, issuing debt (usually in the form of bonds) that is paid back over time. Both approaches require a designated funding source (i.e., revenue), to pay for the cost of the improvement itself and, when a financing mechanism is used, to cover interest and other costs associated with issuing debt (these are known as "debt service costs"). Nearly all infrastructure projects rely on a combination of multiple funding sources for implementation.

Typical sources of funding for new or enhanced infrastructure (transit, bicycle, pedestrian, streetscape, and parks) include:

- Local revenues, including revenues from the City's general fund.
- · User fees and rates, such as transit fares.
- Property-based financing tools, often known as "value capture" tools, take advantage of the property value appreciation and new development opportunities in a plan area to help pay for infrastructure investments.
- Development agreements and partnerships are negotiated on a caseby-case basis with key property owners, institutions, and developers.
- Grant programs, which typically require a competitive application process but do not need to be paid back.

Each of these funding sources and their potential use for projects in the Midtown Specific Plan area are described in more detail below.

#### **Local Revenues**

Many early projects in the Midtown Plan will require a contribution of local funds for capital improvements. These local funding sources include the City's general fund contributions, local oil production tax revenues, gasoline tax funds, and the City's share of county funds (particularly local return funding from Propositions A, C, and Measure R), state sources (such as non-competitive Transportation Development Act funds), and other federal tax proceeds.

#### **User Fees**

User fees are the fees charged for the use of public transit, roads, infrastructure, and utilities (e.g., fares, toll roads, water, wastewater). Such fees and rates are typically set to cover a system's operating and capital expenses each year, which can include debt service for improvements to the system. It may be possible to use some portion of user fee or rate revenue

toward financing the costs of certain types of infrastructure upgrades that may be needed to accommodate higher density development in the Midtown planning area. The most applicable of these are the improvements to the Willow Transit Station; however, the ability to raise the revenues for those improvements can only be determined by the transit agency. While user fees are unlikely to be a major source of funding for implementation of these projects, they may be a funding source for other projects.

#### **Property-Based Financing Tools**

In California, common property-based funding and financing tools include the formation of business improvement districts, benefit assessment districts, and community facilities districts (CFDs). Assessment tools and CFDs leverage the value of new real estate development to capture additional tax revenues to finance infrastructure. The assessments can either be used to pay for improvements over time as the funds are collected, or can be bonded to make larger, up-front investments. One of the advantages of these property-based tools is that they can be applied toward districtwide improvements and are designed to ensure that properties benefitting from improvements also contribute to those public investments.

- · Business Improvement District (BID) or Property Based Improvement District (PBID). A BID or PBID essentially creates a neighborhood-level economic development organization accountable to its members and with its own funding stream to improve business performance by addressing local needs. Business owners (within a BID) or property owners (within a PBID) agree to provide funding for specified services in the district. The district is formed through an affirmative majority vote of the businesses or property owners. Services can vary widely, but frequently include ongoing maintenance and cleaning of public areas, security patrols, marketing, and advocacy. Long Beach currently has five BIDs or PBIDs, with budgets typically below \$200,000.
- · Other Special Assessment Districts. In an assessment district, property owners agree to pay an additional fee or tax to fund improvements in a specific geographic area. The amount that each property owner pays must be proportional to the benefit the property will receive from the proposed improvement. Assessment districts are established by an affirmative vote of property owners representing over 50 percent of the funding to be provided. A variety of assessment districts exist, and each features unique rules for formation and use; examples include sewer, utility, parking, and landscaping and lighting districts. Assessment districts are most useful for funding very specific categories of ongoing operations and maintenance costs.
- Community Facilities Districts (CFDs). Like assessment districts, Mello-Roos Community Facilities Districts are formed when the property owners in a geographical area agree to impose a tax on the land to fund

infrastructure improvements. Unlike assessment districts, however, CFDs are most commonly formed in cases in which the geographic area encompasses a small number of property owners who intend to subdivide the land for sale. To be enacted, CFDs require a two-thirds vote of property owners, which is a difficult hurdle in Midtown given the fragmented nature of property ownership in the area. The Mello-Roos Community Facilities District Act allows the taxes to be proportionally subdivided and passed on to the future landowners. The revenue can then be used either for pay-as-you-go funding or to pay off bonds issued against the anticipated revenue from the CFD.

An important consideration in the case of all district-based assessment tools is that there is a limit to the amount that property owners are typically willing to contribute in annual property tax assessments and fees. A commonly used rule of thumb for calculating the feasibility of implementing new assessments is that total property taxes, assessments, and obligations should not exceed a percentage of a given property's assessed value.

The property-based financing tools described above may be challenging to adopt in the early stages of implementation, since it will take time to attract development and build value in the Midtown. However, the City should maintain dialogue with property owners in anticipation of forming district-based funding tools as market activity increases.

#### Impact Fees, Development Agreements, and Partnerships

This section describes contributions and investment from the private sector that can be used to pay for new infrastructure and services. The funding obtained from development impact fees and agreements will be directly tied to the magnitude of development that occurs in Midtown; as a result, these sources may take time to unlock. In the shorter term, the City may have more success negotiating with major public and nonprofit institutions already in the area to obtain desired improvements in some locations along the corridor.

- Impact Fees. Development impact fees are a one-time charge imposed on new development. These fees are charged to mitigate impacts resulting from the development itself and cannot be used to pay for existing deficiencies. "In-lieu" fees are similar to impact fees, but are charges paid in lieu of developers providing required on-site community benefits. The City of Long Beach currently collects impact fees for park facilities, traffic mitigation, public safety facilities (fire and police), and sewers. These impact fees can be applied toward improvements in the Specific Plan area in accordance with the existing programs.
- Development Agreements. Structured negotiations between cities and developers can be conducted to obtain desired improvements in exchange for development rights. The extent to which a new project

can contribute to the provision of infrastructure depends on a number of factors, including the anticipated project revenues, construction costs, project size, site characteristics, and other factors. Therefore, the amount of public benefits that can be provided is unpredictable and must be negotiated on a case-by-case basis.

· Partnerships. The City should also pursue partnerships with local institutions, nonprofit organizations, and community or business organizations to implement projects and provide ongoing programmatic support. Examples of partners are LA Metro, Long Beach Memorial, Hancock University, and other area institutions. Institutional partnerships can often result in substantial new investments in infrastructure, such as a recent \$100,000 contribution by the Long Beach Container Terminal to help construct Long Beach's Baker Street Park.

#### **Grant Programs**

A wide variety of regional, state, and federal competitive programs exist to distribute funds earmarked for specific types of projects. These programs vary in their availability from year to year. This list is not intended to be exhaustive, but provides guidance on several promising competitive grant programs that can fund early implementation of key capital cost components. The availability of some programs may vary, and therefore require vigilance in tracking and applying for grants. Long Beach has historically excelled in obtaining funding from such sources.

- SCAG Regional Transportation Plan (RTP). As required by law, SCAG assembles its RTP every four years to outline the distribution of transportation funds that it expects to receive from the federal government for the next 25 years. Inclusion in the RTP significantly enhances the potential for a project to receive funds and compete for other competitive grants. Projects proposed for inclusion must undergo a competitive evaluation process. The current RTP was approved in 2012, and the next plan will be adopted in 2016.
- · LA Metro Transportation Improvement Program (TIP). LA Metro uses the TIP as its primary process for selecting transportation improvement projects for funding with discretionary federal, state, and local revenues. SCAG must also approve the projects and include them in the RTP. Relevant 2013 categories included bicycle, pedestrian, and transit improvements. A total of \$186.5 million was made available in 2013, but funding has historically ranged from \$120 to \$800 million. The TIP is revised every two years, with amendments allowed monthly. The most recent full TIP revision occurred in 2013, and the next call for projects is likely to occur in late 2015.
- · Caltrans/SCAG Active Transportation Program (ATP). This program funds "active transportation" pedestrian and bicycle improvements and planning, and will significantly streamline the process

#### **Private Funding Sources**

Private Foundations. Numerous private non-profit foundations, such as the Knight and Annenberg Foundations, provide nation-wide funding for parks and civic spaces. These types of grants/ private funding typically require an applicant to demonstrate how a project will expand cultural experiences, create a sense of place, enhance community identity and/or promote health and sustainability.

#### **Emerging Funding Sources**

New funding sources may become available during implementation of this Specific Plan. Two tools, described below and on the next page, may eventually be available to fund improvements in Midtown.

It should be noted that these tools are not currently a proven short-term source of funding as their uses and applications are limited and evolving.

Infrastructure Financing Districts (IFD). Recent legislation enabled the formation of IFDs in former redevelopment project areas, such as Midtown.

An IFD diverts new local property tax revenues to either pay directly for the construction of infrastructure and public facility improvements, or to issue bonds to finance those improvements.

However, IFDs cannot divert property tax increment revenues from schools and can only pay for public facilities like roads, sewer, water, libraries, and parks—not routine operations and maintenance or, except in limited cases, affordable housing or economic development projects.

However, onerous approval requirements may limit the formation of an IFD: two-thirds of property owners or voters must vote in favor of forming the district, and all affected taxing entities (e.g., counties, special districts) must approve the contribution of their portion of the tax increment to the IFD.

of applying for grants. ATP combines several preexisting competitive grant programs for funding pedestrian and bicycle improvements, including the Bicycle Transportation Account, Safe Routes to School Programs, and a share of the Highway Safety Improvement Program funding. Forty percent of the funding will go to metropolitan planning organizations in urban areas. Small urban and rural regions will receive 10 percent, and the remaining 50 percent of the funds will be awarded to projects statewide. The Caltrans grants require a local funding match. The SCAG grant program will also release a call for projects upon approval of its guidelines by the California Transportation Commission.

Long Beach is historically competitive for funding under the programs absorbed into the ATP. Long Beach received \$433,500 from the Bicycle Transportation Account in 2010-2011 for closing gaps in the bicycle lane network. The City received \$450,000 from the 2010-2011 Safe Routes to School Program for construction of a Class III bikeway, partially located within Midtown on 15th St. between Long Beach Boulevard and Pacific Coast Highway. And Long Beach received funding from the Highway Safety Improvement Program in 2011 for intersection and road diet improvements on Martin Luther King Jr. Avenue between Seventh Street and Sixth Street and Alamitos Avenue at Seventh Street.

- California HCD Housing-Related Parks Program. The Housing-Related Park Program provides grants for the creation of new parks or rehabilitation or improvements to existing parks. The program criteria reward local governments that approve housing for low-income households and are in compliance with the state housing element law. Grant amounts are based on the number of bedrooms in very low and low income housing units in documented housing construction that starts within the 12 months preceding the notice of funding issuance. No local funding match is required. In 2013, a total of \$25 million was awarded, with a minimum award of \$75,000.
- California HCD Infill Infrastructure Grant (IIG) Program. The IIG provides grants to provide gap funding for new construction and rehabilitation of infrastructure that supports higher-density affordable and mixed-income housing in locations designated as infill. Eligible activities include new construction, rehabilitation, and acquisition of infrastructure required as a condition of or approved in connection with approval of Qualifying Infill Projects or Qualifying Infill Areas. The most recent release of funds was in May 2013 and provided \$70 million. A city must apply as a co-applicant with the developer of a qualifying affordable housing project. The 2013 round provided a minimum of \$500,000 and up to \$4 million to grantees; local funding matches were not required but improved competitiveness.
- California HCD TOD Housing Program. Low-interest loans are available as gap financing for rental housing developments that

include affordable units near transit, and as mortgage assistance for homeownership developments. Grants are also available to cities, counties, and transit agencies for infrastructure improvements necessary for the development of specified housing developments or to facilitate connections between these developments and the transit station. The most recent notice of funding availability was issued in May 2013 and provided a total of \$60 million; maximum grants were \$4 million.

- · California Department of Parks and Recreation Land and Water Conservation Fund (LWCF) Competitive Program. The state administers the competitive grant process for distributing federal Land and Water Conservation Fund resources. Grants are to be used for acquisition or development of parks. Up to \$2 million can be awarded, but the award may not exceed half the total project cost; a 50 percent, or higher local match is required.
- U.S. Department of Housing and Urban Development (HUD) Community Development Block Grant (CDBG). The CDBG entitlement program allocates annual grants to larger cities and urban counties to develop viable communities by providing decent housing, a suitable living environment, and opportunities to expand economic opportunities, principally for low- and moderate-income persons. Long Beach may be able to direct CDBG funds for implementation of project components relevant to Long Beach's CDBG priorities.

#### **Other Potential Financing Tools**

In addition to the financing tools described above, two emerging financing strategies that leverage multiple sources of funding could be used to make longer term and larger investments:

- Structured Funds. A "structured fund" is a loan fund that pools money from different investors with varying risk and return profiles. Structured funds have a very specific dedicated purpose, which is clearly defined prior to forming the fund, and they are managed by professionals with fund formation and loan underwriting experience. Because at least a proportion of the investors in a structured fund have an expectation of return on investment, the types of projects financed with these funds must be revenue generating. For example, many regions have begun forming structured funds to acquire and develop affordable housing near transit, which generates rental revenues that can be used to pay back investors. However, this tool is not well suited for infrastructure improvements, which are not revenue generating.
- Revolving Loan Funds (RLF). A "revolving loan fund" is a pool of money dedicated to specific kinds of investments. As the loans are repaid, the funding pool is reallocated and loaned out again. RLF initial funding sources are typically public or private "seed money"—such as a grant, other public funds, or the one-time proceeds from sale of an

#### **Emerging Funding Sources** continued...

Cap-and-Trade Auction Proceeds. California established a cap-and-trade program to limit allowable greenhouse gas emissions. Beginning in late 2012, the state began regular auctions of greenhouse gas emission allowances.

The revenue produced by these allowance auctions may be available to fund transportation and sustainability improvements in Midtown.

However, the amounts, uses, and means of distributing the revenue are still evolving and will continue to change as state agencies finalize programs and rules for their use in the context of the state budget process.

asset—and/or an ongoing stream of revenue like a dedicated portion of a new or existing tax. RLFs can provide low-interest loans and access to capital markets for projects that have poor risk profiles to meet economic development, environmental, or other public policy goals. In contrast to a structured fund, which is capitalized by investors with an expectation of return, the seed money used to start an RLF typically does not need to be paid back, so the funding can revolve indefinitely. If the City is able to identify a source for the seed money, an RLF may be a feasible financing tool for infrastructure in Midtown.

Table 7-3 provides a summary of the applicable funding sources by infrastructure improvement category for the improvement projects.

#### TABLE 7-3 FUNDING SOURCES FOR INFRASTRUCTURE IMPROVEMENTS

		Improvement Category				
Funding Source Category	Funding Source	Bicycle Network & Facilities	Pedestrian Enhancements	Streetscape	Park & Recreation	Transit Facilities
Local Revenues & Fees	Local Revenues	X	X	X	X	X
	User Fees					X
	BID/PBID	X	X	X	X	X
Property-Based Financing Tools	Assessment District	X	X	X	X	X
	Community Facilities District	X	X	X	X	X
Development	Impact and In-Lieu Fees	X	X	X	X	X
	Development Agreements	X	X	X	X	X
	Local Partnerships		X	X	X	X
	SCAG RTP	X	X	X		X
	LA Metro TIP	X	X	X		X
	SCAG ATP	X	X	X		
	Caltrans ATP	X	X	X		
Grant Programs	HCD Housing-Related Parks				X	
	HCD IIG		X	X		
	HCD TOD Housing	X	X	X		X
	California Parks and Rec LWCF				X	
	HUD CDBG	Х	Х	X	Х	Х
Other Tools	Structured Funds					
	Revolving Loan Funds	X	X	X	X	X

# 7.4 RELATIONSHIP TO OTHER PLANS, PROGRAMS, AGENCIES, AND REGULATIONS

The Midtown area is an integral part of the overall fabric of Long Beach, and implementation of this Specific Plan will affect and be affected by activity and plans in the City and region. Although this Specific Plan serves as the new development or zoning plan for the area, several other City and regional plans influence the Midtown area. The following is a list of the most relevant plans, programs, agencies, and regulations that should be referenced in the future.

#### 7.4.1 Local Plans, Programs, and Regulations

#### Long Beach Municipal Code

The Zoning Regulations (Title 21 of the Long Beach Municipal Code), in conformance with the General Plan, regulate land use development in the City of Long Beach. In each zoning district, the zoning regulations specify the permitted and prohibited uses, as well as the development standards, including setbacks, height, parking, and design standards, among others.

When a specific plan is adopted by ordinance, the specific plan effectively replaces portions or all of the current zoning regulations for specified parcels and becomes an independent set of zoning regulations that provide specific direction to the type and intensity of uses permitted or define other types of design and permitting criteria. The Midtown Specific Plan is adopted by ordinance and serves as the zoning for the project area. Where this Specific Plan is silent, the relevant sections and requirements of the zoning regulations shall still apply.

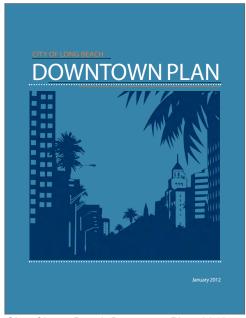
#### The City of Long Beach Downtown Plan

The Downtown Plan, also known as PD-30, seeks to guide how new private and public development can capitalize on existing strengths and enhance the Downtown area overall—making it a more complete place. This plan draws on form-based elements to emphasize the role of building design and character in defining and activating the nearby public realm.

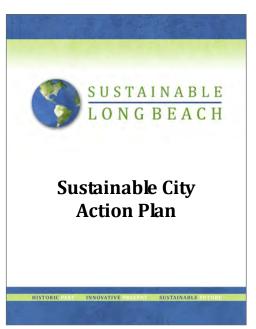
Long Beach Boulevard is a main thoroughfare connecting Downtown to the subregion, I-405, and many Long Beach neighborhoods. This Specific Plan draws from many of the design principles, multi-modal strategies, and mixed-use development standards in the Downtown Plan to create consistency with and connectedness between the two planning areas.

#### Central Long Beach Redevelopment Project Area

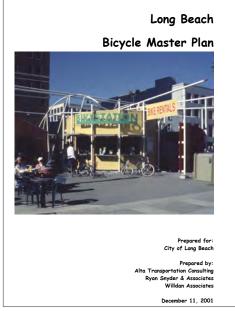
Prior to the statewide elimination of redevelopment in 2012, the project was in the Central Long Beach Redevelopment Area. The overall vision for the redevelopment area was to redirect and concentrate commercial facilities within significant centers along major corridors while accommodating residential needs and preserving and rehabilitating existing neighborhoods.



City of Long Beach Downtown Plan, 2012



City of Long Beach Sustainable City Action Plan, 2010



Long Beach Bicycle Master Plan, 2001

The vision for this Specific Plan carries over these vision elements, along with other more focused project objectives and principles. The loss of redevelopment means the City will need to evaluate a number of funding sources and partnerships to implement this Specific Plan.

#### **Sustainable City Action Plan**

The Sustainable City Action Plan includes focused initiatives, goals, and actions to guide Long Beach toward becoming a sustainable city. The plan emphasizes more natural processes and products, reduced consumption, and less waste to maximize benefits while imparting the smallest negative impacts. Improving quality of life, economic development, culture, and public and environmental health are just a few of the expected outcomes.

In concert with the Sustainable City Action Plan, the Midtown Specific Plan seeks to incorporate more sustainable housing, transit, and lifestyle options. Providing opportunities for transit-oriented, mixed-use housing and a multi-modal approach to circulation will increase pedestrian, bicycle, and mass-transit activity. Less reliance on automobiles and increased tree canopy, green space, and landscaping may assist in decreasing greenhouse gas emissions. The design guidelines and development standards in this Specific Plan also establish sustainable standards for energy efficiency, green building, landscaping, and drainage for the planning area.

#### Long Beach Bicycle Master Plan

The Bicycle Master Plan guides the development and maintenance of bicycle-friendly roads, bikeways, support facilities, and programs for the City. This policy document aims to reduce traffic congestion by providing better facilities for biking and enhancing alternatives to commuting by car. The City's commitment to being the nation's most bicycle-friendly city relies on implementation and integration of all of the City's mobility and transit-related plans.

With the integration of complete streets and enhanced mobility, this Specific Plan prescribes improved crossings and reevaluates the right-of-way design for Long Beach Boulevard to better accommodate bicycles along the corridor. Improvements to Long Beach Boulevard corridor include a new bicycle path along the boulevard, intersecting with bicycle parking at three transit stations and bicycle routes on cross streets. The City anticipates updating the Bicycle Master Plan in 2016.

#### Planned Development District 29 (PD-29)

Some areas of the City are zoned as special districts, called Planned Development Districts, which are more comprehensive than conventional zoning and are intended to achieve a specific outcome in a geographic area. In 2011, Planned Development District 29 (PD 29) regulated 311 acres along Long Beach Boulevard from Wardlow Road to 7th Street (including sphere areas and public right-of-way). In 2012, the City adopted

the Downtown Plan which assumed regulatory control of the portion of PD 29, south of Anaheim Street along Long Beach Boulevard. With the adoption of this Specific Plan PD-29 is rescinded and land use for the remaining areas are now regulated either by conventional zoning or this Specific Plan.

#### Metro Blue Line Bicycle and Pedestrian Access Improvement Plan

The Blue Line Bicycle and Pedestrian Access Plan assesses and recommends physical infrastructure and safety improvements to increase bicycling and walking to nine Metro Blue Line light rail transit stations. The improvement plan includes new crosswalks and countdown signals, a wayfinding plan, resurfacing of designated bikeways, improved lighting, and more bike parking.

The Willow, Pacific Coast Highway (PCH), and Anaheim stations are included in this improvement plan and in this Specific Plan.

Recommended improvements for the Anaheim and PCH stations include:

- Enhanced access at the southern end of the station.
- · Widening sidewalks and installing buffers, such as bike lanes and landscaping, to protect pedestrians.
- · Intersection improvements, including high-visibility crosswalks and bicycle loop detectors.
- Development of bicycle boulevards along 12th, 15th, and 20th streets.

Recommendations for the Willow Station include:

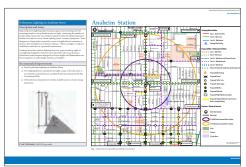
- Adding trees, street furniture, and increased lighting to create a buffer zone between pedestrians and street traffic.
- · Repaving sidewalks and installing curb ramps with truncated domes at all intersections.
- Installing high-visibility crosswalks and increasing pedestrian crossing time.
- Increasing the link between the station and Veteran's Park by installing wayfinding signs and converting the existing sidewalk into a Class I shared use path.
- Development of a bicycle boulevard along Pasadena Avenue.
- Installation of bike parking in the plaza adjacent to the station.

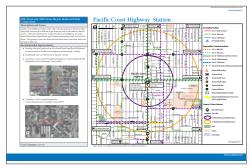
The recommendations for intersection, pedestrian, and bike improvements in the improvement plan are consistent with the vision of the Midtown Specific Plan. The design guidelines and development standards of this Specific Plan should be used for implementing signage, landscaping,



Metro Blue Line Bicycle and Pedestrian Access Improvement Plan, 2011







Recommended improvements to Willow (top), Anaheim (middle), and PCH (bottom) stations.

street furniture, and access to the transit stations. The implementation of improvements from both plans support the City's goal to become the most bike-friendly city in America.

#### Willow Station Bike Transit Hub Access Plan

The Willow Station Bike Transit Hub Access Plan identifies improvements for Willow Station along Long Beach Boulevard. The assessment of the station found that it is underserved, with poor access and inadequate bike lockers and racks. Recommended improvements include new bike lanes, restriping, and intersection improvements such as bicycle signal detectors, modifications to signal timing, and reconfigured crosswalks.

The Midtown Specific Plan recognizes the importance of Willow Station as a multi-modal transit hub along the corridor. The goals and vision for the planning area are consistent with the access and onsite improvements in and leading to the transit station. The design guidelines and development standards of this plan should be used for improving signage, landscaping, bike racks, and other furnishings.

#### Long Beach 2030-2035 General Plan

The General Plan sets forth the goals, policies, and directions the City will take in managing its future. It is the blueprint for development and a guide to achieving the long-term, citywide vision. The General Plan sets seven interrelated goals:

Increased mobility

- Affordable housing
- Reduction in greenhouse gas emissions
- Enhanced quality of life
- Compact & transit-oriented development Improved water quality
- Walkable neighborhoods & districts

These goals are integrated with the Midtown Specific Plan and are discussed in relation to the two elements-mobility and housing-that have the greatest influence in guiding the vision and goals of the Midtown Specific Plan. The General Plan also introduces the concept of place types and identifies strategies to improve Long Beach neighborhoods. Additionally, the land use element identifies Long Beach Boulevard as one of the targeted change areas.

## **Mobility Element**

The 2035 Mobility Element outlines the vision, goals, policies, and implementation measures required to improve and enhance the City of Long Beach's local and regional transportation system. The future vision of the City's transportation system includes a community which:



The Long Beach General Plan is a comprehensive, long-term plan that creates a vision for the future of the City.

- Offers flexible, convenient, affordable, and energy efficient transportation options.
- · Follows mobility practices that maintain and enhance safety while strengthening community, sense of place, urban design, and the natural environment.
- Encourages the use of the most efficient and convenient mode of travel for any particular trip.
- Embraces innovation and appropriate transportation technology.
- · Maintains professional standards in transportation planning and traffic engineering, with safety as the highest priority.
- Integrates land use planning with a multi-modal mobility network, providing people with options to choose various forms of convenient transportation.
- · Plans, maintains, and operates mobility systems consistent with the principles of complete streets, active living, and sustainable community design.

The Mobility Element also discusses the possible extension of Metro's Green Line. Options for expansion include extending the line through South Bay to Torrance and future connections across the Harbor Gateway into the Metro Blue Line Willow Station.

The Midtown Specific Plan and Mobility Element are consistent in their values and vision relative to circulation. Enhancing multi-modal transportation is a key strategy of both of these documents. The Mobility Element details improvements throughout the planning area—including synchronized traffic signals and reconfigured streets and freeway ramps to reduce congestion—as well as applying a context-sensitive approach to balance the mobility system throughout the City.

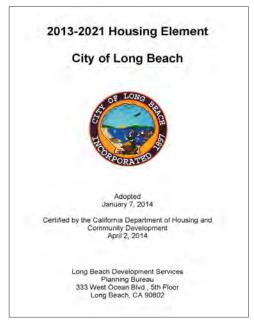
## **Housing Element**

The Housing Element is a tool to guide the City in planning for present and future housing needs, including strategies and programs to improve development regulations and accommodate future growth targets for housing affordable to all household incomes.

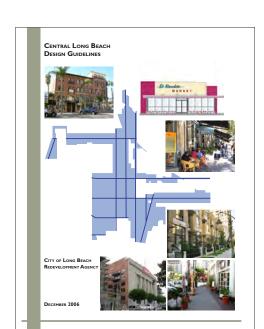
The Midtown Specific Plan promotes the economic and aesthetic revitalization of Long Beach Boulevard, including residential infill projects. It promotes a mix of uses and levels of residential intensity that benefit from existing and future mobility options. Higher density residential uses in this planning area could also be used to address lower income housing needs.



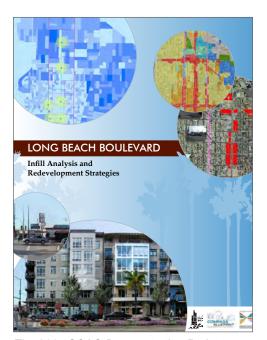
Long Beach General Plan Mobility Element, adopted 2013



Long Beach General Plan Housing Element, 2013-2021



Central Long Beach Design Guidelines, 2006



The 2007 SCAG Demonstration Project highlighted key issues and strategies for improving the corridor.

#### **Central Long Beach Design Guidelines**

The Central Long Beach Design Guidelines (CLBDG) are intended to implement the goals, design standards, and guidelines of the Central Long Beach Strategic Guide for Development. The guidelines strongly influenced and in some cases are directly reflected in the design guidelines in this specific plan. Design principles that are carried throughout both documents include placemaking, green building, human-scale development, and auto/transit-oriented considerations.

The Midtown Specific Plan strives to create a lively corridor through the physical environment—to produce quality design that enhances the experience of those living, working, and visiting the planning area. Like the CLBDG, this plan takes a comprehensive approach to shaping physical features by emphasizing building form and landscape design to reinforce urban and transit-oriented development patterns.

## **Long Beach Boulevard Infill Analysis and Redevelopment** Strategies

This SCAG Compass Blueprint Corridor Study analyzes leveraging recent investments to the Metro Blue Line to spur redevelopment along Long Beach Boulevard. The analysis found that PD-29 zoning regulations at the time were inhibiting private investment. The report recommends updating development and parking standards, establishing a Tax Increment Financing District, increasing the mix of land uses, and improving the streetscape.

Ultimately, this report resulted in the Long Beach Boulevard Midtown Specific Plan. The Midtown plan incorporates the analysis of the infill analysis and strategies into new development standards, design guidelines, mobility plan, and streetscape improvements.

#### 7.4.2 Regional and State Programs, Agencies, and Regulations

#### **Statewide Transportation Improvement Program**

The California Transportation Commission administers transportation programming, which is the public decision-making process that sets priorities and funds projects envisioned in long-range transportation plans. It commits expected revenues over a multiyear period to transportation projects. The Statewide Transportation Improvement Program (STIP) is a multiyear capital improvement program of transportation projects on and off the state highway system, funded with revenues from the state highway account and other funding sources. The California Department of Transportation manages the operation of state highways, including Pacific Coast Highway (State Route 1) and the freeways passing through Long Beach.

#### **Southern California Association of Governments**

The metropolitan planning organization (MPO) for each region must develop a sustainable communities strategy (SCS) that integrates transportation, land-use, and housing policies to plan for achievement of the emissions target for their region. Every four years, the Southern California Association of Governments (SCAG) updates the Regional Transportation Plan/ Sustainable Communities Strategy (RTP/SCS) for the six-county region: Los Angeles, San Bernardino, Riverside, Orange, Ventura, and Imperial counties. The 2012-2035 RTP/SCS vision encompasses three principles that collectively work as the key to the region's future: mobility, economy, and sustainability. It includes a strong commitment to reduce emissions from transportation sources to comply with California Senate Bill 375 (SB 375; the Sustainable Communities Act), improve public health, and meet the National Ambient Air Quality Standards set by the federal Clean Air Act. The 2012–2035 RTP/SCS provides a blueprint for improving quality of life for residents by providing more choices for where they will live, work, and play and how they will move around. The Midtown Specific Plan is consistent with several of the RTP/SCS goals:

- · Maximize mobility and accessibility for all people and goods in the region.
- Ensure travel safety and reliability for all people and goods in the region.
- Preserve and ensure a sustainable regional transportation system.
- Maximize the productivity of our transportation system.
- · Protect the environment and health of our residents by improving air quality and encouraging active transportation (non-motorized transportation, such as bicycling and walking).
- Encourage land use and growth patterns that facilitate transit and nonmotorized transportation.

Though many projects are scheduled through the 2012-2035 RT/SCS throughout Long Beach, none of them are specifically within the Midtown area. Every four years, SCAG updates the Regional Transportation Plan (RTP/SCS). Planning is currently underway for the 2016-2040 Regional Transportation Plan and Sustainable Communities Strategy.

Additionally, SCAG started a visioning process in 2001 that culminated in a regional strategy to accommodate the coming growth. This strategy, called "Compass Blueprint," is integrated with the RTP/SCS and promotes a stronger link between regionwide transportation and land use planning. The strategy also encourages creative, forward-thinking, and sustainable development solutions that fit local needs and support shared regional values, based on the following four key Compass Principles. This program is now known as the Sustainability Planning Grant Program which supports







SCAG's Regional Transportation Plan (2012) and the Compass Blueprint logo



AB 32's Climate Change Scoping Plan provides the framework for helping California meet its greenhouse gas reduction goals.

exemplary projects that illustrate the value effective growth planning can bring to the region. The program provides assistance to local jurisdictions to test planning tools by providing technical assistance to complete planning and policy efforts that enable implementation for the regional SCS. Grants of this nature may be a resource for implementation of this Specific Plan.

#### **Global Warming Solutions Act**

The Global Warming Solutions Act (AB 32) of 2006 established a comprehensive program to reduce greenhouse gas emissions to combat climate change. This bill requires the California Air Resources Board (CARB) to develop regulations to reduce greenhouse gas emissions to 1990 levels by 2020. As of January 1, 2012, the greenhouse gas rules and market mechanisms adopted by CARB took effect and are legally enforceable.

The reduction goal for 2020 is to reduce greenhouse gas emissions by 25 percent of the current rate in order to meet 1990 level, and a reduction of 80 percent of current rates by 2050. The AB 32 Scoping Plan contains the main strategies California will use to reduce the greenhouse gases. The scoping plan has a range of greenhouse gas reduction actions that include direct regulations, alternative compliance mechanisms, monetary and nonmonetary incentives, voluntary actions, market-based mechanisms such as a cap-and-trade system, and an AB 32 program implementation regulation to fund the program.

#### Sustainable Communities and Climate Protection Act

The Sustainable Communities and Climate Protection Act (SB 375) of 2008 provides incentives for cities and developers to bring housing and jobs closer together and improve public transit. The goal behind SB 375 is to reduce automobile commuting trips and thus help meet the statewide targets for reducing greenhouse gas emissions set by AB 32.

SB 375 requires each MPO to add a broader vision for growth—the sustainable communities strategy (SCS)—to its transportation plan. The SCS must lay out a plan to meet the region's transportation, housing, economic, and environmental needs in a way that enables the area to lower greenhouse gas emissions.

#### California Complete Streets Act

The California Complete Streets Act (AB 1358) of 2008 requires circulation elements updated in 2011 or later to address the transportation system from a multi-modal perspective. The bill states that streets, roads, and highways must "meet the needs of all users in a manner suitable to the rural, suburban, or urban context of the General Plan." Essentially, this bill requires a circulation element to plan for all modes of transportation where appropriate, including walking, biking, car travel, and transit.

The Complete Streets Act also requires circulation elements to consider the multiple users of the transportation system, including children, adults, seniors, and the disabled.

#### **Los Angeles County Congestion Management Program**

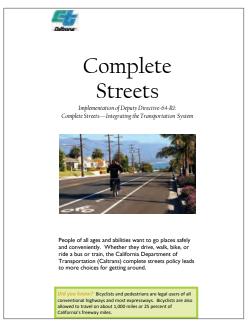
The County of Los Angeles and its transportation agency, Metro, updated the Congestion Management Program (CMP) in 2010 to assess the overall performance of the highway system and provide decision makers with quantitative input for funding improvements and programs. The CMP covers approximately 500 miles of freeway facilities that are divided into 81 key segment pairs. The traffic operations at each segment are evaluated every two years by Caltrans and published in the CMP for Los Angeles County. The CMP for Los Angeles County designated certain arterial roadways and freeway segments as CMP facilities:

Roadways: Pacific Coast Highway, 7th Street, Alamitos Avenue, Orange Avenue

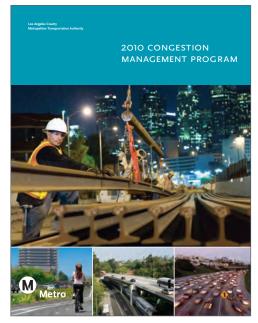
Freeways: I-710, I-605, I-405, SR-91

The County's traffic congestion management policy is intended to determine appropriate transportation planning actions in response to a particular level of service (LOS). As a result, an intersection with a poor LOS does not necessarily preclude new development at or around that intersection. Instead, the local agency will need to respond to intersection LOS with a three-tiered approach:

- 1. Manage speeds and motorist behavior at intersections with high LOS.
- 2. Review traffic growth patterns when congestion begins to appear and planning for appropriate ways to address additional congestion.
- 3. Take steps to manage congestion, including moving from intersectionspecific metrics to LOS for an entire corridor.



California Complete Streets Act, 2008



Los Angeles Metropolitan Transportation Authority County Congestion Management Program, 2010



Los Angeles Metropolitan Transportation Authority Long Range Transportation Plan. 2009

#### Los Angeles County Metropolitan Transportation Authority

Metro is the planning, coordinating, designing, building, and operating transportation agency for Los Angeles County. The agency's 2009 Long Range Transportation Plan (LRTP) lays out a 30-year vision for the Los Angeles County transportation system. The LRTP focuses on connecting highways and arterials with bus, urban, and regional rail systems while reducing greenhouse gas emissions through the following goals:

- Expand the Metro fixed guideway/busway network to over 177 stations covering nearly 230 miles.
- Expand the Metro Rapid network to provide over 400 miles of service through 35 cities and the County of Los Angeles.
- Continue the commitment to operate and expand the Metrolink commuter rail system.
- · Continue the commitment to operate the paratransit bus system.
- Expand and improve bus and rail transit services throughout the county.
- · Fill in critical gaps along the carpool network.
- Build freeway interchanges and carpool lane connectors.
- Expand the Metro Freeway Service Patrol.
- Fund enhancements to arterial, signal synchronization, transportation demand management, bikeway, pedestrian, transit capital, and transportation through the Call for Projects.
- Promote rideshare and other Transportation Demand Management strategies that provide alternatives to driving alone.

The Blue Line light rail train system along Long Beach Boulevard is operated and maintained by Metro. This regional line connects Downtown Long Beach with Downtown Los Angeles and is one of the busiest urban railway systems in the nation. While the LRTP does not identify funded improvements for this regional connector, the Midtown Specific Plan provides guidance on median and street improvements to buffer the train and street activity with increased landscaping.

# **Gateway Cities Strategic Transportation Plan Active Transportation Element**

In 2013, the Gateway Cities Council of Government's (GCCOG) released a Draft Strategic Transportation Plan to promote strategies to reduce traffic and energy consumption while enhancing the quality of life and personal health of the people in its communities. This plan focuses on walking and cycling as alternatives to motorized transportation methods. The Active Transportation Element (ATP) of the Draft Strategic Plan recognizes the importance of bicycling and pedestrian infrastructure as a critical element in reducing the long-standing local and regional traffic concerns. These documents contain policy and action items toward making the GCCOG

region a great place to bike and walk. These include developing regional bicycle routes; access to schools, transit, and open space; and identifying support programs. The most important purposes of GCCOG ATP are to:

- Inventory policies and action being taken at the local level to support active transportation.
- · Identify broader programs and policies that can/should be supported at the COG level regarding funding, education, and safety.
- · Illustrate how the bike facilities proposed by local agencies form the framework for a COG-level system.
- Identify regionally significant bicycle projects that will help "stitch together" the individual jurisdiction plans and connect key activity centers.
- · Identify (graphically) the issues and potential improvements related to bicycle and pedestrian access at the major transit stations in the GCCOG.

The goal of the GCCOG is not to implement the strategies of the plan for each jurisdiction, but to participate in projects at a regional scale, and it can help cities to implement individual plans by assisting in finding funding, advocating for resources from agencies such as Caltrans or Metro, and/or with project vetting to stakeholders.

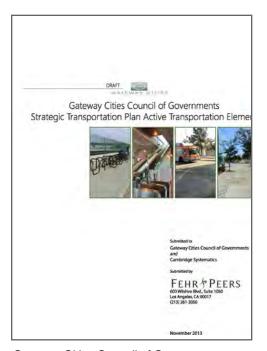
#### SB 226 CEQA Streamlining

In 2011, Governor Jerry Brown signed into legislation SB 226, which became effective in 2013. This bill streamlined the environmental review process for eligible infill projects by limiting the topics subject to review at the project level where the effects of infill development have been addressed in a planning level decision or by uniformly applicable development policies.

Under CEQA Guidelines Section 15183.3, a project may be eligible for streamlining if it is:

- Be located in an urban area on a previously developed site or surrounded by urban uses (75 percent of perimeter);
- Satisfy performance standards in CEQA Guidelines Appendix M; and
- Be consistent with the general use designation, density, building intensity, and applicable policies in the Southern California Association of Governments Sustainable Communities Strategy.





Gateway Cities Council of Governments Strategic Transportation Plan Active Transportation Element, November 2013 Draft (latest available document)

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Long Beach Development Services 333 W. Ocean Blvd., 3rd Floor Long Beach, CA 90802

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#### **Development Services**

**Planning Bureau** 

411 West Ocean Boulevard, 3rd Floor, Long Beach, CA 90802 562.570.6194



November 5, 2020

CHAIR AND PLANNING COMMISSIONERS City of Long Beach California

#### **RECOMMENDATION:**

Recommend that the City Council approve an Addendum to the Midtown Specific Plan Programmatic Environmental Impact Report;

Approve Zone Change ZCHG18-006 from Regional Highway (CHW), Community Automobile Orientated (CCA) and Two Family Residential (R-2-N) to Midtown Specific Plan (MTSP) Transit Node (TOD-L) Districts, over the following nine lots addressed as: 201 - 245 W. Pacific Coast Highway and 1827 Pacific Avenue (APN 7209-022-900, 7209-022-028; 7209-022-027, and 7209-022-023) and approve Zone Text Amendment ZCA18-008 to reflect the boundary change of the Zone Change expanding the area within the Midtown Specific Plan.

Approve Site Plan Review SPR18-054 to allow the construction of two, five-story buildings, consisting of 138-market-rate residential units and 24,911 square feet of commercial space located at 201 - 245 W. Pacific Coast Highway and 1827 Pacific Avenue, in the Midtown Specific Plan (SP-1); and

Approve Lot Merger LMG 18-032 to merge nine lots into two separate lots addressed as 201 - 245 W. Pacific Coast Highway and 1827 Pacific Avenue (APN 7209-022-900, 7209-022-028, 7209-022-027, and 7209-022-023). (District 6)

APPLICANT: Jan Van Dijs Inc.

Jan Van Dijs (on behalf of the property owner Kay Mendoza Trust)

425 E. 4th Street

Long Beach, CA 90802 (Application No. 1810-26)

## **DISCUSSION**

#### BACKGROUND

The site located on the north side of Pacific Coast Highway between Cedar Avenue to the west and Pacific Avenue to the east. The development site consists of nine lots, totaling 1.59 acres,



CHAIR AND PLANNING COMMISSIONERS November 5, 2020 Page 2 of 9

that are bisected by an unnamed alley that runs north to south. The project site is surrounded by multi-family residential and commercial uses to the north, an education facility across Pacific Coast Highway to the south, commercial and multi-family uses across Pacific Avenue to the west, and commercial uses across Cedar Avenue to the east (Exhibit A - Vicinity Map). The site is zoned Regional Highway (CHW), Community Automobile Orientated (CCA) and Two Family Residential (R-2-N) Districts and has a General Plan Land Use Place type of Transit Orientated Development (TOD-L) Districts.

The western half of the site is occupied by a retail food market and parking lot. The eastern half of the project site was developed with a commercial building and parking lot located on the parcel addressed as 201 W. Pacific Coast Highway and a single-story motel located on the parcel addressed on 1827 Pacific Avenue. The motel was demolished in 2011.

#### PROJECT PROPOSAL

The existing commercial building would be demolished, and the site developed with mixed-use development project (Exhibit B - Plans). The project includes two buildings that will be connected by raised pedestrian bridges over the existing alley that is to remain. In total, the site would be developed with 138-market-rate residential units and 24,911 square feet of ground floor commercial.

#### **ENTITLEMENTS**

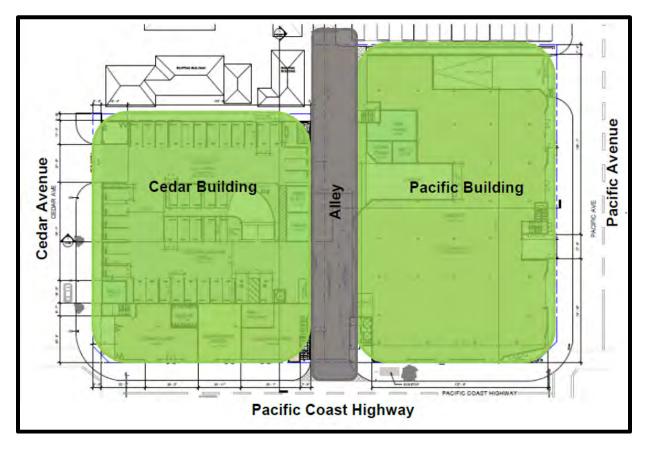
The proposed project requires several entitlements including the addendum to a Program Environmental Impact Report. The first required entitlement is a Site Plan Review, for the purpose of reviewing the design, architecture and layout of the proposed building and site plan. The second is a lot merger. The Lot Merger will create two single lots, one west of the alley and one east of the alley. The third is a zone change to rezone the existing parcels from Regional Highway District (CHW), Community Automobile Orientated (CCA) and Two Family Residential (R-2-N) Districts to the Midtown Specific Plan (MTSP) Transit Node (TN) district. The fourth is a Zone Code Amendment to modify language and maps in the Midtown Specific Plan to address the expansion of the boundary area of Midtown Specific Plan.

#### SITE PLAN REVIEW

The Midtown Specific Plan requires Site Plan Review for projects involving the construction of one or more new dwelling units. The Site Plan Review is a discretionary approval. Projects consisting of 50 dwelling units or more are required to participate in the Conceptual Site Plan Review process. A Conceptual Site Plan Review for this project was completed in 2018. On March 25, 2020, the Site Plan Review Committee reviewed the project's architectural design and layout, and approved the project subject to conditions, pursuant to LBMC Section 21.25.503. As this project proposes more than 50 dwelling units, the Planning Commission is the discretionary approval body for the Site Plan Review. If approved, the project would be contingent on approval of the Zone Change by City Council.

The project is a mixed-use development which will consist of 138-market-rate residential units and 24,911 square feet of commercial area in two buildings connected by pedestrian bridges which extend across the alley.

Figure 1: Project Site



The Cedar Building is located on the western portion of the project site and totals 27,528-square feet of land. The Pacific Building is located on the east portion of the project site, and totals 36,330 square feet of land. An alley that runs north and south biceps the development site. The buildings will be connected by raised pedestrian bridges.

## Pacific Building (East of Alley)

The Pacific building is proposed with five stories and varies in height from 62 feet up to 67 feet with allowed architectural projections. It is proposed with a 23,043-square-foot market located on the ground floor and 92 residential units located above (Levels 2-5). Two levels of subterranean parking is proposed with a total of 182 parking spaces for residents and guests.

# Cedar Building (West of Alley)

The Cedar building is proposed with five stories and a mezzanine parking level<sup>1</sup>. The ground floor includes a 1,941-square-foot commercial retail area, a business center, a leasing/lobby

<sup>&</sup>lt;sup>1</sup> Long Beach Municipal Code defines "Mezzanine" in accordance with the Building code. According to the Building Code mezzanine is defined as an intermediate level or levels between floor and ceiling of any story, which is not an enclosed space. The mezzanine is located between the ground floor and the second level and it is not enclosed. Therefore, the Cedar building is considered to have five stories and not six stories.

area and surface parking. A total of 46 residential units will be located on levels two through five. Parking will be provided on the ground floor and on the mezzanine level which will provide a total of 76 parking spaces that will support the commercial uses for both buildings.

The Cedar building will range in height from 29 feet along the north property line and steps up to 67 feet along Pacific Coast Highway. The Cedar Building was designed to step down in height in a terraced design. This terrace design pushes the bulk and mass of the buildings away from the residential properties towards Pacific Coast Highway.

The buildings will feature white-colored stucco walls accented with grey-colored cement board and dark brown wood cladding. White vinyl windows and black metal guardrails provide contrast to the white stucco walls. A condition has been added to require the windows be of a high-quality material and the window frames to be grey or black in color. The buildings will feature landscaped alcoves as a decorative architecture feature on the upper floors which will provide added greenery to the white colored walls. In addition, large pots or planter boxes would be provided along the perimeter of the building. The planter boxes, in addition to new street trees, will enhance the pedestrian experience at the ground level.

The average typical unit mix is shown for each building in the tables below:

Table 1: Unit Mix

Unit type	No. of subtypes	Average sq. ft.	Total No. of units	Percent of unit mix
Studio	1	668	9	7%
1 Bedroom	1	694	89	64%
2 Bedrooms	3	1,105 - 1,353	32	23%
3 Bedrooms	3	1,023 - 1,087	8	6%
	Total		138	100%

# Circulation and Parking

Access onto the development site will be provided from three access points, Pacific Avenue, Cedar Avenue and Pacific Coast Highway. A new driveway approach located on Pacific Avenue will provide access to the subterranean garage in the Pacific Building. A new driveway approach located on Cedar Avenue will provide access to ground level and mezzanine level parking stalls. The existing (north/south) alley will provide additional access to the site from Pacific Coast Highway. The alley will be widened from 16-feet to 30-feet wide which will provide access to the surface and mezzanine level parking stalls. The alley will also provide access to the loading truck bays located along the west side of the Pacific building adjacent to the alley.

A total of 258 (238 standard and 20 tandem) parking spaces would be provided for the project. The Pacific Building features two levels of subterranean parking providing 182 parking spaces for the residents/occupants. The Cedar Building will provide ground floor and mezzanine level parking totaling 76 parking spaces for the commercial uses. Required parking under the Midtown Plan for both automobiles and bicycles is shown in the tables below.

**Table 2: Parking** 

Type	Quantity	Parking Rate	Amt. Required*	Amt. Proposed*
Res. Units	138 Units	1 Bedrooms /1 per unit Bedrooms /1.25 per unit	148	151
Guest Parking	130 Office	1per 4 units	35	35
Commercial	24,911 sf	2 per 1,000 sf (first 4,000 exempt).	41.8	52
Total	-	-	225	238 (Plus 20 additional as Tandem)
* Final parking num	bers are rounde	d up to the nearest whole	number of parking	stalls

The required residential bike parking is provided in the subterranean level (P-1) of the Pacific Building and the commercial bike parking is provided in the surface and mezzanine level parking lots in the Cedar Building.

**Table 2: Bicycle Parking** 

Type	Quantity	Rate	Amt. Required	Amt. Proposed
Res. Units	138	1 per 2 units	69	78
Commercial	24,911 sf	1 per 7,500 sf (above 4,000 sf)	3.3 (4)	4
Total	-	-	73	8082

# Open Space

The development provides open space for both the residential and commercial components of the project. The open space is provided as private balconies, semi-private alcoves as well as two large common areas located on the second floors of both buildings. The project includes a 1,450-square-foot fitness room located adjacent to the common open space on the second floor of the Pacific building. In addition, 2,537 square feet of landscaping is provided for the commercial component located throughout the project's ground floor. The project exceeds minimum open space requirements.

**Table 4: Open Space** 

Туре	Quantity	ntity Rate Amt.		Amt. Proposed
Common/Private Open Space	138	50 sf per unit	6,900 sf	6,420 sf Private 1,579 sf Semi-private 12,166 sf Common
Commercial	24,911 sf	10% of the project area	2,491 sf	2,537 sf
Total	-	-	9,391 sf	22,702 sf

# LOT MERGER

As the development is proposed over nine lots and has an alley which bisects it, a Lot Merger is required to consolidate them into two, single lots. The Pacific building site consists of five lots which will be merged into a single, 36,330-square-foot, lot. The Cedar Building site consists of four existing lots which will be merged into a single, 27,528-square-foot, lot. Each new lot exceeds the minimum 10,000 square foot size required in the Midtown Specific Plan District

Table 5: Pacific Building Site (East of Alley)

PARCEL NUMBER	ADDRESS	SIZE (SQ. FT.)	Zoning	PRESENT USE
7209-022-900 <sup>2</sup>	1827 Pacific Ave.	16,000	CCA	Vacant
7209-022-028 <sup>3</sup>	201 W. PCH	20,330	CHW	Vacant

The Cedar Building parcels, identified in the table below, will be merged as part of the project.

Table 6: Cedar Building Site (West of Alley)

PARCEL NUMBER	ADDRESS	SIZE (SQ. FT.)	Zoning	PRESENT USE
7209-022-0274	231 W. PCH	16,000	R-2-N	Commercial
7209-022-023 <sup>5</sup>	245 W. PCH	12,728	CHW	Vacant

LBMC Section 20.28.030 requires findings to be made in order to support the Lot Merger which include consolidating smaller lots to create larger conforming lots.

Customarily, the Zoning Administrator has the authority to review and approve Lot Merger requests. LBMC Section 21.21.201 allows the Zoning Administrator the discretion to refer applications to the Planning Commission for consideration. To consolidate the review process for the applicant and the public, the Zoning Administrator has referred this Lot Merger request to the Planning Commission so that it may reviewed alongside the Site Plan Review, Zone Change and the Zoning Code Amendment.

# ZONE CHANGE AND ZONE CODE AMENDMENT

The project site is currently zoned Regional Highway District (CHW), Community Automobile Orientated (CCA) and Two Family Residential (R-2-N) Districts. Mixed use development projects are not permitted in the CHW, CCA or the R-2-N Districts.

In contrast, the General Plan's Land Use Element, adopted in December 2019, designates the project site as Transit Orientated Development (TOD-L). The General Plan serves as the guide or constitution for future development within the City. This PlaceType is a mixed-use land use designation that allows commercial and residential uses such as apartments and condominiums. The current zoning is inconsistent with the General Plan PlaceType.

Accordingly, a Zone Change to the Midtown Specific Plan (MTSP) Transit Node (TN) district (Exhibit C - Proposed Midtown Specific Plan Map) is proposed. The Midtown Specific Plan would be expanded one block west to Cedar Avenue where the development project is located. The Transit Node Districts have two distinct areas, High and Low. This development site will be changed to the Transit Node Low (TOD-L) District. Staff is supportive of the Zone Change as the proposed TN-Low zone will better align the zoning designations of the parcels to the

<sup>&</sup>lt;sup>2</sup> Lot Number 28

<sup>&</sup>lt;sup>3</sup> Lot Numbers 30, 32, 34 and 36

<sup>&</sup>lt;sup>4</sup> Lot Numbers 29 and 31

<sup>&</sup>lt;sup>5</sup> Lot Numbers 33 and 35

CHAIR AND PLANNING COMMISSIONERS November 5, 2020 Page 7 of 9

PlaceType outlined in the Land Use Element and facilitate the construction of new housing. The development project would serve as an appropriate transition between the existing commercial uses that flank Pacific Coast Highway and the multi-family residences located on Cedar Avenue.

The General Plan Land Use Placetype TOD-L is characterized with average densities up to 44 dwelling units per acre and seven stores in height. The General Plan Land Use Map permits building heights up to seven stories for the development site. The MTSP TN-L district allows a floor area ratio (FAR) of 3.0 and up to 65 feet in height and a maximum of five stories for parcels with depths of 200 feet or greater. MTSP does not have a maximum density for residential units; rather density is controlled by the development standards including building height, setbacks, parking, open space standards, etc. The project is proposed with a density of 87 dwelling units per acre, a FAR of 2.6, will have a maximum height of 64 feet and five stories. The proposed density conforms to the development standards of the MTSP TN-L and is considered consistent with the general characteristics of the Placetype TOD-L; it anticipates higher density residential mixed with commercial uses in a proximity to transit. The terraced design of the Cedar building provides transition from the single and multi-family residences to the north. The development site is located in a high transit area which provides access to rapid transit High Transit (Exhibit D - Map). The eastern edge of the project is located just outside of the 1/4-mile radius from transit, the determined radius for walkability to transit, from the "A" line but is well within the critical one-mile distance for potential riders. The project site is located along Long Beach Transit bus routes with bus stops located adjacent to the site on Pacific Coast Highway and Pacific Avenue.

The Zoning Code Amendment would modify language in the Midtown Specific Plan and affected maps for the purpose of reflecting the expanded boundary of Midtown Specific Plan (Exhibit E - Proposed Language Zoning Code Amendment). There are no proposed changes to uses or development standards within the Midtown Specific Plan.

# Community Outreach

The developer conducted two community outreach efforts for the project. The first meeting was held at the Community Center in Wrigley in Fall of 2019 and another was held more recently via Zoom on July 6, 2020.

# **Public Comments**

One public comment letter was received from the Wrigley Association. The Association expressed concerns regarding the project's proposed height, density and lack of parking. The Association states that the project is not compatible with the neighborhoods existing development pattern. (Exhibit F - Public Comments)

# **PUBLIC HEARING NOTICE**

A 1/8<sup>th</sup> page notice of public hearing was published in the Long Beach Press-Telegram on October 22, 2020, in accordance with the requirements of Chapter 21.21 of the Long Beach Municipal Code. Also, 326 notices were mailed out to 300-foot radius. No public comments were received at the time the report was prepared.

# **ENVIRONMENTAL REVIEW**

The Midtown Specific Plan for which a program Environmental Impact Report (State Clearinghouse No. 2015031034) was certified and adopted by the City Council in June of 2016. In accordance with the California Environmental Quality Act (CEQA) and the CEQA Guidelines, an Addendum to the Midtown Specific Plan EIR was prepared for the development project. Pursuant to Public Resources Code Section 21166 and CEQA Guidelines Section 15162, the proposed project has been analyzed in accordance with the Midtown Specific Plan EIR and will not result in any new significant impacts upon the environment, or any impacts greater than those analyzed in the Midtown Specific Plan EIR. A CEQA statement of support and environmental compliance determination has been prepared to document this finding (Exhibit G - Addendum to Midtown Specific Plan EIR). Therefore, no further environmental review is necessary.

The project will be subject to the Mitigation Monitoring and Reporting Program adopted with the Midtown Specific Plan EIR, which established mitigation measures that apply to the overall Midtown Specific Plan, including the proposed development that is the subject of this request. These mitigation measures pertain to aesthetics, air quality, cultural resources, geology and seismicity, greenhouse gas emissions, hazards and hazardous materials, hydrology and water quality, noise, traffic and circulation, utilities and service systems.

# RECOMMENDATION

Findings for the Zone Change, Zoning Code Amendment, Site Plan Review and the Lot Merger (Exhibit H = Findings) are attached. Based on these findings and conditions it is recommended that the Planning Commission recommend approval of 1) the Addendum to the Program EIR; 2) the Zone Change to Midtown Specific Plan; and 3) Zoning Code Amendment. The Planning Commission's action will serve as a recommendation to the City Council, who is the decision-maker on Zoning Code Amendments. It is recommended that the Planning Commission act to approve the Site Plan Review and Lot Merger conditioned upon approval of the Zone Change by the City Council (Exhibit I - Conditions of Approval).

CHAIR AND PLANNING COMMISSIONERS November 5, 2020 Page 9 of 9

Respectfully submitted,

GINA CASILLAS

PROJECT PLANNER

CHRISTOPHER KOONTZ, AIĆP

DEVELOPMENT SERVICES DEPUTY DIRECTOR

OSCAR W. ORCI

DIRECTOR OF DEVELOPMENT SERVICES

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OO:CK:AO:gc

Attachments: Exhibit A - Vicinity Map

Exhibit B - Plans

Exhibit C - Midtown Specific Plan Proposed Map

Exhibit D - High Transit Map

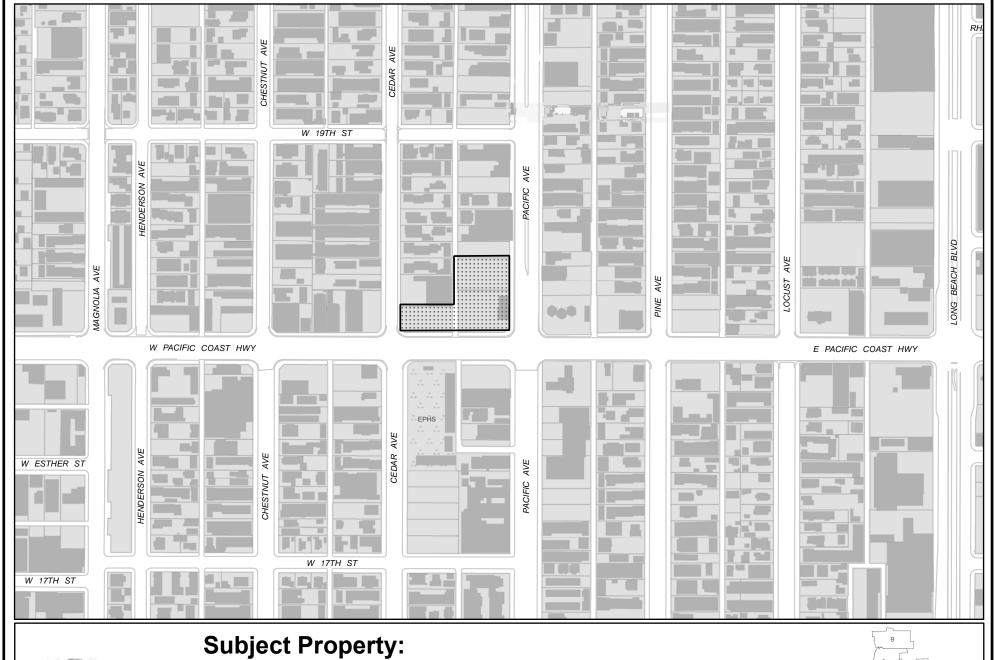
Exhibit E - Draft Zoning Code Text Amendment

Exhibit F - Public Comments

Exhibit G - Addendum to Midtown Specific Plan EIR

Exhibit H - Findings

Exhibit I - Conditions of Approval



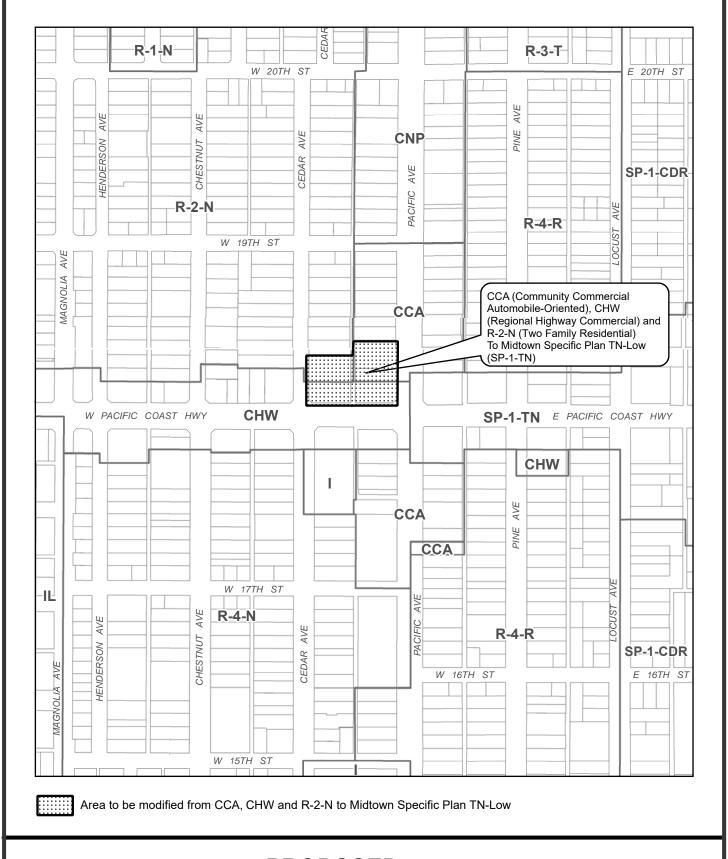


201-245 W Pacific Coast Hwy & 1827 Pacific Ave Council District 6 Zoning Code: CCA, CHW R-2-N

Attachment B









# PROPOSED AMENDMENT TO A PORTION OF PART 9 OF THE USE DISTRICT MAP

Rezoning Case # ZCHG18-006





SUBMITTAL DATE: October 5th. 2020

**201 PCH** 

201- 231 PACIFIC COAST HIGHWAY LONG BEACH, CALIFORNIA

Scale:



	CONTENT
SHEET NUMBER	SHEET NAME
A-000	COVER
A-001	CONTENT
A-002	PRECEDENT
A-003	PRECEDENT
A-004	PRECEDENT
A-005	RENDERING
A-006	RENDERING
A-007	RENDERING
A-008	PROJECT SUMMARY
A-009	OPEN SPACE DIAGRAM
A-010	NEIGHBORHOOD CONTEXT
A-011	SITE LOCATION
A-012	EXISTING SITE PHOTOS
A-013	SITE CIRCULATION
A-014	SHADOW STUDY
A-015	TURN RADIUS DIAGRAM
A-016	ATLA LAND SURVEY
A-100	SITE PLAN
A-101	LEVEL P-2
A-102	LEVEL P-1
A-103	LEVEL 1
A-104	LEVEL MEZZANINE
A-105	LEVEL 2
A-106	LEVEL 3
A-107	LEVEL 4
A-108	LEVEL 5
A-109	ROOF LEVEL
A-301	SOUTH ELEVATION
A-302	EAST ELEVATION
A-303	NORTH ELEVATION
A-304	WEST ELEVATION
4-304 4-305	VICINITY SOUTH ELEVATION
A-306	VICINITY EAST ELEVATION
4-306 4-307	VICINITY EAST ELEVATION VICINITY WEST ELEVATION
A-310	MATERIAL PALETTE
A-310 A-401	BUILDING SECTION 1
A-402	BUILDING SECTION 2
A-403	WALL SECTION 1
A-404	WALL SECTION 2
A-500	UNIT PLAN
A-501	UNIT PLAN
A-502	UNIT PLAN
A-503	UNIT PLAN
A-504	UNIT PLAN
A-505	UNIT PLAN
A-506	UNIT PLAN
A-507	UNIT PLAN

CONTENT					
SHEET NUMBER	SHEET NAME				
L-001	LANDSCAPE - GROUND LEVEL				
L-002	LANDSCAPE - SECOND LEVEL				
L-003	LANDSCAPE - THIRD LEVEL				
L-004	LANDSCAPE - FOURTH LEVEL				
L-005	LANDSCAPE - FIFTH LEVEL				
L-006	ENLARGEMENT PLAN				

A-001 CONTENT



201- 231 PACIFIC COAST HIGHWAY LONG BEACH, CALIFORNIA

Scale:

















A-002 PRECEDENT



201-231 PACIFIC COAST HIGHWAY LONG BEACH, CALIFORNIA

Scale:

**DLBC PROPERTIES** 

**201 PCH** 



























Scale:



201- 231 PACIFIC COAST HIGHWAY LONG BEACH, CALIFORNIA

STUDIO T SQUARE 2 STUDIO T-SQ 2., INC















A-004 PRECEDENT



**201 PCH** 







**201 PCH** 

201- 231 PACIFIC COAST HIGHWAY LONG BEACH, CALIFORNIA

Scale:

STUDIO T SQUARE 2 STUDIO T-SQ 2., INC



A-006
RENDERING



**201 PCH** 

201- 231 PACIFIC COAST HIGHWAY LONG BEACH, CALIFORNIA

Scale:

STUDIO T SQUARE 2 STUDIO T-SQ 2., INC



A-007
RENDERING



**201 PCH** 

201- 231 PACIFIC COAST HIGHWAY LONG BEACH, CALIFORNIA

Scale:

STUDIO T SQUARE 2
STUDIO T-SQ 2., INC

201 PCH, Long Beach								October/15/2020
	4- Stor	ry Apartm	ents on 1	Level Podium v	v/ 2 levels	below grad	e	October/15/2020
Site Area approx.:	1.59	ac	69,050					
Proposed FAR	3.00							
Proposed PAR	3.00	8 8	9					
UNITS	u u	AVERAGE S.F.	Unit Mix	Rentable S.F.	Mid Town Plan	City Parking Required		
studio(0 Bed+ 1 Ba)	9	668		6,012	1	9		
TOTAL STUDIO	9	3 0	7%	1	1			
1A (1 Bed+ 1 Ba)	89	694		61,766	1	89		
TOTAL 1BR	89		64%					
2A (2 Bed/2 Bath)	15	1,105		16,575	1.25	19		
2C (2 Bed/2 Bath)	4	1,061		4,244	1.25 1.25	5 16		
TH(2Bed/2.5Bath) TOTAL 2BR	13 32	1,353	23%	17,589	1.25	16		
3A (3 Bed/2 Bath)	4	1,023	23%	4,092	1.25	5		
3A (3 Bed/2 Bath) 3B (3 Bed/2 Bath)	2	1,023		2,592	1.25	3		
3C (3 Bed/2 Bath)	2	1,087		2,174	1.25	3		
TOTAL 3BR	8	1,007	6%	2/4/7	4.60	,		
Total units	138	7	100.0%	115,044		148		
Average unit size	200	834	100.072	220,011		2.10		
Tarisan and the Analysis and a said and a said and a said a said and a said a said and a said a said a said a								
*Guest Parking Required				200020	1/4 Unit	35		
Market w/Loading & Storage				22,975				
Café				1,936		42		15F 20,911 X 2/1000 = 41.822
Total Commercial Businesses Center				24,911 1,247		42	24,911 19 - 4,000 19 + 20,91	150 20,911 X 2/1000 = 41.822
Fitness/Club (podium)				1,450				
Mech./Utility/El				4,565				
Storage (P2, P1, R1 levels)				2,667				
Corridors (floor L1-L4)				29,700				
Lobby/Leasing/Mail				1,840				
Total				66,380	1.63	225		
Total Gross Building Area	1000	100		181,424				
PARKING PROVIDED	0.0			Area		Tandem	Compact	Standard
PARKING LEVEL R-1 STREET				18,131			0	
PARKING LEVEL MEZZ.				11,318			1	
PARKING LEVEL P-1				30,102		10	11	
PARKING LEVEL P-2				31,228		10	11	
Total Garage Area				90,779		20	23	
Total Provided Parking	-				_			23
Total Provided Parking (Including Tandem)			U.		-			25
BIKE PARKING				Required	Provided			
Retail	1 per 75	500 sq.ft.		4	4			
Residential	1 per 2	Units		69	78			
TOTAL BIKE PARKING				73	82			
OPEN SPACE			Required	Provided				
Commercial Open Space			2,491	2,537				
Common Open Space			6,905	12,166				
Amenities				2,696				
Semi-Private Open Space		-		1,579				
Private Open Space			6,900	6,420	6,420+1,579+7,999 1	F > 6,900 SF		
- units with private open space	97				40100000000000000000000000000000000000			
- units with semi-private open space	8							
- units without semi-/private open space	33							
TOTAL OUTDOOR OPEN SPACE			13,805	25,398				
	The second second							
DENSITY	Units 138		Site Area	acres	FAR	2.6	87	D.U./AC

# PROJECT INFORMATION

PROJECT DESCRIPTION

THE PROJECT IS A MIXED-USE PODIUM STYLE CONSRUCTION OF FIVE STORIES. 4 STORIES TYPE III RESIDENTIAL 138 UNITS OVER 1 STORY TYPE I RETAIL/GARAGE AND OVER 2 LEVELS OF SUBTERRANEAN PARKINGS.

TYPE OF CONSTRUCTION

TYPE IA - NON - COMBUSTIBLE FULLY SPRINKLERED NFPA 13 - P2,P1,L1 (PARKING GARAGE) TYPE III - COMBUSTIBLE FULLY SPRINKLERED NFPA 13 - L2,L3,L4,L5 (RESIDENTIAL

OCCUPANCY S-2-PARKING GARAGE (P2,P1,L1) M-RETAIL (L1) B-LEASING, FÍTNESS (L1,L2) R-2-RESIDENTIAL UNITS (L2,L3,L4,L5)

RESIDENTIAL STORAGE

REQUIRED STORAGE SPACE - MIN 25 S.F. IN AREA AND 175 CU.F PROVIDED: 2,667 S.F. (~15,000 CU.F)

RESIDENTIAL HANDICAP STALLS: REQUIRED 2% OF 151 SPACES - 3.0 SPACES PROVIDED: 4 SPACES (2-ACCESSIBLE VAN) - SEE LEVEL P1&P2

**GUEST HANDICAP STALLS:** 

REQUIRED 5% OF 35 SPACES - 2.0 SPACES

PROVIDED: 2 SPACES (1-ACCESSIBLE VAN) - SEE LEVEL MEZZANINE

PROVIDED (ASSIGNED TO A SINGLE UNIT): 20 SPACES

RETAIL STALLS: PROVIDED:

42 SPACES (2 ACCESSIBLE EV) - SEE LEVEL 1

6 SPACES (2 ACCESSIBLE) - SEE LEVEL MEZZANINE

USE	RATIO	REQUIRED	PROVII	DED
COMMERCIAL (24,911SF)	2/1000	41.822	48	
GUEST PARKING	1/4	138/4=35	35	(24 AT LEVEL MEZZANINE, 11 AT LEVEL P1)
RESIDENTIAL (138 UNITS)		148	151	
TOTAL:		224.822	< 234	Ī
			2	0 TANDEM
GRAND TOTAL:			25	4

COMMERCIAL PARKING: 24,911 SF - 4,000 SF = 20,911 SF 20,911 X 2/1000 = 41.822

**EV PARKING:** 

REQUIRED:

10% OF TOTAL REQUIRED PARKING SPACES SHALL BE ELECTRIC VEHICLE CHARGING SPACES. (10% OF 224.8 = 23 SPACES)

PROVIDED: 29 SPACES (6 ACCESSIBLE EV) - SEE LEVEL 1& LEVEL MEZZANINE.

**BICYCLE PARKING:** 

**DWELLING UNITS:** 

REQUIRED 1.0 SPACE FOR EVERY TWO DWELLING UNITS (138/2=69 SPACES)

PROVIDED: 78 SPACES

REQUIRED 1.0 SPACE FOR EACH 7,500 S.F (25,904 / 7,500= 3.45 SPACES)

PROVIDED: 4 SPACES

T SQUARE 2

A-008

**PROJECT** 

**SUMMARY** 

201 PCH

201- 231 PACIFIC COAST HIGHWAY LONG BEACH, CALIFORNIA

Scale:

STUDIO T-SQ 2., INC



**201 PCH** 

201-231 PACIFIC COAST HIGHWAY LONG BEACH, CALIFORNIA

Scale:1/32" = 1'-0" 1/64" = 1'-0" (if print 11"x17") STUDIO T SQUARE 2



A-010
NEIGHBORHOOD
CONTEXT

STUDIO

**LEGEND** 

Bus Stop

Metro Station

Site Educational

Medical Center

Gas Station

Commercial

Green Space

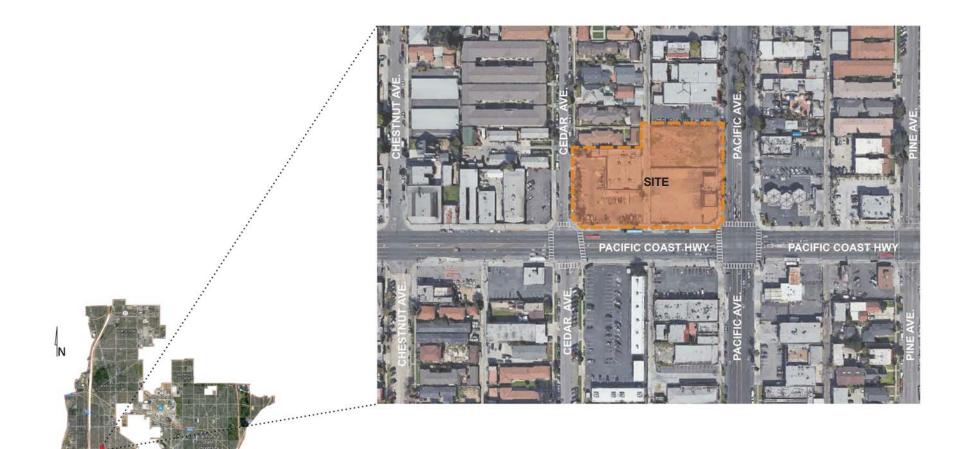
**201 PCH** 

201- 231 PACIFIC COAST HIGHWAY LONG BEACH, CALIFORNIA

Scale:

DLBC PROPERTIES

T SQUARE 2 STUDIO T-SQ 2., INC



A-011 SITE LOCATION



**201 PCH** 

201-231 PACIFIC COAST HIGHWAY LONG BEACH, CALIFORNIA

LONG BEACH























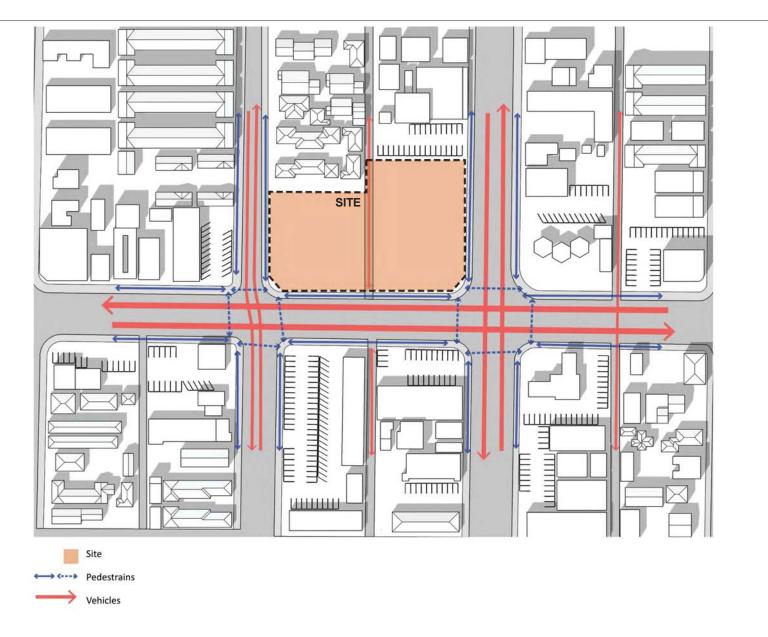
**201 PCH** 

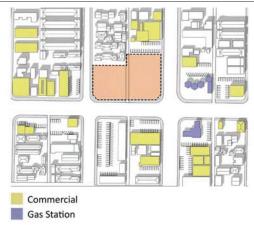
201-231 PACIFIC COAST HIGHWAY LONG BEACH, CALIFORNIA

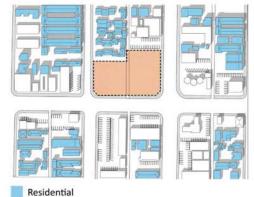
Scale:

A-012 EXISTING SITE PHOTOS









A-013



**CIRCULATION** 

**201 PCH** 

201-231 PACIFIC COAST HIGHWAY LONG BEACH, CALIFORNIA

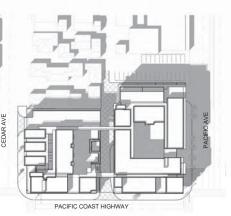
Scale:

**DLBC PROPERTIES** 

STUDIO T-SQ 2., INC

# **SPRING EQUINOX**

PACIFIC COAST HIGHWAY

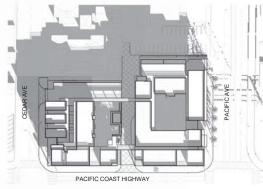




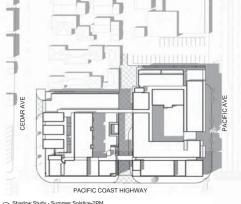


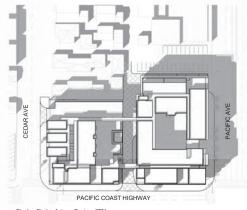


**AUTUMN EQUINOX** 



WINTER SOLSTICE





A-014 **SHADOW STUDY** 





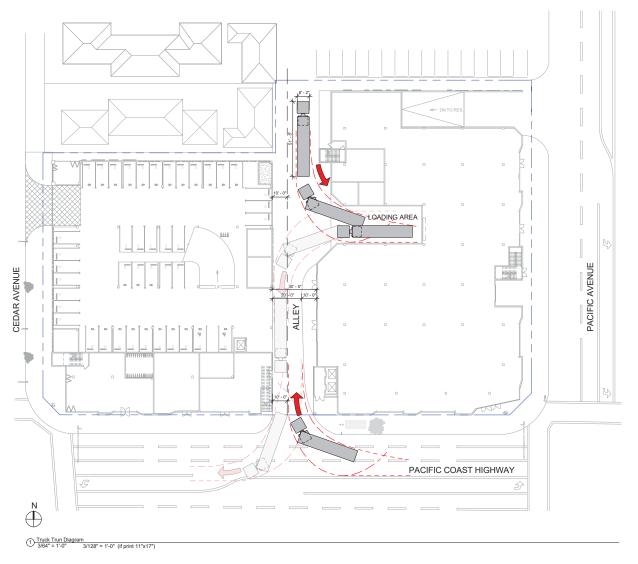
North

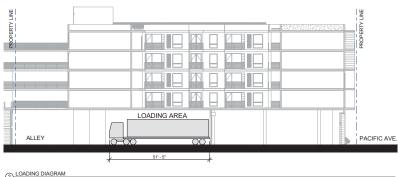
201- 231 PACIFIC COAST HIGHWAY LONG BEACH, CALIFORNIA

Scale:

**DLBC PROPERTIES** 

**201 PCH** 





A-015 **TURN RADIUS DIAGRAM** 

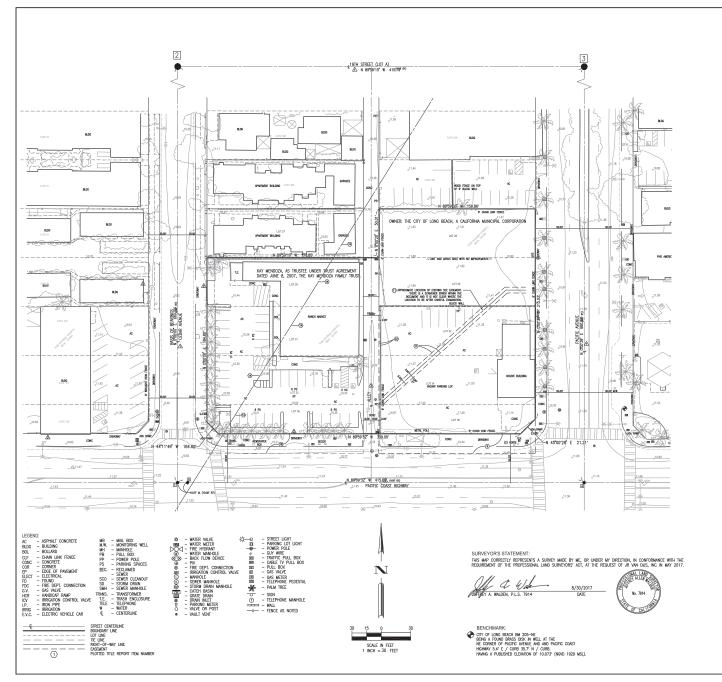


201- 231 PACIFIC COAST HIGHWAY LONG BEACH, CALIFORNIA

Scale:As indicated

**DLBC PROPERTIES** 

**201 PCH** 



TOCOS TITLE INSURANCE COMPANY REPORT NO. 00486286-989-BLA DATED JULY 03, 2017 WAS USED AS A BASIS FOR PREPARING THIS MAP, THE PREPARED OF THE SUMPEY AND MAP ASSUMES NO LUGBLITY FOR REPORTS OR DISCREPANCES STATED IN THIS REPORT NOR FOR ANY INFORMATION OF TRAITURE OF THIS TURNEY CONTROL DATA OWNERS. DET THE REPORT LOCEPT AS NOTHED BY THIS SURVEY.

- 1. GENERAL AND SPECIAL TAXES AND ASSESSMENTS FOR THE FISCAL YEAR 2017-2018, A LIEN NOT YET DUE OR PAYABLE.
- PAID TAXES
- 4. PAID TAXES.
- 5. TAX THE LIEN OF SUPPLEMENTAL TAXES, IF ANY.
- 6. WATER RIGHTS, CLAIMS OR TITLE TO WATER, WHETHER OR NOT DISCLOSED BY THE PUBLIC RECORDS.
- 7. COVENANTS, CONDITIONS AND RESTRICTIONS AS INDICATED IN BOOK 444, PAGE 213 OF OFFICIAL RECORDS.
- 8. COVENANTS, CONDITIONS AND RESTRICTIONS AS INDICATED IN BOOK 7314, PAGE 52 OF OFFICIAL RECORDS.
- (9) EASEMENT FOR STATE HIGHWAY PURPOSES AS INDICATED IN BOOK 12712, PAGE 241 OF OFFICIAL RECORDS AS SHOWN HEREON.
- 10. SHORT FORM LEASE AS INDICATED IN 2463 OF OFFICIAL RECORDS.
- (1) EASEMENT FOR UNDERGROUND CONDUITS, CABLES, VAULTS AND MANHOLES AND INCIDENTAL PURPOSES AS INDICATED IN 4871 OF OFFICIAL RECORDS AS SHOWN HEREON.
- (2) EASEMENT FOR STREET AND ALLEY INCIDENTAL PURPOSES AS INDICATED IN INSTRUMENT NO. 87-706269 OF OFFICIAL RECORDS AS SHOWN HEREON.
- 13. COVENANTS, CONDITIONS AND RESTRICTIONS AS INDICATED IN BOOK 814, PAGE 105 OF OFFICIAL RECORDS.
- (4) PIPELINE EASEMENT AS INDICATED IN DEED BOOK 1588, PAGE 255 OF OFFICIAL RECORDS.
- 15. COVENANTS, CONDITIONS AND RESTRICTIONS AS INDICATED IN DEED BOOK 2963, PAGE 275 OF OFFICIAL RECORDS.
- 16. COVENANTS, CONDITIONS AND RESTRICTIONS AS INDICATED IN DEED BOOK 3018, PAGE 147 OF OFFICIAL RECORDS.
- 17. COMEMANTS, CONDITIONS AND RESTRICTIONS AS INDICATED IN DEED BOOK 2963, PAGE 277 OF OFFICIAL RECORDS.
- (8) EASEMENT FOR STATE HIGHWAY PURPOSES AS INDICATED IN BOOK 12581, PAGE 390 OF OFFICIAL RECORDS AS SHOWN HEREON.
- 19. MEMORANDUM OF LEASE AGREEMENT AS INDICATED IN INSTRUMENT NO. 94-721224 OF OFFICIAL RECORDS.
- 20. DEED OF TRUST AS INDICATED IN INSTRUMENT NO. 06-2410969 OF OFFICIAL RECORDS.

### LEGAL DESCRIPTION

LOTS 32, 34 AND 36 OF THE STARR TRACT, IN THE CITY OF LONG BEACH, COUNTY OF LOS ANGELES, STATE OF CALIFORNIA, AS PER MAP RECORDED IN BOOK 7 PAGE 169 OF MAPS, IN THE OFFICE OF THE COUNTY RECORDED OF SAID COUNTY.

LOTS 29, 31, 33 AND 35 OF STARR TRACT, IN THE CITY OF LONG BEACH, COUNTY OF LOS ANGELES, STATE OF CALIFORNIA, AS PER MAP RECORDED IN BOOK 7 PAGE 169 OF MAPS, IN THE OFFICE OF THE COUNTY RECORDER OF SAID COUNTY.

APN: 7209-022-023, 7209-022-027, 7209-022-028

### MONUMENT NOTES:

- INDICATES FOUND MONUMENT AS NOTED.
- 1 FOUND SPIKE AND TAG STAMPED "CALTRANS" PER R7, ACCEPTED AS THE CENTERLINE INTERSECTION OF CEDAR AVENUE AND PACIFIC COAST HIGHW
- [2] FOUND BOLT WITH PUNCH, NO REFERENCE, ACCEPTED AS THE CENTERLINE INTERSECTION OF CEDAR AVENUE AND 19TH STREET.
- [3] FOUND IRON PIPE IN LIEU OF LITAT IN WELL MONUMENT PER R4 AT THE INTERSECTION OF PACIFIC AVENUE AND 19TH STREET.

### BASIS OF BEARINGS:

THE BEARINGS SHOWN HEREON ARE BASED UPON THE CENTERLINE OF CEDAR AVENUE HAVING A BEARING OF N 00°00'00" E PER R1 (MAP OF THE STARR TRACT, M.B. 0007/1698).

- SURVEY PREFERENCESS

  17 MW OF THE TRANSPORT LAB. 0007/1898

  18 WO OF THE CAMPRIAN COLOMY TRACT MAD 0017/1898

  19 WW OF THE CAMPRIAN COLOMY TRACT MAD 0017/089-090.

  19 WW OF THE CAMPRIAN COLOMY TRACT MAD 1017/089-090.

  10 WW OF THE CAMPRIAN COLOMY TRACT MAD 1017/089-090.

  10 LOS AMBRILES COUNTY PRIFE 0322/989-090.

  10 LOS AMBRILES COUNTY PRIFE 0322/998-090.

  10 LOS AMBRILES COUNTY PRIFE 0322/998-190.

### REJESTABLISHMENT NOTES:

- RE-ESTABLISHED THE CENTERLINE OF STREETS HOLDING FOUND MONUMENTS AS SHOWN HEREON PER R1.
- RE-ESTABLISHED THE STREET RIGHT-OF-WAYS AT RECORD DISTANCES PARALLEL WITH THE STREET CENTERLINES PER R1.
- A RE-ESTABLISHED THE CENTERLINE OF THE ALLEY BASED ON PROPATING RECORD DATA PER R1.
- A RE-ESTABLISHED THE LOT LINES BASED ON PRORATING RECORD DATA PER R1.

# **TOPOGRAPHIC SURVEY**

1832 CEDAR AVE. LONG BEACH, CA. 1827 PACIFIC AVE. LONG BEACH, CA. 201, 231, 245 W. PACIFIC COAST HWY, LONG BEACH, CA

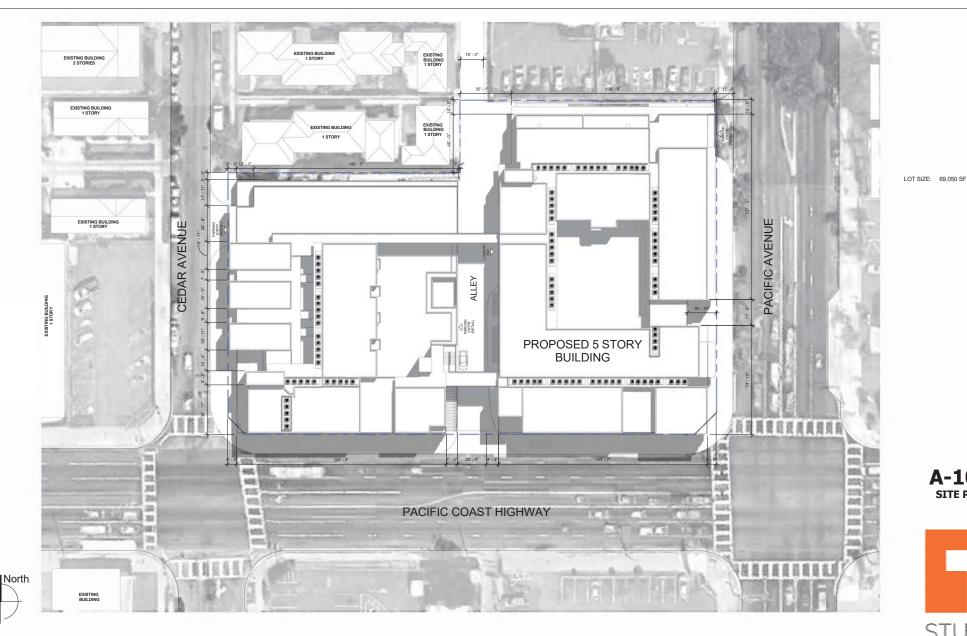


CIVIL ENGINEERS LAND SURVEYORS

08/30/2017 DRAWN BY:

REVISED 10/07/2020

J. MADDOX 1 of 1



A-100

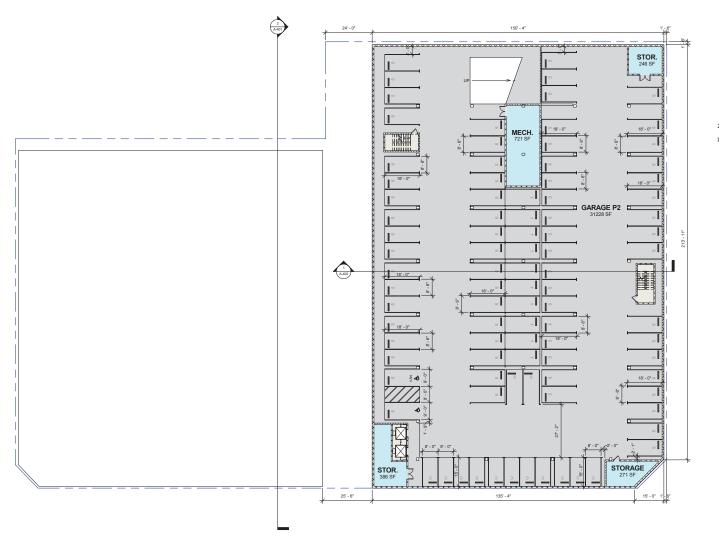
SITE PLAN



**201 PCH** 

201-231 PACIFIC COAST HIGHWAY LONG BEACH, CALIFORNIA

Scale:3/64" = 1'-0" 3/128" = 1'-0" (if print 11"x17")



2 LEVELS RESIDENTIAL PARKING LEVEL P-2: 72 STANDARD

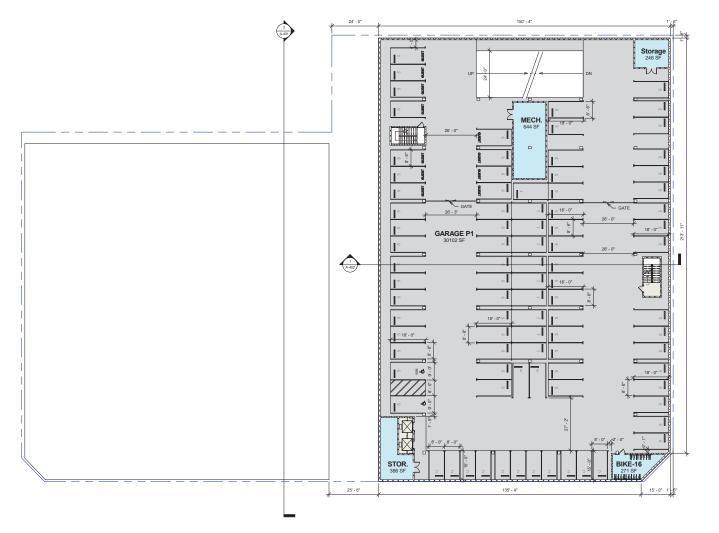
72 STANDARD 11 COMPACT 10 TANDEMS 93

**A-101**LEVEL P-2



201 PCH

201-231 PACIFIC COAST HIGHWAY LONG BEACH, CALIFORNIA



2 LEVELS RESIDENTIAL PARKING

LEVEL P-1:

P-1: 68 STANDARD (11 GUEST STANDARD) 11 COMPACT 10 TANDEMS 89

BIKE PARKING:

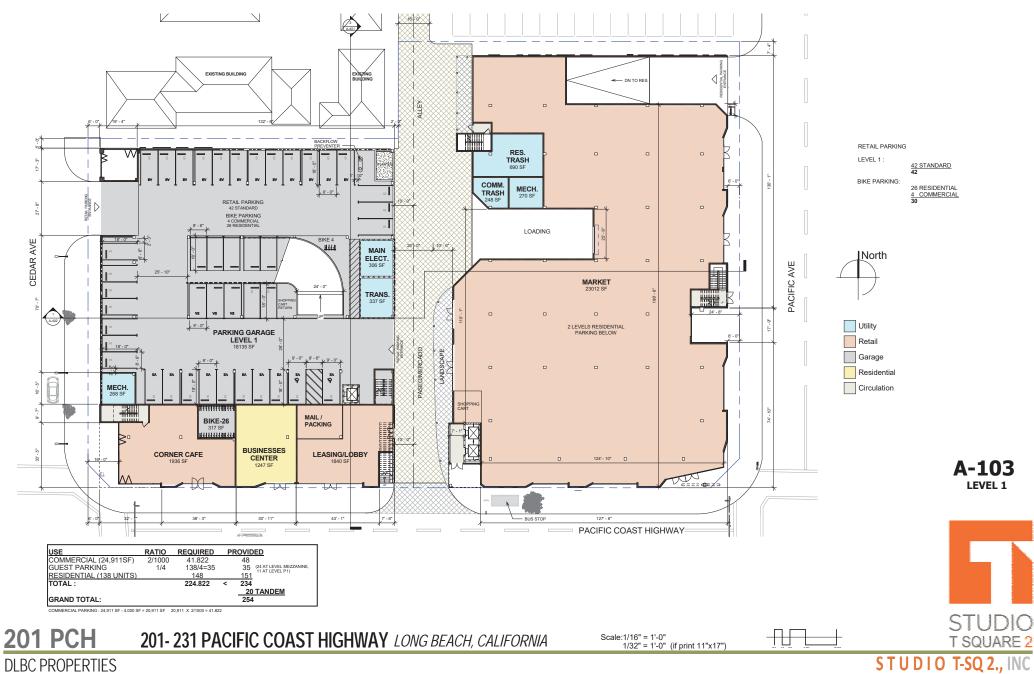
16 RESIDENTIAL

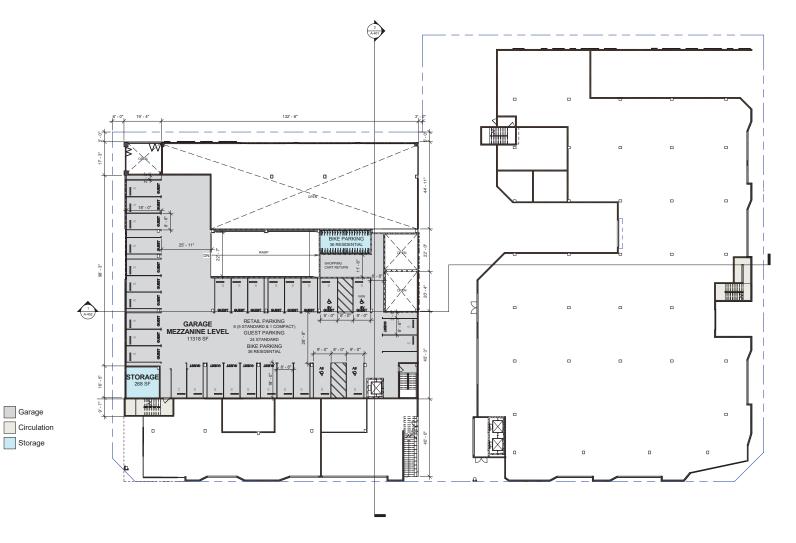
A-102
LEVEL P-1



201 PCH

201-231 PACIFIC COAST HIGHWAY LONG BEACH, CALIFORNIA





RETAIL /GUEST PARKING

MEZZANINE LEVEL:

29 STANDARD (24 GUEST PARKING) 1 COMPACT

BIKE PARKING: 36 RESIDENTIAL

A-104 **LEVEL MEZZANINE** 



201 PCH

201-231 PACIFIC COAST HIGHWAY LONG BEACH, CALIFORNIA





A-105 LEVEL 2



**201 PCH** 

201-231 PACIFIC COAST HIGHWAY LONG BEACH, CALIFORNIA



**A-106** LEVEL 3



UNIT COUNT - LEVEL 3 TOTAL: 35

**201 PCH** 

Utility Residential

Circulation

Balconies

201-231 PACIFIC COAST HIGHWAY LONG BEACH, CALIFORNIA



A-107 LEVEL 4



201 PCH

Utility Residential Circulation

Balconies

201-231 PACIFIC COAST HIGHWAY LONG BEACH, CALIFORNIA



**A-108** LEVEL 5

**STUDIO** 

UNIT COUNT - LEVEL 5 TOTAL: 25

	UNIT COUNT - ALL LEVELS						
	LEFT BUILDING	RIGHT BUILDING					
LEVEL 2	17	22					
LEVEL 3	11	24					
LEVEL 4	14	25					
LEVEL 5	4	21					
TOTAL:	46	92					
GRAND TO	TAL:	138					

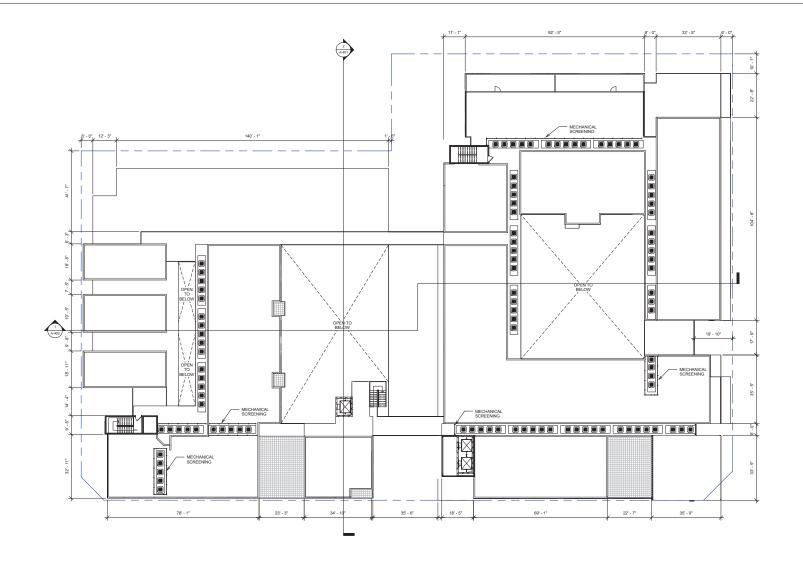
201 PCH

Utility Residential Circulation

Balconies

201-231 PACIFIC COAST HIGHWAY LONG BEACH, CALIFORNIA





A-109 **ROOF LEVEL** 



201 PCH

201-231 PACIFIC COAST HIGHWAY LONG BEACH, CALIFORNIA



South Elevation





ELASTOMERIC STUCCO



STOREFRONT SYSTEM



ELEVATOR CORE



STEEL GUARDRAIL





CLEAR GLASS VINLY WINDOW



WOOD CLADDING



VINLY SILDING DOOR



BUILDING SIGNAGE



STEEL COLOUNM



CEMENT



A-301 SOUTH **ELEVATION** 

**201 PCH** 

201-231 PACIFIC COAST HIGHWAY LONG BEACH, CALIFORNIA

3/32" = 1'-0" 3/64" = 1'-0" (if print 11"x17")

STUDIO T-SQ 2., INC











STEEL

GUARDRAIL









BOARD SIDING



CEMENT

T SQUARE 2

A-302 **EAST ELEVATION** 

**201 PCH** 

201-231 PACIFIC COAST HIGHWAY LONG BEACH, CALIFORNIA

3/32" = 1'-0" 3/64" = 1'-0" (if print 11"x17")



North Elevation









2 STOREFRONT



3 GREEN WALL PANEL



STEEL GUARDRAIL



7 CLEAR GLASS VINLY WINDOW



WOOD CLADDING



VINLY SILDING DOOR



BUILDING SIGNAGE



CEMENT BOARD SIDING



CEMENT BOARD



A-303
NORTH

**201 PCH** 

201-231 PACIFIC COAST HIGHWAY LONG BEACH, CALIFORNIA

Scale:

3/32" = 1'-0" 3/64" = 1'-0" (if print 11"x17")

DLBC PROPERTIES



West Elevation









2 STOREFRONT SYSTEM



3 GREEN WALL PANEL



5 STEEL GUARDRAIL



7 CLEAR GLASS VINLY WINDOW



8 WOOD CLADDING



VINLY SILDING DOOR



BUILDING SIGNAGE



CEMENT EOARD SIDING



CEMENT



A-304
WEST
ELEVATION

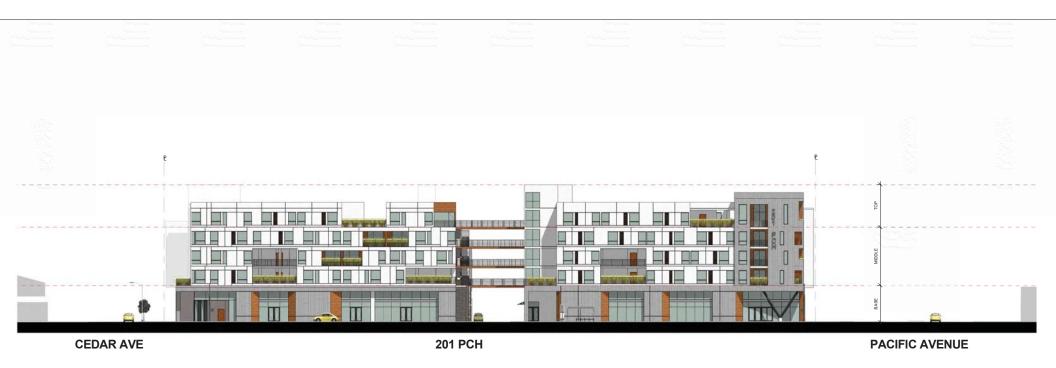
**201 PCH** 

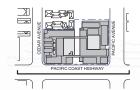
201-231 PACIFIC COAST HIGHWAY LONG BEACH, CALIFORNIA

Scale:

3/32" = 1'-0" 3/64" = 1'-0" (if print 11"x17")

DLBC PROPERTIES





A-305

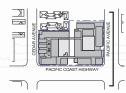


**201 PCH** 20

201- 231 PACIFIC COAST HIGHWAY LONG BEACH, CALIFORNIA

Scale: 1/16" = 1'-0" 1/32" = 1'-0" (if print 11"x17")





A-306
VICINITY EAST
ELEVATION

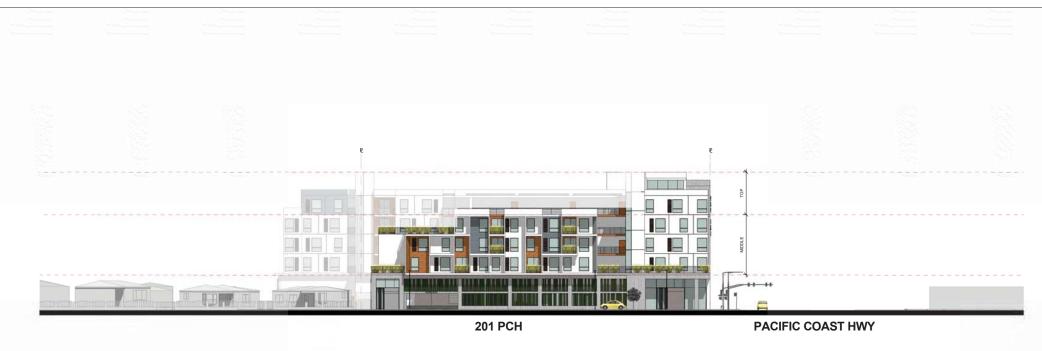


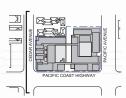
201-231 PACIFIC COAST HIGHWAY LONG BEACH, CALIFORNIA

Scale: 1/16" = 1'-0" 1/32" = 1'-0" (if print 11"x17")

**DLBC PROPERTIES** 

**201 PCH** 





A-307
VICINITY WEST ELEVATION



201-231 PACIFIC COAST HIGHWAY LONG BEACH, CALIFORNIA

Scale: 1/16" = 1'-0" 1/32" = 1'-0" (if print 11"x17")









JOINT GLAZED WINDOWS WALL PANEL: TRANSLUCENT

PERFORATED METAL PANEL ELEVATOR CORES: CAST IN PLACE CONCRETE WITH STAINLESS STEEL ELEVATOR DOORS

ELASTOMERIC STUCCO, SMOOTH FINISH, COLOR: WHITE COMMERCIAL STOREFRONT GLAZING, ANODIZED ALUMINUM DOOR FRAMS, BUTT

42" STEEL GUARDRAILS, PAINTED - COLOR: BLACK

PODIUM FLOOR FINISH: LIGHT WEIGHT CONCRETE, NATURAL FINISH SEALED

RESIDENTIAL WINDOWS: JELDWEN ATLANTIC SERIES VINYL CASEMENT WINDOWS - COLOR: WHITE

WOOD CLADDING COLOR: DARK BROWN

**EQUITONE FIBRE CEMENT** COLOR: GREY













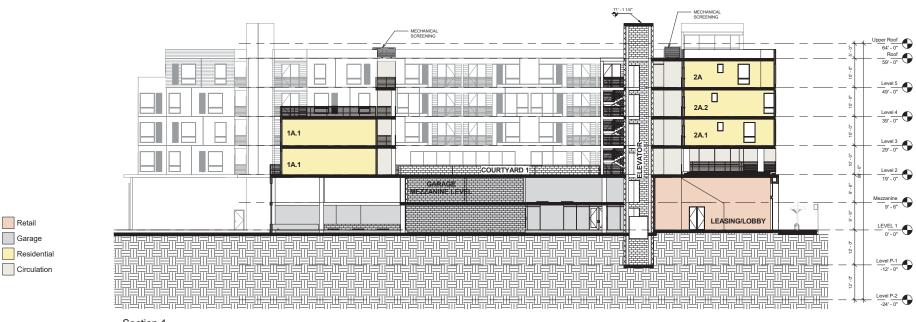
**201 PCH** 

7

201-231 PACIFIC COAST HIGHWAY LONG BEACH, CALIFORNIA

Scale:

**DLBC PROPERTIES** 

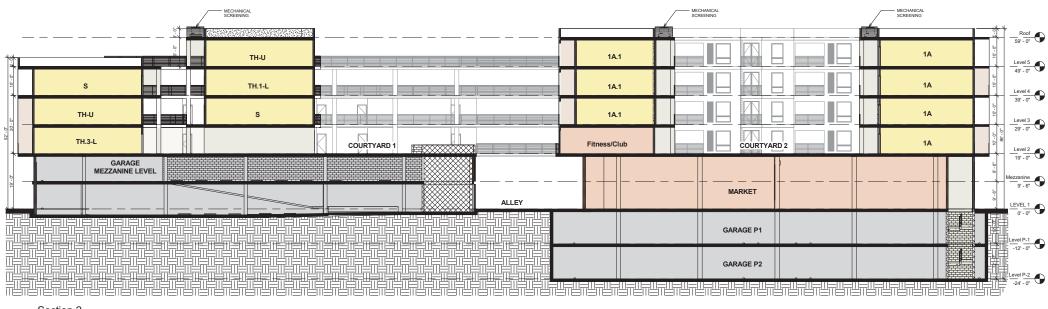


Section 1

A-401 BUILDING **SECTION 1** 



**201 PCH** 



Section 2

Retail

Garage Residential

Circulation

Balconies

A-402
BUILDING
SECTION 2



**201 PCH** 

201-231 PACIFIC COAST HIGHWAY LONG BEACH, CALIFORNIA

Scale:3/32" = 1'-0" 3/64" = 1'-0" (if print 11"x17")

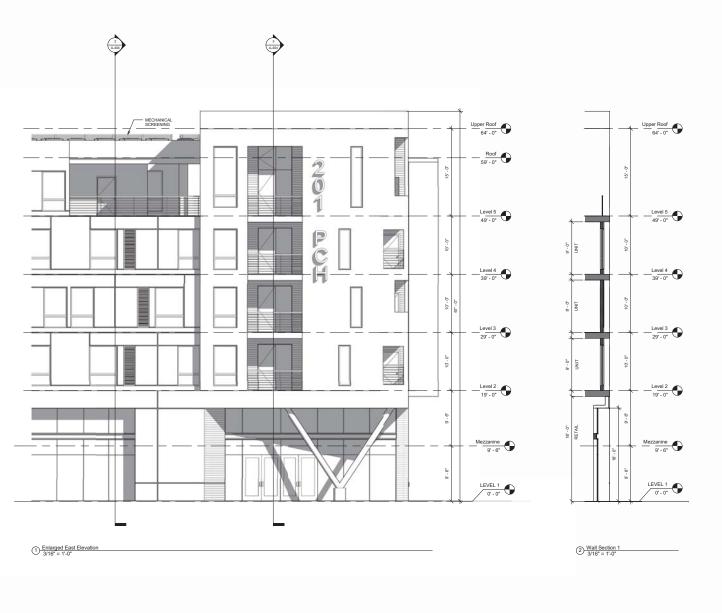
**DLBC PROPERTIES** 

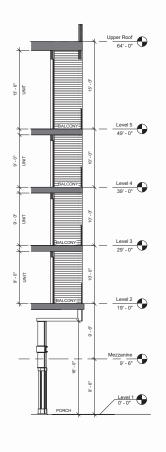


**201 PCH** 

201-231 PACIFIC COAST HIGHWAY LONG BEACH, CALIFORNIA

Scale:3/16" = 1'-0" 3/32" = 1'-0" (if print 11"x17") STUDIO T SQUARE 2





3 Wall Section 2 3/16" = 1'-0"

A-404 **WALL SECTION** 2



**201 PCH** 

201-231 PACIFIC COAST HIGHWAY LONG BEACH, CALIFORNIA

Scale:3/16" = 1'-0" 3/32" = 1'-0" (if print 11"x17")



A-500 UNIT PLAN



**201 PCH** 

201-231 PACIFIC COAST HIGHWAY LONG BEACH, CALIFORNIA

Scale: 1/4" = 1'-0" 1/8" = 1'-0" (if print 11"x17")



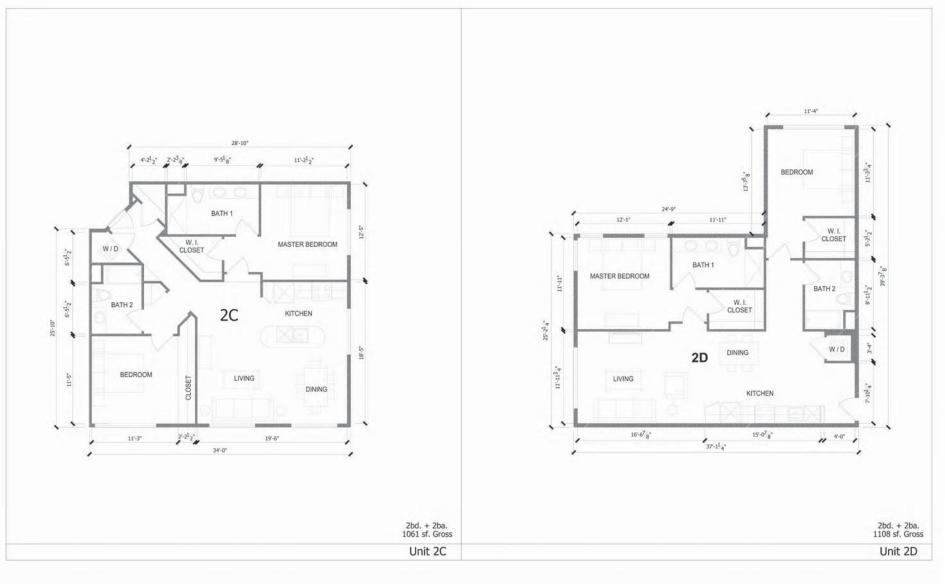
A-501
UNIT PLAN



**201 PCH** 

201-231 PACIFIC COAST HIGHWAY LONG BEACH, CALIFORNIA

Scale: 1/4" = 1'-0" 1/8" = 1'-0" (if print 11"x17")



A-502
UNIT PLAN

201 PCH

201-231 PACIFIC COAST HIGHWAY LONG BEACH, CALIFORNIA

Scale:

1/4" = 1'-0" 1/8" = 1'-0" (if print 11"x17") STUDIO T SQUARE 2

**DLBC PROPERTIES** 



A-503
UNIT PLAN

Townhouse Unit-1

STUDIO

**201 PCH** 

201-231 PACIFIC COAST HIGHWAY LONG BEACH, CALIFORNIA

Scale:

1/4" = 1'-0" 1/8" = 1'-0" (if print 11"x17")



A-504 **UNIT PLAN** 

2bd. + 2.5ba. 1323 sf. Gross

Townhouse Unit-2

201 PCH

201-231 PACIFIC COAST HIGHWAY LONG BEACH, CALIFORNIA

1/4" = 1'-0" 1/8" = 1'-0" (if print 11"x17")



A-505 UNIT PLAN

2bd. + 2.5ba. 1353 sf. Gross

Townhouse Unit-3

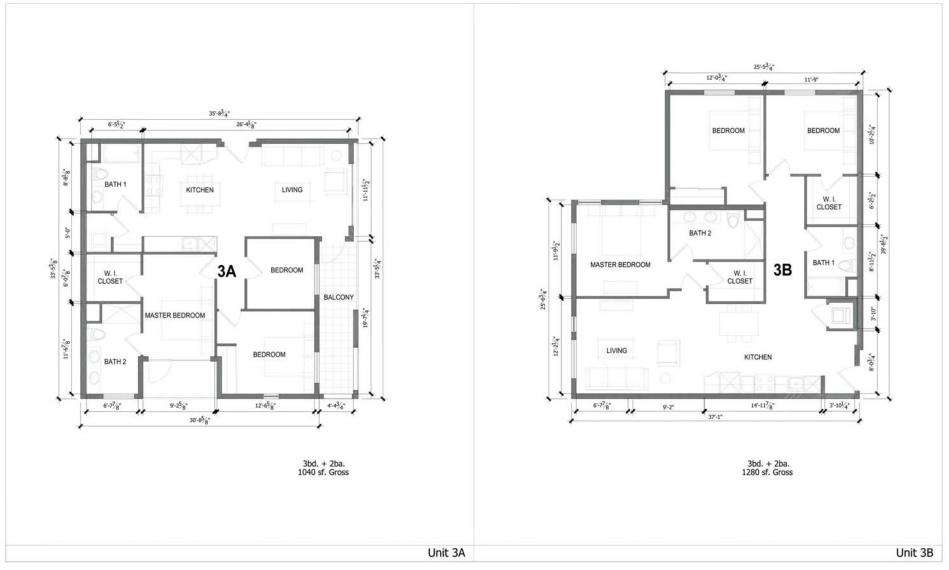
STUDIO

**201 PCH** 

201-231 PACIFIC COAST HIGHWAY LONG BEACH, CALIFORNIA

Scale:

1/4" = 1'-0" 1/8" = 1'-0" (if print 11"x17")



A-506 UNIT PLAN



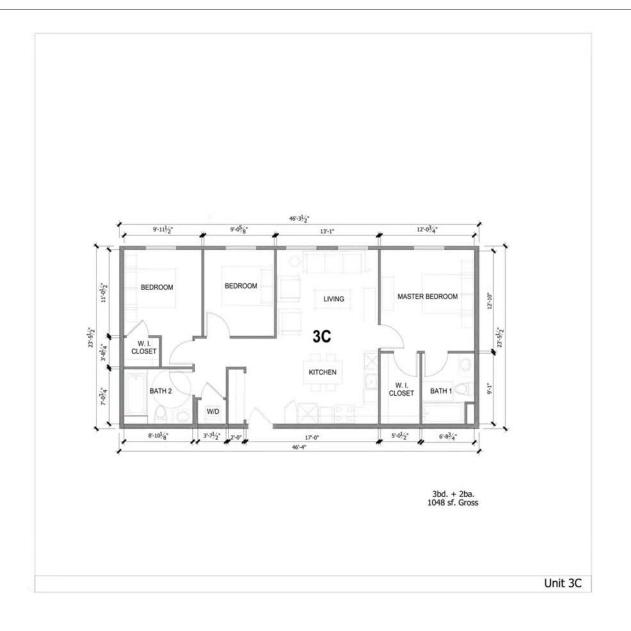
**201 PCH** 

201-231 PACIFIC COAST HIGHWAY LONG BEACH, CALIFORNIA

Scale:

1/8" = 1'-0" (if print 11"x17")

1/4" = 1'-0"



A-507
UNIT PLAN



201 PCH

201-231 PACIFIC COAST HIGHWAY LONG BEACH, CALIFORNIA

Scale:

1/4" = 1'-0" 1/8" = 1'-0" (if print 11"x17")



- Existing street trees, Syagrus romanzoffiana / Queen Palm (6) total, protect in place. Existing street tree, Chilopsis linearis / Desert Willow (1) total, protect in place.

- Existing sectors (recompose internal / depart virtuo (1/ state, protect in place.
   Existing decorative bicycle rack, protect in place.
   Existing decorative bicycle rack, protect in place.
   Existing steet, Lagerstreemia indica / Crepe myrtle (1) total, protect in place.
   Existing street lights, protect in place.
- Existing street lights, protect in place.
   Natural gray concrule sidewalk, per City's standards. Protect in place existing sidewalk, prepandamages cause by construction.
   Decorative planter pots with bench per City's streetscape design standards.
   Smooth paver passe for reducing speed and warning.
   Cobblestore paver driveway speen for reducing speed and warning.
   Planning area with shade tolerant succulent plants.
   Traffic signal, protect in place.

- Vehicular gate.
   Concrete driveway / alley.
   Back-flow preventer unit.





Precast concrete planter pots with anti graffiti coating treatment. Planted with



Interlocking concrete paver driveway apron and paseo for reducing speed and





**201 PCH** 201- 231 PACIFIC COAST HIGHWAY LONG BEACH, CALIFORNIA

Drought Tolerance Plant : Rosmarinus offcinalis 'Tuscan Blue

Drought Tolerance Plant : Phormium 'Maori Queen'

Drought Tolerance Plant : Lagerstroemia indica

Scale: 1/16" = 1'-0" 1/32" = 1'-0" (if print 11"x17")

Cobblestone paver driveway apron for reducing speed and warni

L-001

LANDSCAPE - GROUND LEVEL STUDIO T-SQ 2., INC

Shade Tolerance Succulents: Sansevieria Trifasciata



#### LEGEND

- Podium pool. Proposed depth 4'-6'.
   SPA, 10'x10'.
   Fireplace, double sided.

- Proposed location of public shower, restroom and pool equipments
- Pool safety fence and gate per building code.
   What height planter with tropical evergreen planting theme.
   Residence retreat, raised deck with relax atmosphere, refer to enlarge.

- Residence retreat, raised dock thrift states atmosphere, refer to enlarger.
   Residence interporary meetings pot, refer to enlargement.
   Precast pottery fountain.
   In recast pottery fountain.
   It hanging planting basket on railing with trailing planting.
   Raised yogs fur for outdoor excise opportunity and community event.
   Private open space.





Overall courtyard design concept



Residence retreat / meeting spot





**201 PCH** 

201- 231 PACIFIC COAST HIGHWAY LONG BEACH, CALIFORNIA

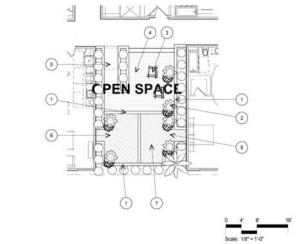
Scale: 1/16" = 1'-0" 1/32" = 1'-0" (if print 11"x17")

L-002

STUDIO T-SQ 2., INC LANDSCAPE - SECOND LEVEL



- 4' Max. height planter with tropical evergreen planting theme.
   Planter pot with self-irrigated liner.
   Coffee table.



**ENLARGEMENT - OPEN SPACE** 



Metal art panel on wall





201- 231 PACIFIC COAST HIGHWAY LONG BEACH, CALIFORNIA

Scale: 1/16" = 1'-0" 1/32" = 1'-0" (if print 11"x17")



- LEGEND

  4 Max. height planter with tropical evergreen planting theme.

  5 Stone pattern procedain ties paving.

  6 Country style teak bench.

  6 Hanging planting basket on railing with trailing planting.

  7 Planter pot with self-irrigated liner.

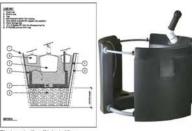








Stone patterns porcelain tiles at residence retreat and meeting spot





**201 PCH** 

201- 231 PACIFIC COAST HIGHWAY LONG BEACH, CALIFORNIA

Scale: 1/16" = 1'-0" 1/32" = 1'-0" (if print 11"x17")





- LEGEND

  1. 4 Max. height planter with sopical evergreen planting theme.
  2. Stone pattern porcelain tiles paving
  3. Country skyle teak bench.
  4. Hanging planting basket on railling with trailing planting.
  5. Planter por twis self-irrigated inser.
  6. Country skyle teak box at stock set.
  7. Country skyle seak box at stock set.
  7. Country skyle sola set.
  9. ADA Ramp.
  9.















**201 PCH** 201- 231 PACIFIC COAST HIGHWAY LONG BEACH, CALIFORNIA

Scale: 1/16" = 1'-0" 1/32" = 1'-0" (if print 11"x17")













**201 PCH** 

201- 231 PACIFIC COAST HIGHWAY LONG BEACH, CALIFORNIA

### SITE PLAN REVIEW FINDINGS

201 – 245 W. Pacific Coast Highway and 1827 Pacific Avenue Application No. 1810-26 (ZCHG18-0006, ZCA 18-008, SPR18-054, LMG 18-032) November 5, 2020

Pursuant to Section 21.25.506 of the Long Beach Municipal Code (LBMC), the Site Plan Review Committee or the Planning Commission shall not approve a Site Plan Review unless the following findings are made. These findings and staff analysis are presented for consideration, adoption, and incorporation into the record of proceedings:

1. THE DESIGN IS HARMONIOUS, CONSISTENT AND COMPLETE WITHIN ITSELF AND IS COMPATIBLE IN DESIGN, CHARACTER AND SCALE, WITH NEIGHBORING STRUCTURES AND THE COMMUNITY IN WHICH IT IS LOCATED;

The project site is located on the north side of Pacific Coast Highway between Cedar Avenue and Pacific Avenue. Pacific Coast Highway is a major north-south State highway under the jurisdiction of the California Department of Transportation (Caltrans) that runs along most of the California Pacific coastline. In the City of Long Beach, Pacific Coast Highway runs east-west, and is primarily a commercial corridor with some residential uses. The project site encompasses four parcels for a total project area of 1.59 acres. The western half of the project site is occupied by commercial buildings/uses. The eastern half of the project site is currently vacant and is a former redevelopment site. The developer seeks to demolish the existing commercial buildings and construct a new five-story, mixed-use project, consisting of 138-market-rate residential units and 24,911 square feet of commercial area.

The project site is zoned Regional Highway District (CHW), Community Automobile Orientated (CCA) and Two Family Residential (R-2-N) Districts and requires a Zone Change to Midtown Specific Plan (MTSP) Transit Node (TN) district) to facilitate development of the mixed-use development.

The project will consist of two, five story buildings, as one, mixed-use development project which consists of 138-market-rate residential units and 24,911 square feet of commercial area. The larger of the two buildings — The Pacific Building, is located on the northwest corner of Pacific Avenue and Pacific Coast Highway. This building will sit over five lots which totals 36,330 square feet of land. The Cedar Building is located on the northeast corner of Cedar Avenue and Pacific Coast Highway. The two buildings will sit over four lots which totals 27,528 square feet of land. A north-south alley biceps the Cedar and Pacific, however the buildings will be connected by raised pedestrian bridges that expand across the alleyway.

The project site is surrounded by residential and commercial uses. Single-family and multi-family residential development is located to the north of the Project Site along Cedar Avenue. Commercial uses are located east of the Project Site across Pacific Avenue. One single-family home fronts along Pacific Avenue just east of the Project Site. Pacific Coast Highway immediately borders the Project Site to the south. Commercial uses are located along the Pacific Coast Highway and Pacific Avenue. Single-family and multi-family development are located just south of the commercial uses along Pacific Coast Highway. Cedar Avenue immediately borders the Project Site to the west. A one-story commercial building fronts Pacific Coast Highway and a one-story multifamily building is across the street from the Project Site on Cedar Avenue. Commercial uses are located along the Pacific Coast Highway. Single-family and multi-family development are located to the west of the Project Site along local streets. The prevailing height of residential and commercial buildings in the vicinity is generally one and two-story.

The design of the proposed development reflects a modern architectural style with a flat roof and parapet consisting white-colored stucco accented with grey-colored cement board and dark brown wood cladding. The building will also feature white vinyl windows and black metal guardrails. Landscaped alcoves are featured on the buildings elevations which provide added greenery to the building's white colored walls. The Cedar building, which is adjacent to one and two-story residential uses, will range in height from 29 feet along the north property line and will step up to 67 feet along Pacific Coast Highway. In respect to the proximity to residential properties to the north, the five-story Cedar building features a terraced design that steps up in height placing the bulk and mass towards Pacific Coast Highway. The Pacific building, which is adjacent to commercial uses, will range in height from 62 to 67 feet where 65 feet is generally permitted with allowances for greater heights for architectural projections.

The mixed-use project would serve as an appropriate transition between the traffic existing traffic and commercial uses that flank Pacific Coast Highway and the single-family residences that abut the corridor. The single-family residences located immediately north of the project site will be buffered by landscaping to help screen views, and the building height to reduce noise impacts from Pacific Coast Highway.

2. THE DESIGN CONFORMS TO ANY APPLICABLE SPECIAL DESIGN GUIDELINES ADOPTED BY THE PLANNING COMMISSION OR SPECIFIC PLAN REQUIREMENTS, SUCH AS THE DESIGN GUIDELINES FOR R-3 AND R-4 MULTI-FAMILY DEVELOPMENT, THE DOWNTOWN DESIGN GUIDELINES, PD GUIDELINES OR THE GENERAL PLAN;

The Land Use Element (LUE) of the General Plan identifies the subject property as Transit Orientated Development (TOD-L). This PlaceType is a mixed-use land use designation that allows commercial and residential uses such as apartments

and condominiums. The proposed Zone Change from Regional Highway District (CHW), Community Automobile Orientated (CCA) and Two Family Residential (R-2-N) Districts to Midtown Specific Plan (MTSP) Transit Node (TN) district implements this Place Type and would facilitate the mixed-use development. . The General Plan Land Use Placetype TOD-L is characterized with densities up to 44 dwelling units per acre and five stores in height. The MTSP TN-L district allows a floor area ratio (FAR) of 3.0 and up to 65 feet in height and a maximum of five stories for parcels with depths of 200 feet or greater. There is no maximum density prescribed within the Zoning District but rather density is controlled by the development standards for residential uses including height, setback, parking, etc. The General Plan Land Use Map permits building heights up to seven stories for the development site. The project is proposed with a density of 87 dwelling units per acre, a FAR of 2.6, will have a maximum height of 64 feet and five stories. The proposed density conforms to the development standards of the MTSP TN-L and is considered consistent with the general characteristics of the Placetype TOD-L; it anticipates higher density residential mixed with commercial uses in a proximity to transit. Although higher densities are anticipated it is understood that most existing lots are much smaller than this project site which totals 1.59 acres and are previously developed with active uses making it improbable for many more lots to be redeveloped at this density. The density here is consistent for the PlaceType and is supported by its proximately to high transit area. The eastern edge of the project is located just outside of the 1/4 mile, the determined radius for walkability, from the "A" line but is well within the critical one-mile distance for potential riders. The project site is also located along Long Beach Transit bus routes with bus stops located adjacent to the site on Pacific Coast Highway and Pacific Avenue.

The project design conforms to the design guidelines of the Midtown Specific Plan such as density, height, and neighborhood compatibility.

Transit Oriented Development Low Place Type

Transit Shorted Bevelopment Low Flace Type					
	Characteristics	Proposed			
Density	44 dwelling	87 dwelling units/acre			
	units/acre				
Height	7 stories	65' (5 stories)			
Use	Mixed-Use	Mixed- Use (Grocery store, coffee shop,			
		residential)			

The project includes 138 market rate residential units, for which there has been an expressed need in the City. The project will not only redevelop an underutilized and vacant site, but also help contribute to increasing the supply of housing to combat the regional and state-wide housing shortage. The project is consistent with the Regional Housing Needs Assessment (RHNA) inventory which includes primarily vacant or underutilized commercial properties with limited existing residential uses. Specifically, the project implements the following Housing Element Goals and Policies:

- Housing Element Policy 4.1: Encourage a balance of rental and homeownership opportunities, including high quality apartments, townhomes, condominiums, and single-family homes to accommodate the housing needs of all socioeconomic segments of the community, including large families;
- Housing Element Policy 4.5 Encourage residential development along transit corridors, in the downtown and close to employment, transportation and activity centers; and encourage infill and mixed-use developments in designated districts;
- Housing Element Policy 4.6: Maintain a vacant and underutilized residential sites inventory, including City-owned sites, and assist residential developers in identifying land suitable for residential development.

## 3. THE DESIGN WILL NOT REMOVE SIGNIFICANT MATURE TREES OR STREET TREES, UNLESS NO ALTERNATIVE DESIGN IS POSSIBLE;

There are existing palm trees located on the project site which will be removed make way for the new development. The existing street trees located on Pacific Avenue, Cedar Avenue and on Pacific Coast Highway will remain.

As part of the landscaping plan for the proposed project, the applicant proposes to improve the site with new perimeter landscaping and landscaping throughout the development which includes new trees such as Lagerstoemia Indica, Arbutus unedo, Phyllostachys nigra, Rhaphiolepis indica and Strelizia Nicolai and drought tolerant scrubs and plants such as Aeoniuum Kiwi, Anigozantho, Cuphea hyssopifolia, and Euonymus japonicus golden.

The Developer shall provide for tree wells, new street trees with root barriers and irrigation along Pacific Coast Highway, adjacent to the project site, subject to the approval of the California Department of Transportation. New street trees along Cedar and Pacific Avenues will also be planted by the applicant in accordance with LBMC 21.42.050.

# 4. THERE IS AN ESSENTIAL NEXUS BETWEEN THE PUBLIC IMPROVEMENT REQUIREMENTS ESTABLISHED BY THIS ORDINANCE AND THE LIKELY IMPACTS OF THE PROPOSED DEVELOPMENT; AND

Improvements to the public right-of-way adjacent to the project include several dedications, required by the Code and conditions of approval, to offset the capital improvements to public infrastructure necessary to support the mixed-use project. These improvements include construction of off-site improvements needed to provide full Americans with Disabilities Act (ADA) accessibility compliance within the public right-of-way adjacent to the project; removal of unused driveways and curb cuts and replacement with full-height curb, curb

gutter and sidewalk; reconstruction of sidewalk, curb, and curb gutter; new street trees with root barriers; and irrigation systems adjacent to the project site (See App no. 2018-26 for Conditions of Approval).

The most significant of the improvements are the following dedications and improvements required by Public Works:

- Alley widening to a full 20-feet of width.
- Alley re-paving adjacent to the project site
- Installing lighting in the alley.
- Undergrounding utilities in the alley.

Due to the size of the development and the projected increased use of the public right-of-way adjacent to the project site, by automobiles, bicyclists, and pedestrians, an essential nexus exists for these public improvements.

# 5. THE PROJECT CONFORMS WITH ALL REQUIREMENTS SET FORTH IN CHAPTER 21.64 (TRANSPORTATION DEMAND MANAGEMENT), WHICH REQUIREMENTS ARE SUMMARIZED IN TABLE 25-1 AS FOLLOWS:

Table 25-1
Transportation Demand Management Ordinance Requirements

TDM	New I	oment	
Requirements	25,000+ Square Feet	50,000+ Square Feet	100,000+ Square Feet
Transportation Information Area	•	<b>*</b>	•
Preferential carpool/vanpool parking		<b>*</b>	•
Parking designed to admit vanpools		<b>*</b>	•
Bicycle parking		•	•
Carpool/vanpool loading zones			•
Efficient pedestrian access			•
Bus stop improvements			•
Safe bike access from			•

street to bike parking				
Transit review	For all residential and nonresidential projects subject to EIR			

The project is predominantly residential in nature and includes a 24,911 square foot non-residential component which is below the 25,000 square foot threshold in Table 25-1; therefore, the project is exempt from Transportation Demand Management requirements.

## 6. THE APPROVAL IS CONSISTENT WITH THE GREEN BUILDING STANDARDS FOR PUBLIC AND PRIVATE DEVELOPMENT, AS LISTED IN SECTION 21.45.400.

The project consists of a mixed-use project with over 50 dwelling units (a total of 138 market rate residential units) in two buildings and is subject to the Green Building Standards for public and private development contained in LBMC 21.45.400. As a condition of approval, the project will have to demonstrate meeting the applicable sustainable building standards. Green buildings are designed to meet certain objectives such as protecting occupant health; using energy, water and other resources more efficiently; and reducing the overall impact to the environment.

## ZONING CHANGEAND ZONE CODE AMENDMENT FINDINGS

201 – 245 W. Pacific Coast Highway and 1827 Pacific Avenue Application No. 1810-26 (ZCHG18-006, ZCA 18-008, SPR18-054, LMG 18-032 November 5, 2020

Pursuant to Section 21.25.106 of the Long Beach Municipal Code, in all cases, the Planning Commission and the City Council shall be required to make the following findings of fact before rezoning a parcel. These findings and staff analysis are presented for consideration, adoption, and incorporation into the record of proceedings:

# 1. THE PROPOSED CHANGE WILL NOT ADVERSELY AFFECT THE CHARACTER, LIVABILITY OR APPROPRIATE DEVELOPMENT OF THE SURROUNDING AREA; AND

The project site is currently zoned Regional Highway District (CHW), Community Automobile Orientated (CCA) and Two Family Residential (R-2-N) Districts. Mixed use development projects are not permitted in the CHW, CCA or the R-2-N Districts. The applicant seeks a Zone Change to the Midtown Specific Plan (MTSP) Transit Node (TN) district to facilitate the mixed-use development. The MTSP TN is consistent with the General Plan's Land Use Designation, Transit Orientated Development (TOD-L). This PlaceType is a mixed-use land use designation that allows commercial and residential uses at higher densities such as apartments and condominiums.

The project is surrounded by residential and commercial uses to the north, commercial uses to the west, east and south. The mixed-use project would serve as an appropriate transition between the existing traffic and commercial uses that flank Pacific Coast Highway and the single-family residences that abut the corridor. The single-family residences located immediately north of the project site will be buffered by landscaping to help screen views, and the building height to reduce noise impacts from Pacific Coast Highway. Construction of the project would not negatively affect the character of the existing neighborhood, nor would it adversely affect its livability.

## 2. THE PROPOSED CHANGE IS CONSISTENT WITH THE GOALS, OBJECTIVES AND PROVISIONS OF THE GENERAL PLAN.

The Land Use Element of the General Plan states that the City of Long Beach is committed to continuing its tradition of improving the physical environment by achieving multiple and interrelated land use goals including, but not limited to, offering broad-based housing opportunities. The General Plan's Land Use Element, adopted in December 2019, designates the project site as the Transit Orientated Development - Low (TOD-L). This PlaceType is a mixed-use land use designation that allows commercial and residential uses such as apartments and

condominiums. This PlaceType allows for multi-family residential and commercial buildings on larger parcels of land, up to seven stories in height. The TOD-L Placetype encourages the multi-family housing at densities that provide a transition from lower-density single family neighborhoods to higher density housing planned along transit routes such as Pacific Coast Highway and Pacific Avenue.

The surrounding neighborhood consists of single story commercial and one and two-story residential uses. The Land Use Element identifies the development of new multifamily housing along commercial corridors as an important strategy in this area of Long Beach. Additionally, the Land Use Element identified the needs for neighborhood and community serving uses specifically grocery uses in the Westside/Wrigley neighborhoods. The project would be consistent with the City's General Plan by creating new multifamily housing in the vicinity of commercial uses and that would be consistent with the character of surrounding neighborhood.

The Zone Change implements the LUE goals polices for example, Goal No.3 – Accommodate Strategic Growth and Change. LU Policy 7-4 Encourage degraded and abandoned buildings and properties to transition to more productive uses through adaptive reuse or new development. Goal No. 5: Diversify Housing Opportunities. LUE Policy 13-2- Provide new housing opportunities in neighborhood-service centers and corridors within transit-oriented development areas and downtown.

The applicant seeks a Zone Change to Midtown Specific Plan (MTSP) Transit Node (TN) district. The proposed MTSP-TN-L district will better align the existing zoning designations of the parcels to their PlaceType outlined in the Land Use Element and facilitate the construction of housing on otherwise underutilized and vacant lots. The Land Use Element identifies the development of new multifamily housing along commercial corridors as an important strategy in this area of Long Beach. The zone change to the MTSP-TN-L district would support the production of housing in this location which is consistent the TOD-L Placetype designation of the General Plan. The project would be consistent with the City's General Plan by creating new market rate apartments. A mixed-use project that include new grocery store in the vicinity of residential uses would support the character of surrounding residential neighborhood and be consistent with the existing commercial uses along Pacific Coast Highway.

## 3. IF THE PROPOSED CHANGE IS A REZONING OF AN EXISTING MOBILE HOME PARK, THAT THE REQUIREMENTS OF SECTION 21.25.109 HAVE BEEN OR WILL BE FULLY MET.

The proposed change does not involve the rezoning of an existing mobile home park. The western half of the project site is occupied by commercial buildings/uses. The eastern half of the project site is currently vacant and is a former redevelopment site.

### LOT MERGER FINDINGS

201 – 245 W. Pacific Coast Highway and 1827 Pacific Avenue Application No. 1810-26 (ZCHG18-006, ZCA 18-008, SPR18-054, LMG 18-032 November 5, 2020

1. ANY ONE OF SUCH CONTIGUOUS PARCELS OR UNITS HELD BY THE SAME OWNER DOES NOT CONFORM TO THE MINIMUM SIZE STANDARDS AS REQUIRED BY THE ZONING REGULATIONS, AND AT LEAST ONE OF SUCH CONTIGUOUS PARCELS IS NOT DEVELOPED WITH A SEPARATE BUILDING FOR WHICH A PERMIT HAS BEEN ISSUED BY THE CITY; OR

The project site located on the north side of Pacific Coast Highway between Cedar Avenue to the west and Pacific Avenue to the east. The development site consists of nine lots, totaling 1.59 acres, which are bisected by an unnamed alley that runs north to south. A Lot Merger is required to consolidate the lots on each side of the alley into two, single lots. The Pacific lots (east of the alley) consist of five lots which will be merged into a single lot totaling 36,330- square- feet of land. The Cedar lots (west of the alley) of four lots which will be merged into one single. 27,528 square- feet of land. Each new lot exceeds the minimum 10,000 square foot size required in the Midtown Specific Plan District.

2. A SINGLE PROJECT IS DEVELOPED ON CONTIGUOUS LOTS IN SUCH A MANNER THAT ONE OR MORE OF THESE RECORDED LOTS COULD BE SOLD SEPARATELY FROM THIS PROJECT BUT WILL RESULT IN REDUCTION OF REQUIRED PARKING, SETBACKS, OPEN SPACES, OR VIOLATION OF OTHER DEVELOPMENT STANDARDS AS SPECIFIED IN THE CURRENT ZONING REGULATIONS.

The project site located on the north side of Pacific Coast Highway between Cedar Avenue to the west and Pacific Avenue to the east. The project site consists of nine lots, totaling 1.59 acres, which are bisected by an unnamed alley that runs north to south. The development is proposed across all nine lots and will be connected by raised pedestrian bridges which allow occupants to share parking, and the project amenities such as open space areas, community rooms, and the fitness room.

### **CONDITIONS OF APPROVAL**

201 – 245 W. Pacific Coast Highway and 1827 Pacific Avenue Application No. 1810-26 (ZCHG18-006, ZCA 18-008, SPR18-054, LMG 18-032) November 5, 2020

- 1. Project approvals consist of a Site Plan Review and two Lot Mergers in conjunction with the construction of two, five story buildings, as one, mixed-use development project which consists of 138-market-rate residential units and 24,911 square feet of commercial area, and 258 (238 standards and 20 tandem) parking stalls on adjacent development sites in the Midtown Specific Plan (MTSP). The five lots that comprise the Pacific Avenue development site and the four lots that comprise the Cedar Avenue development site will be consolidated by the Lot Mergers.
- 2. Site Plan Review approval is subject to the approval of the Zone Change and Zoning Code Amendment.
- 3. This permit and all development rights hereunder shall terminate two years from the effective date of this permit unless construction is commenced, or a time extension is granted, based on a written request submitted to and approved by the Zoning Administrator prior to the expiration of the two-year period as provided in Section 21.21.406 of the Long Beach Municipal Code.
- 4. This permit shall be invalid if the owner(s) and/or applicant(s) have failed to return written acknowledgment of their acceptance of the conditions of approval on the *Conditions of Approval Acknowledgment Form* supplied by the Planning Bureau. This acknowledgment must be submitted within 30 days from the effective date of approval (final action date or, if in the appealable area of the Coastal Zone, 21 days after the local final action date).
- 5. Applicant shall defend, indemnify, and hold harmless, the City and its boards, commissions, agents, officers, and employees (collectively "City") from any claims, actions, or proceedings (individually referenced as "Claim" and collectively referred to as "Claims") filed against the City to attack, set aside, void, or annul the approval of the subject CUP or related entitlements, or any Claims brought against the City due to acts or omissions in any way connected to the Applicant's project. City shall promptly notify the Applicant of any Claim and shall cooperate in the defense of the Claim. Applicant shall be responsible to pay any and all costs of defending any claims brought against the City including any and all costs, including attorney's fees, incurred by the City in defense of the Claim or Claims.

#### **Special Conditions:**

6. All work shall be carried out in substantial conformance with the activities shown

Conditions of Approval 201 – 245 W. Pacific Coast Highway and 1827 Pacific Avenue Application No. 1810-26 (ZCHG18-006, ZCA 18-008, SPR18-054, LMG 18-032) November 5, 2020

Page 2 of 13

on plans received by the Department of Development Services, Planning Bureau, dated March 26, 2018, and approved by the Planning Commission on June 21, 2018.

- 7. The applicant shall revise the development plans to illustrate all window frames will feature dark colored frames/trim rather than white colored frames/trims subject to satisfaction of the Director of Development Services.
- 8. The applicant shall revise the development plans to illustrate all windows be of a high quality and afford a shadow line and depth subject to the satisfaction of the Director of Development Services. To achieve shadow line and depth, the applicant shall include a detail (i.e., cross sections) in the development plans illustrating a four (4) inch recess for all windows upon submittal into Building Plan Check.
- 9. A minimum of 225 parking stalls shall be permanently maintained and in useful operation within the buildings' parking garage. The number of Electric Vehicle (EV) charging stations and spaces shall meet California Green Building Standards Code Chapter 5 Section 5.106.5.3 requirements.
- 10. A minimum of 73 bicycle parking spaces shall be provided for and maintained on site. The type, spacing and placement of bicycle racks shall follow the guidelines of the Bicycle Master Plan to the satisfaction of the Director of Development Services. Each of the project's bicycle storage rooms shall include a bicycle air pump and tools for tenant use. Bicycle storage rooms shall not be repurposed or converted into another function without prior Planning Bureau authorization.
- 11. The applicant shall comply with the Mitigation Measures specified in the Mitigation Monitoring and Reporting Program (MMRP) of the Midtown Specific Plan Program EIR and Addendum to the MTSP EIR of the subject proposal's Planning Commission Staff Report dated November 5, 2020.

- 12. The applicant and/or developer shall submit a draft covenant of easement for review and approval to the satisfaction of the Director of Development Services and the City Attorney. Such covenant shall include language to grant shared, reciprocal access to all project parking areas, common open space areas, tenant amenity areas, and project interiors to all residential tenants, guests and vehicles. The covenant shall provide regulations for the maintenance of all project areas. The covenant shall be recorded/executed prior to the issuance of Certificate of Occupancy for either building.
- 13. The applicant shall complete the recordation of the Certificate of Compliance Notice of Lot Merger and proof of new deed prior to issuance of any project building permit beyond demolition and site grading.
- 14. In compliance with the Mitigation Measures specified in the Mitigation Monitoring and Reporting Program (MMRP) of the Midtown Specific Plan Program EIR and Addendum to the MTSP EIR, the applicant shall submit Phase One reports for all parcels prior to issuance of building permits.
- 15. The applicant shall ensure the proposed conceptual mezzanine design shall meet the Long Beach Building code related to mezzanine floor area limitation of max 50% of the room or space (in type I construction, fire sprinkler NFPA13, emergency/alarm communication) as specified in Building Code Section CBC 505.2.1(2) to the satisfaction of the Building Official.
- 16. Final Certificate of Occupancy for the development project shall be withheld until all inspection and approvals for both building's parking areas, common open space areas, tenant amenity areas, and the pedestrian bridge linking the two buildings have been granted.
- 17. The applicant shall obtain approval of a Master Sign Program for the development project prior to installation of signage subject to satisfaction of the Director of Development Services.
- 18. All noise levels emanating from the project's common open space areas shall not exceed applicable noise standards specified in Long Beach Municipal Code Section 8.80 subject to the satisfaction of the Director of Development Services.
- 19. All truck loading and unloading operations shall comply with all noise limitations provided in Long Beach Municipal Code Section 8.80. subject to the satisfaction of the Director of Development Services.

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- 20. The applicant shall demonstrate compliance with LBMC Section 8.61 Shopping Carts, which requires all shopping cart owners to operate and maintain an onsite cart containment program subject to satisfaction of the Director of Development Services.
- 21. One or several central satellite television/data receiver dish(es) shall be located on the roof of the buildings or in another utility area so that a separate satellite receiver dish is not needed for each residential and community space.
- 22. On-site landscaping shall be subject to LBMC Section 21.42.035 Special Requirements for Water Efficient Landscaping. Landscaped areas shall be planted primarily with drought tolerant plant materials and shall be provided with water-conserving, automatic irrigation systems designed to provide complete and adequate coverage to sustain and promote healthy plant life. The irrigation system shall not cause water to spray or flow across a public sidewalk.
- 23. The Department of Development Services and the Long Beach Police Department shall have the authority to review the site for security problems and said departments shall have the power to require additional security measures including, but not limited to, security guards, fencing, and additional security lighting if problems develop at the site.
- 24. Exterior security bars and roll-up doors applied to windows and pedestrian building entrances shall be prohibited. Noise levels emanating from the project's common open space areas shall not exceed applicable noise standards specified in Long Beach Municipal Code. Use of the 2<sup>nd</sup> floor common open space areas and the private balconies and semi-private open space areas shall be restricted to the hours of 6:00 a.m. 12:00 a.m. (midnight).
- 25. All conditions of approval must be printed verbatim on all plans submitted for plan review to the Planning and Building Bureaus. These conditions must be printed on the site plan or a subsequent reference page.
  - The Director of Development Services is authorized to make minor modifications to the approved design plans or to any of the conditions of approval, if such modifications shall not significantly change/alter the approved design/project. Any major modifications to the approved project shall be reviewed and approved by the Planning Commission.
- 26. Site development, including landscaping, shall conform to the approved plans on file in Long Beach Development Services. At least one set of approved plans containing Planning, Historic Preservation, Building, Fire, and, if applicable, Health Department stamps shall be maintained at the job site, at all times for

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reference purposes during construction and final inspection.

- 27. Adequately-sized trash rooms shall be designed and provided for this project as per LBMC Section 21.45.167. The designated trash rooms shall be placed in inconspicuous locations on the development site, provide for easy access, and contain a collection area for recyclable materials.
- 28. Prior to the issuance of a building permit, the applicant must depict all utility apparatus, such as, but not limited to, backflow devices and Edison transformers, on both the site plan and the landscape plan. These devices shall not be located in any front, side, or rear yard area that is adjacent to a public street. Such devices shall be properly screened with landscaping or other screening methods approved by the Director of Development Services.
- 29. All rooftop mechanical equipment shall be fully screened from public view. Said screening must be architecturally compatible with the building in terms of theme, materials, colors and textures. If the screening is not specifically designed into the building, a rooftop mechanical equipment plan must be submitted showing screening and must be approved by the Director of Development Services prior to the issuance of a building permit.
- 30. Any graffiti found onsite must be removed within 24 hours of its appearance.

#### **Standard Conditions:**

- 31. If, for any reason, there is a violation of any of the conditions of this permit or if the use/operation is found to be detrimental to the surrounding community, including public health, safety or general welfare, environmental quality or quality of life, such shall cause the City to initiate revocation and termination procedures of all rights granted herewith.
- 32. This approval is required to comply with the conditions of approval as long as the use is on the subject site. As such, the site shall allow periodic reinspections, at the discretion of city officials, to verify compliance. The property owner shall reimburse the City for the inspection cost as per the special building inspection specifications established by City Council (Sec. 21.25.412, 21.25.212).
- 33. In the event of transfer of ownership of the property involved in this application, the new owner shall be fully informed of the permitted use and development of said property as set forth by this permit together with all conditions that are a part thereof. These specific requirements must be recorded with all title conveyance documents at time of closing escrow.

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- 34. Demolition, site preparation, and construction activities are limited to the following (except for the pouring of concrete which may occur as needed):
  - a. Weekdays and Federal Holidays: 7:00 a.m. to 7:00 p.m.;
  - b. Saturdays: 9:00 a.m. to 6:00 p.m.; and
  - c. Sundays: Not permitted

#### PUBLIC WORKS CONDITIONS OF APPROVAL

#### **GENERAL REQUIREMENTS**

- 35. Prior to the start of any on-site/off-site demolition, excavation or construction, the Developer shall submit a construction plan for pedestrian protection, construction area perimeter fencing with custom printed screen(s), street lane closures, construction staging, shoring excavations and the routing of construction vehicles (excavation hauling, concrete and other deliveries, etc.). All applicable plans and drawings shall be reviewed and approved by the Department of Public Works. Work, including hauling soils or other debris, is not allowed within the right-of-way without a valid Public Works permit.
- 36. The Developer shall submit a Traffic Control Plan prepared by a registered Civil or Traffic Engineer in the State of California, with wet seal and signature, for review and approval by the Department of Public Works.
- 37. Pacific Coast Highway is a State highway under the jurisdiction of the California Department of Transportation (Caltrans). A street improvement permit from Caltrans will be required for all work within the Pacific Coast Highway right-of-way. Contact the Caltrans Permit Office, at (213) 897-3631, to request additional information regarding the Caltrans permitting process. The Developer is responsible for coordination with the applicable entity and approvals from such.
- 38. The Developer shall construct all off-site improvements needed to provide full Americans with Disabilities Act (ADA) accessibility compliance within the adjacent public right-of-way. At this stage in the entitlement process the plans are conceptual in nature, and plan check is required for in-depth review of ADA compliancy. As determined during the plan check process, the Developer shall dedicate and improve additional right-of-way necessary to satisfy unfulfilled ADA requirements.
- 39. Public improvements shall be constructed in accordance with Public Works construction standards, and per plans reviewed and approved by the Department of Public Works. The City's Public Works Engineering Standard Plans are available online at www.longbeach.gov/pw/resources/engineering/standard-plans. Prior to

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issuance of a building permit, detailed off-site improvement plans shall be prepared by a licensed Civil Engineer, stamped, signed and submitted to Public Works for review and approval. This is in addition to any plan check required by the Department of Development Services.

40. All conditions of approval, including cover letter signed by the Planning Officer and Case Planner, must be printed verbatim on all plans submitted for plan review to the Department of Public Works.

#### **PUBLIC RIGHT-OF-WAY**

- 41. The Developer proposes an enclosure for refuse and recycling receptacles within the development, adjacent to the north-south alley. All refuse and recycling receptacles shall be subject to the standards and requirement of Long Beach Municipal Code Chapter 8.60, including number of receptacles and receptacle specifications. The Developer and/or successors shall be responsible for the cleanliness of the alleyway adjacent to the development.
- 42. The Developer proposes encroachments into the public right-of-way that include architectural features, awnings, dwelling spaces, landscaping and pedestrian bridges. All encroachments shall comply with California Building Code Chapter 32 or be eliminated. No dwelling spaces, or common areas including the projections as stated above, shall encroach within the public roadway, alleyway, court, or ways, except for bridges or tunnels of acceptable heights/depths, as reviewed and approved by the Director of Public Works, to link private parcels bisected by a public roadway.
- 43. The Developer proposes the construction of pedestrian bridges encroaching into the public right-of-way along the unnamed north-south alley, connecting the two proposed buildings. At a minimum, a 17-foot vertical clearance shall be maintained from the surface of the alley to the lowest part of any bridge. The Developer's site plan also shows the installation of decorative pavers within Cedar Avenue and the north-south alley, and decorative pavers, planter pots and benches along Pacific Coast Highway. The Developer shall process an Installation and Maintenance Agreement for the pedestrian bridges, decorative pavers, planter pots and benches. A complete application along with all required items shall be submitted for review and processing.
- 44. The Developer shall dedicate and improve additional right-of-way for alley widening purposes along the north-south alley, including 2 feet on both sides of the centerline and as needed to achieve a 20-foot wide public alleyway. The Developer shall improve the full width of the alley right-of-way adjacent to the development site, relocating all existing facilities as necessary to accommodate the alley widening.

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45. The Developer's site plan proposes construction within the vicinity of existing easements, underground/above ground utility lines, monitoring wells, franchise pipelines and gas lines. The Developer is responsible for all design, applicable utility approval, permitting, relocation work, and commissioning as required by the interested agency and shall work with each utility directly.

#### **OFF-SITE IMPROVEMENTS**

- 46. Pacific Avenue adjacent to the project site is currently under a 5-year moratorium (ending on June 1, 2021), with over 2 years remaining. The Developer shall provide written approval from the City to implement any street improvements prior to the end of the existing moratorium, in the form of a discretionary permit for excavation. Any work within a street under moratorium requires a complete grind and overlay from block to block.
- 47. Decorative paving along Pacific Coast Highway and Cedar Avenue is not permitted to be installed. The Developer shall construct the full width of the driveway curb approaches with Portland cement concrete.
- 48. Decorative paving along the north-south alley is not permitted to be installed. The Developer shall reconstruct the full width of the alley adjacent to the development site with Portland cement concrete. All utility poles along the alley widening shall be undergrounded by the Developer at project expense.
- 49. The Developer shall reconstruct the alley intersection and curb returns at Pacific Coast Highway to align with the new alley widening. The Developer shall relocate all existing facilities in the vicinity of the alley intersection to accommodate reconstruction.
- 50. The Developer shall provide for public street lamps or install on-site alley lighting to the improved north-south alley, to sufficiently illuminate the alleyway.
- 51. The Developer shall contact the appropriate City Department or agency of interest of existing facilities within the north-south alley, prior to submitting alley improvement plans to the Department of Public Works. The Developer shall check with the Long Beach Water Department, at (562) 570-2300, and the Energy Resources Department, at (562) 570-2000, for scheduled main replacement work.
- 52. All unused driveways and curb cuts shall be removed and replaced with full-height curb, gutter and sidewalk. There are existing driveways along the perimeter of the development site that will not be utilized based on conceptual design and shall be demolished and replaced.

- 53. The Developer shall demolish the existing sidewalk and curb ramp located at the corner of Cedar Avenue and Pacific Coast Highway adjacent to the project site and construct new hardscape per the most current City standard. All hardscape shall be constructed with Portland cement concrete.
- 54. The Developer shall reconstruct the curb, gutter and sidewalk along Pacific Coast Highway adjacent to the project site, resulting in an improved 13-foot wide public sidewalk. All hardscape shall be constructed with Portland cement concrete. The Developer shall also reconstruct sections of the Pacific Coast Highway roadbed adjacent to the project site that are cracked, deteriorated, or uplifted/depressed, to the satisfaction of Caltrans and the Director of Public Works.
- 55. The Developer shall reconstruct the sidewalk along Cedar Avenue adjacent to the project site, and all cracked, deteriorated, or uplifted/depressed sections of curb and gutter. All hardscape shall be constructed with Portland cement concrete. All removal limits shall consist of entire panel replacements (from joint line to joint line).
- 56. The Developer shall reconstruct cracked, deteriorated, or uplifted/depressed sections of curb, gutter and sidewalk adjacent to the project site along Pacific Avenue. All hardscape shall be constructed with Portland cement concrete. All removal limits shall consist of entire panel replacements (from joint line to joint line).
- 57. In coordination with the City's Public Works department the Developer shall provide tree wells, new street trees with root barriers and irrigation along Pacific Coast Highway, adjacent to the project site. The Developer and/or successors shall water and maintain all street trees, landscaping and sprinkler systems along Pacific Coast Highway as required in connection with this project. An Installation and Maintenance Agreement (IMA) shall be executed prior to issuance of Certificate of Occupancy for the development project to require the developer and/or successors to install and maintain all landscaping installed along Pacific Coast Highway. The Developer shall contact the Street Tree Division of the Department of Public Works, at (562) 570-2770, prior to beginning the tree planting, landscaping, and any irrigation system work. The Street Tree Division will assist with the size, type and manner in which the street trees are to be installed. At a minimum, parkway trees shall provide shade coverage, after five years of growth, of 50% of the total area dedicated for public right of way
- 58. The Developer shall provide for new tree wells and street trees with root barriers and irrigation along the perimeter of the project site, along Pacific Avenue and

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Cedar Avenue, per Section 21.42.050 of the Long Beach Municipal Code. Street trees requiring removal shall be relocated or replaced to the satisfaction of the Director of Public Works. The Developer and/or successors shall water and maintain all street trees, landscaping and sprinkler systems required in connection with this project. The Developer shall contact the Street Tree Division of the Department of Public Works, at (562) 570-2770, prior to beginning the tree planting, landscaping, and any irrigation system work. The Street Tree Division will assist with the size, type and manner in which the street trees are to be installed.

- 59. Prior to ANY demolition, excavation or construction the Developer shall install Custom Printed Flex Mesh screen(s) along the perimeter of the development site, such as FenceScreen.com Series 311, or equivalent, fence screening, and provide for the printed graphic to the satisfaction of the Director of Public Works. The graphics shall depict positive images of the City or other artistic concepts. Prior to submitting the graphic design for printing, the Developer shall consult with the Department of Public Works to review and approve.
- 60. The Developer shall be responsible for the maintenance, repair and replacement of off-site improvements abutting the project boundary during construction of the on-site improvements, until final inspection of the on-site improvements by the City. All off-site improvements, adjacent to the development site and/or along the truck delivery route, found damaged as a result of construction activities shall be reconstructed or replaced by the Developer.
- 61. The Developer shall provide for the resetting to grade of manholes, pull boxes, meters, and other existing facilities in conjunction with the required off-site improvements.
- 62. The Developer shall submit for approval a shoring plan, for any temporary or permanent tiebacks/soil nails that are required to extend beneath the public rights-of-way adjacent to the project site. Tiebacks/soil nails shall be installed, maintained and removed per the standards and requirement of Long Beach Municipal Code Chapter 14.08.
- 63. The Developer shall submit a grading plan with hydrology and hydraulic calculations showing building elevations and drainage pattern and slopes, for review and approval by the Director of Planning and Building Services and the Director of Public Works, prior to issuance of a building permit.
- 64. Prior to approving an engineering plan, all projects greater than 1 acre in size must demonstrate coverage under the State Construction General NPDES Permit. To meet this requirement, the applicant must submit a copy of the letter

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from the State Water Resource Control Board acknowledging receipt of the Notice of Intent (NOI) and a certification from the Developer or Engineer that a Storm Water Pollution Prevention Plan (SWPPP) has been prepared. Should you have any questions regarding the State Construction General NPDES Permit or wish to obtain an application, please call the State Regional Board Office at (213) 576-6600 or visit their website for complete instructions at www.waterboards.ca.gov/water\_issues/programs/stormwater/construction.sht ml. Left-click on the Construction General Permit Order 2009-0009-DWQ link.

#### TRAFFIC AND TRANSPORTATION

- 65. A traffic impact analysis must be prepared for this project, under the supervision and approval of a registered Traffic Engineer in the State of California (Engineer's stamp required) and submitted for review prior to issuance of a building permit. In addition, any physical street improvements must include a scaled drawing stamped by a registered Civil Engineer in the State of California. Any conditions generated by the analysis shall be made a part of these conditions.
- 66. The Developer shall improve traffic signal related equipment to current California Manual on Uniform Traffic Control Devices (CA MUTCD) and/or Caltrans and City of Long Beach standards. The traffic signal related equipment shall be within signalized intersections that are directly or significantly impacted by the Developer's project (e.g. the intersection of Pacific Coast Highway and Pacific Avenue/Cedar Avenue), based on the results of the traffic impact analysis. If not existing, the traffic signal related equipment shall include, but may not be limited to, the following:
  - a. All traffic signal indications shall be updated to 12-inch LED units.
  - b. Vehicular detection shall be installed on all approaches to the signalized intersection. This may include presence, mid or advance detection per City direction. Options will include standard Type E loops or video detection.
  - All pedestrian indications shall be upgraded to LED countdown modules within all pedestrian crossings.
  - d. All pedestrian push buttons shall be upgraded to the most current City standard.
  - e. New Emergency Vehicle Pre-Emption (EVPE) equipment shall be installed at the signalized intersection. The equipment and installation must be completed per the most current City standard. A GPS Module shall be installed at the signalized intersection per the most current City standard.
  - f. The Developer may be asked to update the traffic signal controller. The existing traffic signal controller may not have the capability to handle the

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complexities of new traffic patterns that are directly related to the Developer's project. In such cases, the Developer shall install a new traffic signal controller based on the most current City standard.

- 63. New continental style crosswalks in the vicinity of the project site shall be added by the Developer to the satisfaction of the City Traffic Engineer. The Developer shall be responsible to upgrade all existing crosswalks, and install all new thermoplastic continental crosswalks, to the newest City standards.
- 64. The Developer shall be responsible to implement the most recent Bicycle Master Plan of the City at its frontage blocks or contribute a fair share fee to the City for future implementation.
- 65. The Developer shall be responsible to replace the existing decorative bicycle racks along Pacific Coast Highway and provide new bicycle parking and related facilities to the satisfaction of the City Traffic Engineer.
- 66. There an existing bus stop located on Pacific Coast Highway, east of the north-south alley, adjacent to the development site. The Developer shall incorporate enhancements to improve the bus stop into this project. The Developer shall collaborate with Long Beach Transit and the City's Public Works Department to take advantage of this opportunity. The Developer is responsible for coordination with Public Works, and the applicable entity and approvals from such for all design, applicable utility work, permitting, and relocation work.
- 67. The Developer shall contact Long Beach Transit prior to the commencement of work to coordinate design and construction issues, and to ensure that construction does not interfere with transit bus operations at the existing bus stop on Pacific Coast Highway. Contact Shirley Hsiao, Manager of Service Development Planning, at (562) 591-8753.
- 68. The size and configuration of all proposed driveways serving the project site shall be subject to review and approval of the City Traffic Engineer. Driveways greater than 28 feet in width require a variance; contact the Transportation Mobility Bureau, at (562) 570-6331, to request additional information regarding driveway construction requirements.

Note: The Developer is proposing to construct a driveway with a vehicular gate along Pacific Avenue near the property's northern boundary. The Developer shall provide 40 feet of stacking distance from the proposed gate to the projection of the curb face. Driveways located on adjoining properties shall be separated by a minimum 20 feet of full-height curb per Long Beach Municipal Code Section 21.42.251. However, backing a vehicle into a driveway from a main arterial is not acceptable. Public Works recommends the Developer install

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a curb loading zone in lieu of the proposed driveway along Pacific Avenue.

- 69. The Developer shall submit an on-site traffic circulation study to analyze utilization of the driveways servicing the development, to the satisfaction of the City Traffic Engineer.
- 70. The Developer shall salvage and reinstall all traffic signs that require temporary removal to accommodate new construction within the public right-of-way. All traffic signs shall be reinstalled to the satisfaction of the City Traffic Engineer.
- 71. The Developer shall replace all existing traffic signs that are damaged or misplaced. The Developer shall also be responsible to replace all traffic signs and mounting poles damaged or misplaced as a result of construction activities.
- 72. The Developer shall repaint all traffic striping and markings adjacent to the project site. The Developer shall contact the Transportation Mobility Bureau, at (562) 570-6331, to modify any existing curb marking zones adjacent to the project site.
- 73. All traffic control device installations, including pavement markings within the private parking garages, shall be installed in accordance with the current edition of the CA MUTCD (i.e. white parking stalls, stop signs, entry treatment signage, handicapped signage, etc.).

#### **ENERGY RESOURCES**

- 74. If in the future, the developer intends to individually meter the residential units, LBER will required a secure a location for the meter headers during architectural design phase. The developer/owner shall be responsible for coordinating with LBER to make sure there is a plan in place for any future relocation of gas facilities.
- 75. The developer shall contact LBER in advance to coordinate, plan, discuss fees and cost and to schedule impacts of installing a meter room for the project. LBER reserves the right to postpone or suspend natural gas service until all LBER requirements have been met.
- 76. The developer shall provide all gas loads for proposed development to the satisfaction of the LBER Department.

# ZONING CHANGE AND ZONE CODE AMENDMENT FINDINGS

201 – 245 W. Pacific Coast Highway and 1827 Pacific Avenue Application No. 1810-26 (ZCHG18-006, ZCA 18-008, SPR18-054, LMG 18-032) November 5, 2020

Pursuant to Section 21.25.106 of the Long Beach Municipal Code, in all cases, the Planning Commission and the City Council shall be required to make the following findings of fact before rezoning a parcel. These findings and staff analysis are presented for consideration, adoption, and incorporation into the record of proceedings:

# 1. THE PROPOSED CHANGE WILL NOT ADVERSELY AFFECT THE CHARACTER, LIVABILITY OR APPROPRIATE DEVELOPMENT OF THE SURROUNDING AREA; AND

The project site is currently zoned Regional Highway District (CHW), Community Automobile Orientated (CCA) and Two Family Residential (R-2-N) Districts. Mixed use development projects are not permitted in the CHW, CCA or the R-2-N Districts. The applicant seeks a Zone Change to the Midtown Specific Plan (MTSP) Transit Node Low (TN Low) district to facilitate the mixed-use development. The MTSP TN Low zoning district is consistent with the site's General Plan's PlaceType Designation, Transit Orientated Development (TOD-L). This PlaceType is a mixed-use land use designation that allows commercial and residential uses at higher densities such as apartments and condominiums and neighborhood-serving commercial uses to support the day-to-day needs of area residents.

The project is surrounded by residential and commercial uses to the north, commercial uses to the west, east and south. The mixed-use project would serve as an appropriate transition between the existing traffic and commercial uses that flank Pacific Coast Highway and the single-family residences that abut the corridor. The single-family residences located immediately north of the project site will be buffered by landscaping to help screen views, and the building height will help to reduce noise impacts from Pacific Coast Highway. Construction of the project would not negatively affect the character of the existing neighborhood, nor would it adversely affect its livability.

# 2. THE PROPOSED CHANGE IS CONSISTENT WITH THE GOALS, OBJECTIVES AND PROVISIONS OF THE GENERAL PLAN.

The Land Use Element of the General Plan states that the City of Long Beach is committed to continuing its tradition of improving the physical environment by achieving multiple and interrelated land use goals including, but not limited to, offering diverse housing opportunities. The General Plan's Land Use Element (GPLUE), adopted in December 2019, designates the project site as the Transit

Orientated Development - Low (TOD-L). This PlaceType is a mixed-use land use designation that allows commercial and residential uses such as apartments and condominiums. This PlaceType allows for multi-family residential and commercial buildings on larger parcels of land, up to seven stories in height. The TOD-L Placetype encourages the multi-family housing at densities that provide a transition from lower-density single family neighborhoods to higher density housing planned along transit routes such as Pacific Coast Highway and Pacific Avenue.

While the surrounding neighborhood consists of single story commercial and one and two-story residential uses, The Land Use Element identifies the development of new multifamily housing along commercial corridors as an important strategy in this area of Long Beach. As such, the area can be characterized as an area in transition. Additionally, the Land Use Element identified the needs for neighborhood and community serving uses specifically grocery uses in the Westside/Wrigley neighborhoods. The project would be consistent with the City's General Plan by creating new multifamily housing in the vicinity of commercial uses and allowing for a grocery store and other neighborhood-serving uses, consistent with the character of surrounding neighborhood.

In particular, the subject location has been identified among areas (totaling 13% of the City's acreage) that would accommodate growth anticipated in the City through 2040. Map LU-20 of the GPLUE identifies the location of eight "major areas of change" that are the focus of the land use concept and details the intent of the changes. Major Area of Change Number 5 depicts those areas in the City where the focus is on encouraging mixed use, transit oriented development, given their proximity to transit and the relative underuse of parcels, in light of their transit access, central location and proximity to jobs; portions of Pacific Coast Highway are depicted among those areas. Other areas of change are identified for a wide range of General Plan objectives including, for example, preservation of open space and transitioning of older industrial areas to future, clean job-generating uses.

The Zone Change implements the LUE goals polices for example, Goal No.3 – Accommodate Strategic Growth and Change. LU Policy 7-4 Encourage degraded and abandoned buildings and properties to transition to more productive uses through adaptive reuse or new development. Goal No. 5: Diversify Housing Opportunities. LUE Policy 13-2- Provide new housing opportunities in neighborhood-service centers and corridors within transit-oriented development areas and downtown.

The applicant seeks a Zone Change to Midtown Specific Plan (MTSP) Transit Node (TN) district. The proposed MTSP-TN-L district will better align the existing zoning designations of the parcels to their PlaceType outlined in the Land Use Element and facilitate the construction of housing on otherwise underutilized and vacant lots. The Land Use Element identifies the development of new multifamily housing along commercial corridors as an important strategy in this area

of Long Beach. The zone change to the MTSP-TN-L district would support the production of housing in this location which is consistent the TOD-L Placetype designation of the General Plan. The project would be consistent with the City's General Plan by creating new market rate apartments. A mixed-use project that include new grocery store in the vicinity of residential uses would support the character of surrounding residential neighborhood and be consistent with the existing commercial uses along Pacific Coast Highway.

# 3. IF THE PROPOSED CHANGE IS A REZONING OF AN EXISTING MOBILE HOME PARK, THAT THE REQUIREMENTS OF SECTION 21.25.109 HAVE BEEN OR WILL BE FULLY MET.

The proposed change does not involve the rezoning of an existing mobile home park. The western half of the project site is occupied by commercial buildings/uses. The eastern half of the project site is currently vacant and is a former redevelopment site.

#### Midtown Specific Plan Environmental Impact Report

Midtown Specific Plan FEIR & MMRP

Midtown Specific Plan NOA

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**Initial Study** 

Notice of Preparation (NOP)

**Scoping Meeting Presentation** 

Final Draft Midtown Specific Plan

September 2020 | Addendum No. 1 to the Midtown Specific Plan

# 201 West PCH Project

For City of Long Beach

Prepared for:

#### City of Long Beach Development Services Planning Bureau

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This Addendum to the City of Long Beach's 2016 certified Midtown Specific Plan Environmental Impact Report (Certified EIR), State Clearinghouse No. 2015031034 has been prepared in accordance with Section 21166 of the California Environmental Quality Act (CEQA) and sections 15162 and 15164 of the CEQA Guidelines. The City of Long Beach is the lead agency responsible for the EIR, and this Addendum for the proposed 201 West PCH Project.

Jan van Dijs Inc. (Applicant) proposes to develop a mixed-use apartment project at 201-245 West Pacific Coast Highway and 1827 Pacific Avenue in the City of Long Beach in Los Angeles County. The Project Site is located on Pacific Coast Highway between Cedar and Pacific Avenues. The Project Site is located just west of the Midtown Specific Plan's western boundary, and approximately a quarter mile of the Metro Blue Line, Pacific Coast Highway Station.

The Proposed Development Project would demolish the existing buildings onsite and construct a new five-story mixed-use apartment development over several lots. A (north/south) un-named alley bisects the project, which results in the development project being constructed as two separate buildings, the "Cedar Building" and the "Pacific Building" which are connected together by several raised pedestrian bridges. The Proposed Development Project would include 138 dwelling units, comprised of studio, one-bedroom, two-bedroom, and three-bedroom units, and approximately 25,000 square feet of ground-floor commercial distributed throughout the two buildings. The commercial space would include 23,000 square feet of grocery store in the Pacific building and an approximately 2,000 square foot café in the Cedar building. The Proposed Development Project would extend the Midtown Specific Plan area to the Project Site. The Proposed Development Project would be within the buildout of the Midtown Specific Plan. In order to implement the Proposed Development Project, a number of discretionary approvals from the City of Long Beach are required, including (1) Zoning Code Amendment, (2) Zone Map Change; (3) Site Plan Review; (4) Lot Merger; and (5) Certificate of Compliance.

### 1.1 PURPOSE OF AN EIR ADDENDUM

# 1.1.1 CEQA Requirements

Where a previous program EIR has been prepared, subsequent activities within the program must be examined in light of that EIR to determine whether an additional environmental document must be prepared. (CEQA Guidelines Section 15168(c)). Where the subsequent activities involve site specific operations, the agency should use a written checklist to document the evaluation of the site and the activity to determine whether the environmental effects of the operation were covered in the program EIR. (CEQA Guidelines Section 15168(c)(4)).

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Pursuant to PRC Section 21166 and State CEQA Guidelines Section 15162, when an EIR has been certified or a negative declaration adopted for a project, no subsequent EIR or negative declaration shall be prepared for the project unless the lead agency determines that one or more of the following conditions are met:

- 1. Substantial project changes are proposed that will require major revisions of the previous EIR or negative declaration due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects;
- Substantial changes would occur with respect to the circumstances under which the project is undertaken that require major revisions to the previous EIR or negative declaration due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects; or
- 3. New information of substantial importance that was not known and could not have been known with the exercise of reasonable diligence at the time the previous EIR was certified or the negative declaration was adopted shows any of the following:
  - a. The project will have one or more significant effects not discussed in the previous EIR or negative declaration.
  - Significant effects previously examined will be substantially more severe than identified in the previous EIR.
  - c. Mitigation measures or alternatives previously found not to be feasible would in fact be feasible and would substantially reduce one or more significant effects of the project, but the project proponent declines to adopt the mitigation measures or alternatives.
  - d. Mitigation measures or alternatives that are considerably different from those analyzed in the previous EIR would substantially reduce one or more significant effects on the environment, but the project proponent declines to adopt the mitigation measures or alternatives.

An Addendum can be prepared to a previously certified EIR if some changes or additions are necessary but none of the conditions described in Section 15162 (above) calling for preparation of a subsequent EIR have occurred (CEQA Guidelines Section 15164).

Changes to the Midtown Specific Plan (Approved Project) and regulatory conditions, described below under the Project Description would fulfill none of the conditions outlined in CEQA Guidelines Sections 15162(a)(1)-(3) as these changes would not result in new significant environmental effects or a substantial increase in the severity of previously identified significant effects requiring major revisions to the Certified EIR. Accordingly, this checklist provides the substantial evidence required by CEQA Guidelines Section 15164(e) to support the finding that a subsequent EIR is not required and an addendum to the Certified EIR is the appropriate environmental document to address changes to the project.

As stated in CEQA Guidelines Section 15164 (Addendum to an EIR or Negative Declaration):

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- a) The lead agency or responsible agency shall prepare an addendum to a previously certified EIR if some changes or additions are necessary but none of the conditions described in Section 15162 calling for preparation of a subsequent EIR have occurred.
- b) An addendum to an adopted negative declaration may be prepared if only minor technical changes or additions are necessary or none of the conditions described in Section 15162 calling for the preparation of a subsequent EIR or negative declaration have occurred.
- c) An addendum need not be circulated for public review but can be included in or attached to the final EIR or adopted negative declaration.
- d) The decision-making body shall consider the addendum with the final EIR or adopted negative declaration prior to making a decision on the project.
- e) A brief explanation of the decision not to prepare a subsequent EIR pursuant to Section 15162 should be included in an addendum to an EIR, the lead agency's findings on the project, or elsewhere in the record. The explanation must be supported by substantial evidence.

After careful consideration of the potential environmental impacts of the Proposed Project, the City of

Long Beach has determined that 1) none of the conditions requiring preparation of a subsequent or supplement to an EIR have occurred, and 2) the circumstances described in Section 15164 of the CEQA Guidelines exist. Therefore, an Addendum to the Midtown Specific Plan EIR has been deemed appropriate.

## 1.1.2 Scope of Analysis in This Addendum

Changes to the Midtown Specific Plan EIR ("Certified EIR") and regulatory conditions, described below under the Project Description would fulfill none of the conditions outlined in CEQA Guidelines Sections 15162(a)(1)-(3) as these changes would not result in new significant environmental effects or a substantial increase in the severity of previously identified significant effects requiring major revisions to the Certified EIR. Accordingly, this checklist provides the substantial evidence required by CEQA Guidelines Section 15164(e) to support the finding that a subsequent EIR is not required and an addendum to the Certified EIR is the appropriate environmental document to address changes to the project.

In order to implement the Proposed Project, a number of discretionary approvals from the City of Long Beach are required, including (1) Zoning Code Amendment (2) Zone Map Change; (3) Site Plan Review; (4) Lot Merger; and (5) Certificate of Compliance. As lead agency under CEQA, the City of Long Beach is required to evaluate the environmental impacts associated with these discretionary approvals. The scope of the review for project related impacts for this Addendum is limited to differences between impacts analyzed by the Certified EIR for implementation of the Midtown Specific Plan Project (Approved Project) and the Proposed Project. The Approved Project will serve as the "baseline" for the environmental impact analysis. The baseline includes all applicable mitigation measures from the adopted Mitigation Monitoring and Reporting Program (MMRP), approved in conjunction with the Certified EIR. As required by CEQA, this Addendum also

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addresses changes in circumstances or new information that would potentially involve new environmental impacts.

## 1.2 CONTENT AND ORGANIZATION OF THIS ADDENDUM

This Addendum relies on the City of Long Beach's CEQA checklist, which addresses environmental issues section by section. The completed checklist is included in Section 5.0, Environmental Analysis. Each environmental topic has the following subheadings:

- Summary of Previous Environmental Analysis
- Impacts Associated with the Proposed Project (including environmental checklist)
- Adopted Mitigation Measures Applicable to the Proposed Project

#### 1.3 PREVIOUS ENVIRONMENTAL DOCUMENTATION

For a detailed description of adopted land use planning documents that apply to the Certified EIR and associated environmental documentation, see Section 3.1, Project Background, of this Addendum.

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#### 2.1 PROJECT LOCATION

## 2.1.1 Project Site

The Project Site is located toward the eastern side of the City, approximately 2 miles north of the Pacific Ocean and approximately 0.5 miles north from Downtown Long Beach<sup>1</sup>. The Project Site is approximately 2.2 miles south of the San Diego Freeway (I-405) and 0.8 miles east of the Long Beach Freeway (I-710) (See Figure 1, Regional Map). The Project Site is comprised of several lots addressed as 201-245 West Pacific Coast Highway and 1827 Pacific Avenue in the City of Long Beach within Los Angeles County. (See Figure 2, Local Vicinity).

The Project Site consists of four parcels: two parcels on the eastern side of the Project Site (northwest corner of Pacific Avenue and Pacific Coast Highway) are vacant and two parcels on the western side of the Project Site (northeast corner of Cedar Avenue and Pacific Coast Highway) are developed with an approximately 9,100 square foot grocery store and its associated surface parking. Table 1 below summarizes the existing conditions at the Project Site.

## 2.1.2 Midtown Specific Plan

The Midtown Specific Plan area is located along Long Beach Boulevard and is roughly bound by Wardlow Road to the north, Atlantic Avenue to the east, Anaheim Street to the south, and Pacific Avenue to the west. The Midtown Specific Plan regulates its plan area through four development districts: Transit Node, Corridor, Medical and Open Space. The Project Site is located just west of the Midtown Specific Plan area's western boundary on Pacific Coast Highway (See Figure 3, Existing Zoning and General Plan Map). The Project Site is located near Transit Node 6 of the Midtown Specific Plan. Transit Node 6 is approximately 20 acres. The projected development potential for District 6 assumes up to 362 dwelling units, 297,125 square feet of commercial/employment, and 102 hotel rooms (Long Beach 2016b).

The vision of the Midtown Specific Plan is to make Midtown a vibrate and thriving community with a unique blend of parks, strong businesses, and transit-oriented housing, and make Midtown an early leader in multi-modal transportation. The Transit Node District supports compact, transit-oriented mixed-use and residential development centered on Metro Blue Line stations (Long beach 2016b).

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<sup>&</sup>lt;sup>1</sup> Calculated from the northern border of the Downtown Plan area to the Project Site.

#### 2.2 ENVIRONMENTAL SETTING

## 2.2.1 Existing Land Use and Zoning

The Project Site is comprised of four parcels. A summary of the General Plan Land Use designation (PlaceTypes) and corresponding zones are provided in Table 1 below. Table 1 also provides a description of the current uses onsite.

Table 1 Summary of Existing Conditions at the Project Site

		Existing Designations			
Parcel APN <sup>1</sup>	Address <sup>1</sup>	General Plan LUE (2019) PlaceType <sup>2</sup>	Zoning <sup>3</sup>	Description	
7209-022-027	231 W. Pacific Coast Highway		Two-Family Residential, Standard Lot (R-2-N)	Developed with an approximately 9,100 square foot supermarket building and	
7209-022-023	245 W. Pacific Coast Highway	Transit-Oriented Development Low	Regional Highway Commercial (CHW)	surface parking lot	
7209-022-900	1827 Pacific Avenue	Density (TOD-L) (7 story limitation/height designation)	Community Commercial Automobile-Oriented (CCA)	Undeveloped, vacant land enclosed by fencing and a wall	
7209-022-028	201 W. Pacific Coast Highway		Regional Highway Commercial (CHW)	Vacant parcel developed with a one- story building (vacant) fronting Pacific Avenue. The rest of the parcel is paved. The parcel is enclosed with a fence and wall.	

Sources:

Los Angeles County Office of the Assessor 2020.

City of Long Beach 2019.

City of Long Beach 2016a

# 2.2.2 Surrounding Land Use and Zoning

The Project Site is located within an urbanized area within the City of Long Beach, Los Angeles County, California. The Project Site is located on Pacific Coast Highway between Cedar and Pacific Avenues. Pacific Avenue and Pacific Coast Highway are prominent thoroughfares in Long Beach. Commercial and other non-residential uses generally "front" along these streets and residential neighborhoods are located behind commercial uses. Below is a description of the properties surrounding the Project Site. Refer to Figures 2, Local Vicinity, and 3, Existing Zoning and General Plan Map.

North: Single-family and multi-family residential development is located to the north of the Project Site along Cedar Avenue. Commercial uses are located to the north of the Project Site along Pacific Avenue. The residential uses are one and two story in height, and the commercial uses to the north are generally one-story in height.

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The residential properties along Cedar Avenue are zoned Two-family Residential, standard lot (R-2-N). The residential properties on the west side of Cedar Avenue have a PlaceType designation of Founding and Contemporary Neighborhood (Single-family and low-density) (FCN). The properties on the east side of Cedar Avenue have a Place Type designation of Transit-Oriented Development Low Density (mixed use) (TOD-L). Parcels near the Project Site have a 7-story height limit, and the parcels located on Cedar Avenue, north of 19th Street have a 4-story height limit. The FCN PlaceType designation limits height at 2 stories.

■ East: Pacific Avenue immediately borders the Project Site to the east. Commercial uses are located east of the Project Site along Pacific Avenue. One single-family home fronts along Pacific Avenue just east of the Project Site. Commercial uses continue eastward along the Pacific Coast Highway. Single-family and multifamily residential properties are located just east of these commercial uses along Pacific Avenue. Buildings in the vicinity of the Project Site range between one and two stories in height.

In the vicinity of the Project Site, parcels along Pacific Avenue are zoned CCA with a PlaceType designation of TOD-L (with a seven-story height limit). Parcels further east from Pacific Avenue are zoned Moderate-density Multiple Residential (R-4-R) with a PlaceType designation of TOD-L (with a 7 story and 5 story height limit). Parcels generally along the Pacific Coast Highway are zoned Specific Plan (SP-1-TN) and have a PlaceType designation of Transit-Oriented Development Moderate Density (TOD-M) with a 10-story height limit. These parcels are within the Midtown Specific Plan Area, which guide development within this area.

South: The Pacific Coast Highway immediately borders the Project Site to the south. Educational Partnership High School is located at 1794 Cedar Avenue, across the street from the Project Site. Commercial uses are located along the Pacific Coast Highway and Pacific Avenue. Single-family and multifamily development are located just south of the commercial uses along Pacific Coast Highway. Further south along Pacific Avenue, single-family and multi-family residential uses front Pacific Avenue. In the vicinity of the Project Site, buildings range between one to two stories.

Parcels along the Pacific Coast Highway are zoned Regional Highway Commercial (CHW) with a PlaceType designation of Neighborhood Serving Center or Corridor Moderate Density (NSC-M) and TOD-L. Parcels along Pacific Avenue are zoned CCA near the Project Site and have a PlaceType designation of TOD-L. The parcels just south of the commercial uses along the Pacific Coast Highway are zoned Institutional (I) and Medium-density Multiple Residential (R-4-N) and have the PlaceType designations of NSC-M and Multiple Family Residential Moderate Density (MFR-M), respectively. Buildings to the south have a height limit of four to five stories.

■ West: Cedar Avenue immediately borders the Project Site to the west. A one-story commercial building fronts Pacific Coast Highway and a one-story multifamily building is across the street from the Project Site on Cedar Avenue. Commercial uses are located along the Pacific Coast Highway. Single-family and multifamily development are located to the west of the Project Site along local streets. Buildings to the west of the Project Site are generally one to two stories. Properties to the west are zoned CHW, with a PlaceType designation of NSC-M, and R-2-N, with a PlaceType designation of FCN. The height limit for the NSC-M PlaceType designation is 5-stories and the height limit for the FCN PlaceType designation is 2 stories.

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# 2.2.3 Local and Regional Access

The I-405 Freeway, approximately 1.8 miles north of the Project Site, the I-710 Freeway, approximately 0.8 miles west of the Project Site, Pacific Coast Highway (State Route 1 [SR-1]), immediately south of the Project Site, provide regional access to the Project Site.

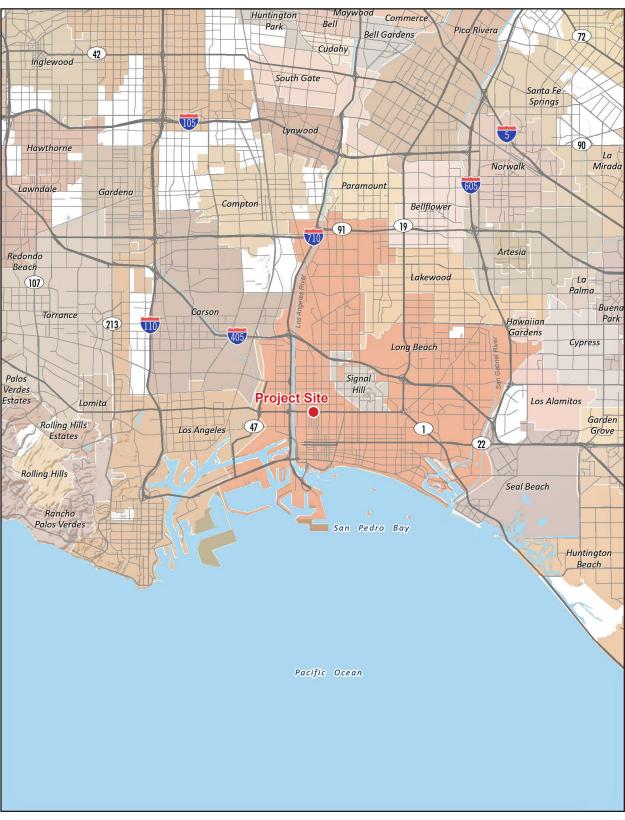
Locally, the Project Site is served by the City's street grid system. The Project Site is located on Pacific Coast Highway between Cedar and Pacific Avenues. The Long Beach General Plan, Circulation Element, designates Pacific Coast Highway as a Regional Corridor. Pacific Avenue is designated as a Minor Avenue north of the Pacific Coast Highway (adjacent to the Project Site) and as a Major Avenue south of the Pacific Coast Highway. Cedar Avenue borders the Project Site to the west and is designated as a local street. These streets provide primary and local access to the Project Site.

#### 2.2.4 Public Transit

The Project Site is approximately a quarter mile west of the Metro A Line (formerly known as the Blue Line), Pacific Coast Highway Station, located near the intersection of Long Beach Boulevard and the Pacific Coast Highway. The Metro A Line provides service between Downtown Long Beach and Downtown Los Angeles, and connects to Metro C Line, E Line, D Line, and B Line (former known as the Green Line, Expo Line, Purple Line, and Red Line, respectively) at transfer stations. In addition, a number of bus lines operate along the Pacific Coast Highway, Pacific Avenue, and Magnolia Avenue with bus stops within 0.25 miles of the project site. Long Beach Transit and Torrance Transit operates the bus routes in vicinity of the Project Site. The Long Beach Transit lines in the vicinity of the Project Site include: 1, 171, 172, 173, 174, and 182. The Torrance Transit operates bus route 3 in the vicinity of the Project Site. Southern California Association of Government (SCAG) identifies the Project Site as being within a High Quality Transit Area (SCAG 2016).

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Figure 1 - Regional Location



Note: Unincorporated county areas are shown in white.

Source: ESRI, 2020

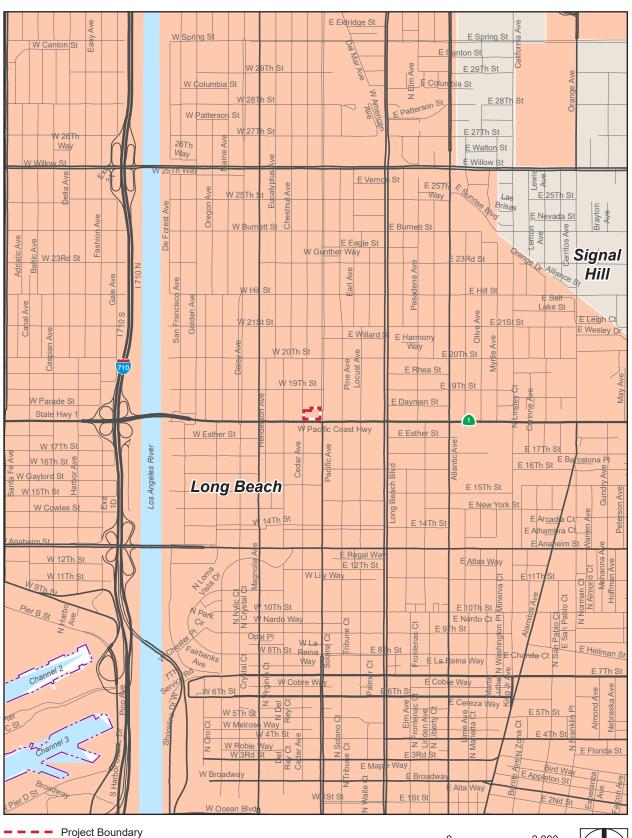




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Figure 2 - Local Vicinity



Note: Unincorporated county areas are shown in white.

Source: ESRI, 2020

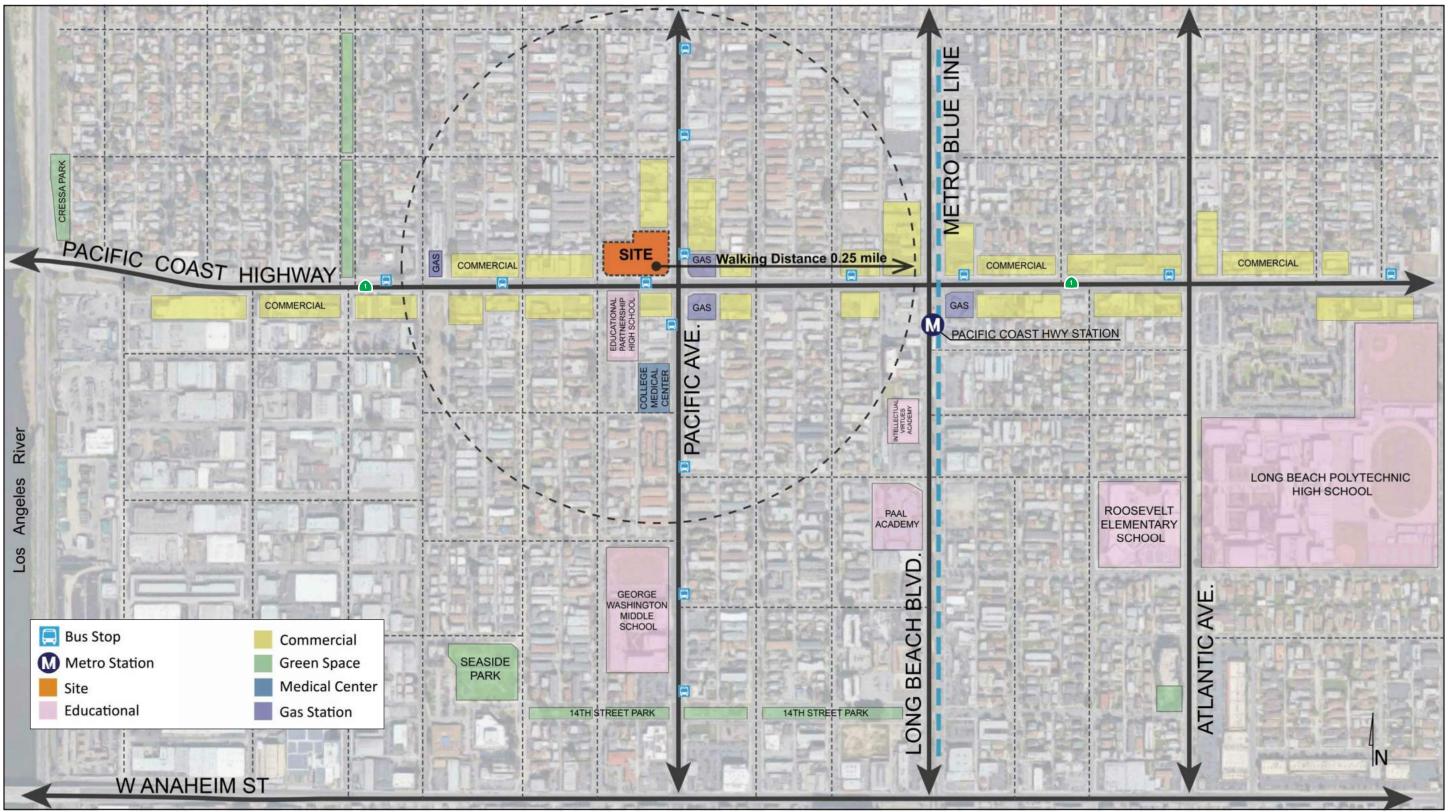




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Figure 3 - Neighborhood Context





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# 3. Project Description

#### 3.1 PROJECT BACKGROUND

## 3.1.1 Approved Project (Midtown Specific Plan)

The Approved Project analyzed in the 2016 Certified EIR consists of City adoption of the Midtown Specific Plan (Specific Plan Area), extraction of the two residential blocks around Officer Black Park from PD-29 (Area Outside the Specific Plan), and retention of the underlying conventional zoning designations already in place for the two extracted residential blocks. The Approved Project also includes the closure of a few roadway segments that intersect with Long Beach Boulevard.

#### 3.1.1.1 SPECIFIC PLAN AREA

The Approved Project provides a framework for the development and improvement of a 369-acre corridor along Long Beach Boulevard. The Midtown Specific Plan Area currently contains just under 1,900 residential units and a little over 2.6 million square feet of commercial and employment uses, as well as medical facilities with over 950 licensed hospital beds and three hotels with approximately 200 hotel rooms. The Approved Project increased the number of permitted residential units within the Midtown Specific Plan Area to just over 3,600 units—approximately 1,700 more than existing conditions but about 2,200 less than would be allowed under the current PD-29 zoning.

The Midtown Specific Plan allows commercial and employment building square footage of 2.9 million square feet (a net increase of almost 369,000 square feet over existing conditions) by concentrating and intensifying development at key transit and employment nodes. The buildout projections for the Specific Plan assume a small increase in the number of licensed hospital beds (27 beds) and the addition of a business hotel with up to 81 hotel rooms.

#### 3.1.1.2 AREA OUTSIDE THE SPECIFIC PLAN

As stated above, the Approved Project includes an area outside of, but adjacent to the Specific Plan Area boundary; the area comprises approximately four acres around Officer Black Park. Existing land uses within this area consists of 76 dwelling units and 11,346 square feet associated with the existing church; this area also contains Officer Black Park.

Under the Approved Project, the two residential blocks around Officer Black Park were extracted from PD 29 and retained their underlying conventional zoning designations: Single-Family Residential, standard lot (R-1-N); Three-Family Residential (R-3-S); and Park (P). The proposed extraction did not require an amendment to the City's zoning map, as the underlying conventional zoning designations were already in place. With the exception of the zoning designation revisions, no physical change (e.g., additional development intensity,

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redevelopment) was proposed; the EIR assumed no physical changes would occur within this area and all existing uses would remain.

#### 3.1.1.3 ROADWAY SEGMENT CLOSURES

The Approved Project included the closure of the following roadway segments to vehicular traffic in order to create parklets (small street parks): 25th Street west of Long Beach Boulevard; 25th Street east of Long Beach Boulevard; 23rd Street east of Long Beach Boulevard; 21st Street west of Long Beach Boulevard; 21st Street east of Long Beach Boulevard; Rhea Street east of Long Beach Boulevard; Esther Street east of Long Beach Boulevard; 15th Street west of Long Beach Boulevard; 15th Street east of Long Beach Boulevard; and 14th Street east of Long Beach Boulevard.

#### 3.1.1.4 APPROVED PROJECT APPROVALS

Implementation of the Approved Project required the project approvals listed in Table 2.

Table 2 Project Approvals for Approved Project

Lead Agency	Action
Long Beach City Council	Adoption of the Midtown Specific Plan Adoption of a Zone Change Certification of the EIR Adoption of Findings of Fact and Statement of Overriding Considerations (if required) Adoption of the Mitigation Monitoring Program
Responsible Agencies	Action
Los Angeles Regional Water Quality Control Board	Issuance of a National Pollution Discharge Elimination System Permit (NPDES) for future construction activities

#### 3.1.2 2016 Certified EIR

On June 24, 2016, the Long Beach City Council certified the 2016 Certified EIR and adopted the Approved Project. The 2016 Certified EIR analyzed environmental impacts of the Approved Project. Most impacts identified in the EIR were determined to be less than significant after implementation of mitigation measures. However, the following impacts were determined to be significant and unavoidable even after implementation of feasible mitigation:

• Air Quality Standards (Construction). The Approved Project was found to generate short-term emissions that exceed the South Coast Air Quality Management District's (SCAQMD) regional construction significance thresholds and would significantly contribute to the nonattainment designations of the South Coast Air Basin.

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- Air Quality (Operational). The Approved Project was found to generate long-term emissions that exceed SCAQMD's regional operational significance thresholds and would significantly contribute to the nonattainment designations of the South Coast Air Basin.
- Air Quality (Construction). It was determined that construction activities related to buildout of the Approved Project could expose sensitive receptors to substantial pollutant concentrations of NOX, CO, PM10, and PM2.5.
- Air Quality Plan (Construction and Operational). It was determined that the Approved Project is a regionally significant project that would contribute to an increase in frequency or severity of air quality violations in the South Coast Air Basin and would conflict with the assumptions of the applicable Air Quality Management Plan.
- Greenhouse Gas (GHG) Emissions (Operational). It was determined that buildout of the Approved Project would result in a substantial increase in GHG emissions compared to existing conditions and would not meet SCAQMD's Year 2035 Target efficiency metric of 2.4 metric tons of CO2e per year per service population or the long-term GHG reduction goal under Executive Order S-3-05.
- Noise (Construction). It was determined that noise from construction activities associated with future development projects that would be accommodated by the Approved Project could result in substantial impacts to sensitive receptors.

## 3.2 PROJECT DESCRIPTION

Jan van Dijs Inc. (Applicant) proposes to develop a mixed-use apartment project at 201-245 West Pacific Coast Highway and 1827 Pacific Avenue in the City of Long Beach in Los Angeles County. The Proposed Project would demolish existing buildings onsite and construct a five-story mixed-use apartment development. The Proposed Development Project would include 138 dwelling units and 25,000 square feet of ground-floor commercial. The dwelling units would be comprised of studio, one-bedroom, two-bedroom, and three-bedroom units. The commercial space would include 23,000 square feet of grocery store and approximately 2,000 square foot café. Total gross building area would be approximately 181,436 square feet. The Proposed Project would provide a total of 25,398 square feet of open space, which includes commercial open space, common open space, amenities, and semi-private and private open space (see Table 3 below).

The development project would construct two separate buildings (the Cedar Building and the Pacific Building) connected by pedestrian bridges that span across the north/south (unnamed) alley. Both buildings would contain a total of five stories. The ground floor commercial would encompass both buildings with residential floors span levels two through five. The building would be approximately 64 feet above grade with architectural features extending to 71 feet above grade. The Pacific Building project would include two levels of subterranean parking and the Cedar building will provide surface parking.

Table 3 Proposed Open Space

Open Space Type	Provided (Square Feet)
Commercial Open Space	2,537
Common Open Space	12,166
Amenities	2,696
Semi-Private Open Space	1,579
Private Open Space	6,420
TOTAL	25,398

The Proposed Project would provide a total of 238 parking spaces without tandem parking (or 258 parking spaces with tandem parking) and 82 bicycle parking spaces. Vehicle parking would be accommodated in two levels of subterranean parking, mezzanine level, and street level. Vehicle access to the garage would be provided from one driveway along the west side of Pacific Avenue and one driveway one the east side of Cedar Avenue. The loading area for truck deliveries would be accessed from the existing north/south alley that bisects the project development site.

# 3.2.1 Midtown Specific Plan Area Extension to Project Site

Pacific Avenue provides the western boundary of Transit Node 6 of the Midtown Specific Plan area. The Project Site is located just west of the Midtown Specific Plan area, along Pacific Coast Highway between Cedar and Pacific Avenues. The Proposed Project would extend the Midtown Specific Plan area, Transit Node 6, westerly, to the northeast corner of Cedar Avenue and Pacific Coast Highway. The Proposed Project would be within the buildout of Transit Node 6. Table 4 summarizes the buildout of Transit Node 6 as well as the buildout of the entirety of the Midtown Specific Plan. The Midtown Specific Plan area currently contains approximately 1,900 residential units and a little over 2.6 million square feet of commercial and employment uses, as well as medical facilities with over 950 licensed hospital beds and three hotels with approximately 200 hotel rooms. The Midtown Specific Plan 2016 Certified EIR studied the increase of the number of permitted residential units to just over 3,600 units—1,736 units more than existing conditions. In addition to an increase of 369,000 square feet of commercial and employment generating uses, 27 hospital beds, and 81 hotel rooms over existing conditions of the Plan area at the time. The Transit Node districts supports compact, transit-oriented mixed-use and residential development centered near Metro Blue line stations (Long Beach 2016b).

Table 4 Land Use Summary

	Dwelling Units	Commercial/Employment Square Footage	Hotel Rooms/Hospital Beds
Transit Node 6	362 du	297,125 sf	102 rooms
Overall Midtown Specific Plan	3,619 du	2,997,265 sf	277 rooms / 983 beds
Source: Long Beach 2016b			

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As previously stated, the Proposed Development Project is located immediately adjacent to the Midtown Specific Plan area, at the northern corner of the Pacific Avenue/Pacific Coast Highway intersection. The Midtown Specific Plan area will be expanded westerly, terminating at the northeast corner of Cedar Avenue and Pacific Coast Highway to include the Project Site. As such, the Proposed Development Project relies on the 2016 Certified EIR for the Midtown Specific Plan (SCH No. 2015031034) which analyzed an increase in the Midtown Specific Plan area of 1,736 dwelling units, 368,932 square feet of commercial and employee uses, 27 hospital beds, and 81 hotel rooms. The Proposed Project would ultimately acquire the 1.59 acres west of the Approved Project Site to be incorporated as part of the Midtown Specific Plan area.

# 3.2.2 Discretionary Actions

This Addendum to the Certified EIR is intended to serve as the primary environmental document for all future actions associated with the Proposed Project, including all discretionary approvals requested or required to implement the Proposed Project. In addition, this Addendum is the primary reference document for the formulation and implementation of the MMRP. All the approved, applicable measures from the Certified EIR have been incorporated into this document. This document is intended to provide sufficient information to allow the City of Long Beach and any other permitting agencies to evaluate the potential impacts from construction and implementation of the Proposed Project. The following discretionary actions have been requested by the Project Applicant:

- Zoning Code Amendment
- Zone Map Change
- Site Plan Review
- Lot Merger
- Certificate of Compliance

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Figure 4 - Conceptual Site Plan





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## 4.1 BACKGROUND

1. Project Title: 201 West PCH Project

#### 2. Lead Agency Name and Address:

City of Long Beach Development Services Planning Bureau 411 West Ocean Blvd, 3rd Floor Long Beach, California 90802

#### 3. Contact Person and Phone Number:

Contact: Gina Casillas, Planner 562-570-6879

**4. Project Location:** The Project Site is located at 201-245 West Pacific Coast Highway and 1827 Pacific Avenue in the City of Long Beach within Los Angeles County. The Project Site is located on Pacific Coast Highway between Cedar and Pacific Avenues.

#### 5. Project Sponsor's Name and Address:

Jan van Dijs Inc. 425 E. 4<sup>th</sup> Street Unit E Long Beach, CA 90802

- 6. General Plan Designation: Transit-Oriented Development Low Density TOD-L
- **7. Zoning:** Regional Highway Commercial (CHW), Community Commercial Automobile-Oriented (CCA) and Two-family Residential, standard lot (R-2-N)
- **8. Description of Project** (Describe the whole action involved, including but not limited to, later phases of the project, and any secondary, support, or off-site features necessary for its implementation. Attach additional sheets if necessary):

The Proposed Development Project would demolish the existing buildings onsite. The development project will construct two, five story buildings, as one, mixed-use development project, which consists of 138-market-rate residential units and approximately 25,000 square feet of commercial area. The development project is bisected by an existing 18-foot wide (north/south) un-named alley. The two buildings will be connected by raised pedestrian bridges that expand across the alleyway. The larger of the two buildings – The Pacific Building, is located on the northwest corner of Pacific Avenue and Pacific Coast Highway. This building will sit over five lots which totals 36,330 square feet of land. A lot merger will merge the five lots into one lot. The Cedar Building will sit over four lots which totals 27,528 square feet of land. A lot merger will merge the four lots into one lot.

Commercial square footage will be located on the ground floor of both buildings and residential square footage will be located on levels two through five. The buildings would be approximately 64 feet above grade with architectural features extending to 71 feet above grade. The Pacific Building would include two levels of subterranean parking and the Cedar building will provide surface parking. The Pacific Building will provide approximately 23,000 square feet of commercial area (grocery store) and the Cedar Building will provide approximately 2,000 square feet of commercial area (café) In order to implement the Proposed Project, a number of discretionary approvals from the City of Long Beach are required, including (1) Zoning Code Amendment; (2) Zone Map Change; (3) Site Plan Review; (4) Lot Merger; and (5) Certificate of Compliance.

- 9. Surrounding Land Uses and Setting (Briefly describe the project's surroundings):
  The Project Site is immediately bordered by Cedar Avenue to the west, Pacific Avenue to the east and Pacific Coast Highway to the south. The Project Site is surrounded commercial uses to the east and south along Pacific Avenue and Pacific Coast Highway, single family and multi-family uses to the north and multifamily and commercial uses to the west.
- **10. Other Public Agencies Whose Approval Is Required** (e.g., permits, financing approval, or participation agreement): None.
- 11. Have California Native American tribes traditionally and culturally affiliated with the project area requested consultation pursuant to Public Resources Code section 21080.3.1? If so, is there a plan for consultation that includes, for example, the determination of significance of impacts to tribal cultural resources, procedures regarding confidentiality, etc.?

(Note: Conducting consultation early in the CEQA process allows tribal governments, lead agencies, and project proponents to discuss the level of environmental review, identify and address potential adverse impacts to tribal cultural resources, and reduce the potential for delay and conflict in the environmental review process. (See Public Resources Code section 21080.3.2.) Information may also be available from the California Native American Heritage Commission's Sacred Lands File per Public Resources Code section 5097.96 and the California Historical Resources Information System administered by the California Office of Historic Preservation. Please also note that Public Resources Code section 21082.3(c) contains provisions specific to confidentiality.)

The Proposed Project would comply with SB18.

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## 4.2 ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact," as indicated by the checklist on the following pages.

<ul><li>☐ Aesthetics</li><li>☐ Biological Resources</li><li>☐ Geology / Soils</li><li>☐ Hydrology / Water Quality</li></ul>	□ Agricultural and Forest Resources     □ Cultural Resources     □ Greenhouse Gas Emissions     □ Land Use / Planning     □ Pagulation / Maurica	☐ Air Quality ☐ Energy ☐ Hazards & Hazardous Materials ☐ Mineral Resources ☐ Public Services
<ul><li>Noise</li><li>Recreation</li><li>Utilities / Service Systems</li></ul>	<ul><li>☐ Population / Housing</li><li>☐ Transportation / Traffic</li><li>☐ Wildfire</li></ul>	<ul><li>☐ Public Services</li><li>☐ Tribal Cultural Resources</li><li>☐ Mandatory Findings of Significance</li></ul>
On the basis of this initial evaluation  I find that the proposed pure NEGATIVE DECLARATION with the proposed pure of the proposed pure of the proposed pure of the proposed pure of the proposed propose	project COULD NOT have a significal be prepared.  poposed project could have a significal asse because revisions in the project D NEGATIVE DECLARATION of the project MAY have a significant	icant effect on the environment, and a ant effect on the environment, there will have been made by or agreed to by the
unless mitigated" impact on the e earlier document pursuant to app based on the earlier analysis as des required, but it must analyze only t  I find that although the prall potentially significant effects  DECLARATION pursuant to app	roject MAY have a "potentially signiful national project MAY have a "potentially signiful national project and 2) has been attached sheets. An ENVI he effects that remain to be addressed to posed project could have a signification (a) have been analyzed adequated blicable standards, and (b) have been	cant effect on the environment, because y in an earlier EIR or NEGATIVE n avoided or mitigated pursuant to that
upon the proposed project, nothin	g further is required.	mitigation measures that are imposed
Signature  Printed Name	Dai For	

#### 4.4 EVALUATION OF ENVIRONMENTAL IMPACTS

- 1. A brief explanation is required for all answers except "No Impact" answers that are adequately supported by the information sources a lead agency cites in the parentheses following each question. A "No Impact" answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g., the project falls outside a fault rupture zone). A "No Impact" answer should be explained where it is based on project-specific factors, as well as general standards (e.g., the project would not expose sensitive receptors to pollutants, based on a project-specific screening analysis).
- 2. All answers must take account of the whole action involved, including off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.
- 3. Once the lead agency has determined that a particular physical impact may occur, then the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. "Potentially Significant Impact" is appropriate if there is substantial evidence that an effect may be significant. If there are one or more "Potentially Significant Impact" entries when the determination is made, an EIR is required.
- 4. "Negative Declaration: Less Than Significant With Mitigation Incorporated" applies where the incorporation of mitigation measures has reduced an effect from "Potentially Significant Impact" to a "Less Than Significant Impact." The lead agency must describe the mitigation measures, and briefly explain how they reduce the effect to a less than significant level.
- 5. Earlier analyses may be used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration. Section 15063(c)(3)(D). In this case, a brief discussion should identify the following:
  - a) Earlier Analyses Used. Identify and state where they are available for review.
  - b) Impacts Adequately Addressed. Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.
  - c) Mitigation Measures. For effects that are "Less than Significant with Mitigation Measures Incorporated," describe the mitigation measures which were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.
- 6. Lead agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g., general plans, zoning ordinances). Reference to a previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated.

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- 7. Supporting Information Sources: A source list should be attached, and other sources used or individuals contacted should be cited in the discussion.
- 8. This is only a suggested form, and lead agencies are free to use different formats; however, lead agencies should normally address the questions from this checklist that are relevant to a project's environmental effects in whatever format is selected.
- 9. The explanation of each issue should identify:
  - a) the significance criteria or threshold, if any, used to evaluate each question; and
  - b) the mitigation measure identified, if any, to reduce the impact to less than significance

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This section provides evidence to substantiate the conclusions in the environmental checklist. The section will briefly summarize the conclusions of the Certified EIR and then discuss whether or not the proposed project is consistent with the findings in the Certified EIR. Mitigation measures referenced are from the Certified EIR.

#### 5.1 **AESTHETICS**

# 5.1.1 Summary of Impacts Identified in the Certified EIR

The Initial Study prepared for the Approved Project determined that there would be no substantial adverse effect on a scenic vista nor substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway. The Initial Study determined that the Approved Project would not have the potential to obstruct or otherwise impact existing public views or scenic vistas. Additionally, it determined that no rock outcroppings or any other scenic resources exist on or adjacent to the Project Site and no state scenic highways occur adjacent to or near the Project Site. These topics were determined to have no impact.

The Certified EIR concluded that the Approved Project which included landscaping and architectural treatments would bring consistency and stylistic improvements to the existing visual character of the Project Site. It was determined that the Proposed Development Project, in accordance with the Approved Project, would visually alter the area, it would not deteriorate the existing visual character or conflict with any existing architectural characteristics specific to the area.

Additionally, with regard to lighting and glare, the Certified EIR concluded that with adherence of the provisions of the Midtown Specific Plan, City's Municipal Code and California's Building Energy Efficiency Standards for Residential and Nonresidential Buildings, and because the Project Site and surrounding area are largely developed and contain existing sources of lighting, the lighting and glare associated with proposed development project that would be accommodated by the Approved Project would not substantially increase nighttime light and glare throughout the Project Site or its surroundings.

The Certified EIR concluded that upon implementation of regulatory requirements, development of the Approved Project with regard to impacts to aesthetics would result in less than significant impacts.

# 5.1.2 Impacts Associated with the Proposed Project

Except as provided in Public Resources Code Section 21099, would the project:

	Environmental Issues	Substantial Change in Project Requiring Major EIR Revisions	Substantial Change in Circum- stances Requiring Major EIR Revisions	New Information Showing New or Increased Significant Effects	Less Than Significant Impact/No Changes or New Information Requiring Preparation of an EIR	No Impact
a)	Have a substantial adverse effect on a scenic vista?					X
b)	Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?					x
c)	In nonurbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?				X	
d)	Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?				x	

#### a) Have a substantial adverse effect on a scenic vista?

**No Impact.** As with the Approved Project, the Proposed Development Project, located immediately west of the Approved Project site, would not have the potential to obstruct or otherwise impact existing public views of scenic vistas, as none exist along the corridor. No impact would occur.

b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?

**No Impact.** As with the Approved Project, the Proposed Development Project, located immediately west of the Approved Project site, does not contain any rock outcroppings or any other scenic resources on or adjacent to the Project Site. Additionally, as with the Approved Project, the Proposed Development Project is not within a state scenic highway, nor is it visible from any officially designated scenic highway. No impact would occur.

c) In nonurbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly

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accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?

Less Than Significant Impact/No Changes or New Information Requiring Preparation of an EIR. The Proposed Development Project would entail the Midtown Specific Plan Area, as studied in the 2016 Certified EIR, would be expanded to incorporate the Project Site that would merge 5 lots on Pacific Coast Highway and Cedar Avenue and 4 lots on Pacific Coast Highway and Pacific Avenue. This would entail the development of 115,044 square feet comprising of residential use with 138 dwelling units, 25,000 square feet of commercial space, and 25, 398 square feet of open space. This is well within what was analyzed for the Approved Project which included the increase in development for the Midtown Specific Plan area including an additional 1,737 dwelling units, 368,932 square feet of commercial and employee uses, 27 hospital beds, and 81 hotel rooms. As it is within the scope of what was previously analyzed, the Proposed Project would not result in new aesthetic impacts or impact regulations affecting scenic quality. No changes or new information would require preparation of a subsequent EIR.

d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?

Less Than Significant Impact/No Changes or New Information Requiring Preparation of an EIR. The Approved Project includes residential, commercial/employee, hospital, and hotel uses on-site with associated parking. The Proposed Project would also include residences, commercial, and open spaces uses on-site with associated parking, which, as with the Approved Project would generate light at nighttime hours. Interior lighting emanating from residential units would be typical of residential units and would not create a substantial light source. As with the Approved Project, the Proposed Project would be required to comply with the City of Long Beach Municipal Code (Sections 21.41.259, 21.44.855, and 21.44.600) which would ensure that exterior lighting and fixtures would ensure that lighting impacts are less than significant.

The Proposed Project's would result in no changes to the non-reflective exterior building materials under the Approved Project; similarly, the Proposed Project would result in a less than significant impact to glare.

# 5.1.3 Adopted Mitigation Measures Applicable to the Proposed Project

No mitigation measures related to aesthetics were outlined in the Certified EIR.

# 5.1.4 Level of Significance After Mitigation

No mitigation measures are required for the Proposed Project.

#### 5.2 AGRICULTURE AND FORESTRY RESOURCES

# 5.2.1 Summary of Impacts Identified in the EIR

The Initial Study prepared for the Approved Project scoped out Agriculture and Forestry Resources. The Initial Study found that the California Department of Conservation characterizes the Midtown Specific Plan area as "Urban and Built-Up". There is no Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland) mapped in or near the Project Site. No Williamson Act contracts were in effect on or adjacent to the Project Site. No forest land or timberland occur within Long Beach, and the Approved Project would not cause impacts to forest land or timberland. No impact would occur with respect to agriculture and forestry resources, and no additional analysis was required in Certified EIR.

# 5.2.2 Impacts Associated with the Proposed Project

In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board.

Would the proposed project:

		Substantial Change in Project Requiring Major EIR Revisions	Substantial Change in Circum- stances Requiring Major EIR Revisions	New Information Showing New or Increased Significant Effects	Less Than Significant Impact/No Changes or New Information Requiring Preparation of an EIR	No Impact
a)	Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?					х
b)	Conflict with existing zoning for agricultural use, or a Williamson Act contract?					X

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		Substantial Change in Project Requiring Major EIR Revisions	Substantial Change in Circum- stances Requiring Major EIR Revisions	New Information Showing New or Increased Significant Effects	Less Than Significant Impact/No Changes or New Information Requiring Preparation of an EIR	No Impact
c)	Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?					X
d)	Result in the loss of forest land or conversion of forest land to non-forest use?					Х
e)	Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?					х

a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?

No Impact. The Project Site is located in an urbanized area. The Project Site is not a candidate for listing as prime farmland, unique farmland, or farmland of statewide importance. The Project Site is not in an area mapped by the Farmland Mapping and Monitoring Program (FMMP) (DOC 2020). The Project Site is not zoned for agricultural uses and no farmland or agricultural activity exist on site. Similar to the Approved Project, the Proposed Project would not convert important farmland to a nonagricultural use. No impact would occur and no mitigation is necessary.

#### b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?

**No Impact.** The Project Site is not zoned for agricultural use and no active Williamson Act contract exist on site. As with the Approved Project, implementation of the Proposed Project would not conflict with agricultural zones or a Williamson Act contract. No impact would occur and no mitigation is necessary.

c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?

**No Impact.** The Project Site is in an urbanized location and does not contain forest land or timberland. The Project Site and the surrounding area are not zoned for forest land or timberland. The Proposed Project would not conflict with zoning for forest land or timberland. No impact would occur and no mitigation is necessary.

d) Result in the loss of forest land or conversion of forest land to non-forest use?

**No Impact.** The Project Site does not contain forest land. The implementation of the Proposed Project would not result in the loss of forest land or the conversion of forest land to non-forest uses. No impact would occur and no mitigation is necessary.

e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?

**No Impact.** The Project Site and surrounding area are urban and do not contain farmland or forest land. The implementation of the Proposed Project would not result in the loss of forest land or the conversion of forest land to non-forest uses. No impact would occur and no mitigation is necessary.

# 5.2.3 Adopted Mitigation Measures Applicable to the Proposed Project

No mitigation measures related to agricultural resources were outlined in the Certified EIR.

# 5.2.4 Level of Significance After Mitigation

No mitigation measures are required for the Proposed Project.

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## 5.3 AIR QUALITY

# 5.3.1 Summary of Impacts Identified in the EIR

The Initial Study for the Approved Project concluded that future development that would be accommodated under the Approved Project would not emit objectionable odors that would affect a substantial number of people. Additionally, existing facilities would be required to be in compliance with SCAQMD Rule 402 to prevent nuisances on sensitive land uses. Temporary emissions resulting from construction equipment would be controlled by permitting regulations.

The Certified EIR determined that construction activities associated with implementation of the Approved Project would generate short-term emissions that exceed the South Coast Air Quality Management District's regional construction thresholds. It was also concluded that long-term criteria air pollutant emissions associated with the Approved Project would exceed the South Coast Air Quality Management District's regional operational significance thresholds. Additionally, construction activities related to buildout of the Approved Project would expose sensitive receptors to substantial pollutant concentrations. The Certified EIR also determined that onsite operation-related emissions associated with the Approved Project would not expose sensitive receptors to substantial pollutant concentrations. It was also concluded that the Approved Project could site sensitive land uses in proximity to major air pollution sources. The Certified EIR also determined that the Approved Project is a regionally significant project would contribute to an increase in frequency or severity of air quality violations in the South Coast Air Basin and would conflict with the assumptions of the applicable Air Quality Management Plan. Implementation of Mitigation Measures AQ-1 through AQ-7 were found to reduce certain impacts to a less than significant level, though impacts with regard to constructionrelated emissions; operation-related criteria air pollutants from stationary and mobile sources; regional construction emissions; and operational phase criteria air pollutant emissions would remain significant and unavoidable even with mitigation.

# 5.3.2 Impacts Associated with the Proposed Project

Where available, the significance criteria established by the applicable air quality management district or air pollution control district may be relied upon to make the following determinations.

Would the project:

	Environmental Issues	Substantial Change in Project Requiring Major EIR Revisions	Substantial Change in Circum- stances Requiring Major EIR Revisions	New Information Showing New or Increased Significant Effects	Less Than Significant Impact/No Changes or New Information Requiring Preparation of an EIR	No Impact
a)	Conflict with or obstruct implementation of the applicable air quality plan?				X	

	Environmental Issues	Substantial Change in Project Requiring Major EIR Revisions	Substantial Change in Circum- stances Requiring Major EIR Revisions	New Information Showing New or Increased Significant Effects	Less Than Significant Impact/No Changes or New Information Requiring Preparation of an EIR	No Impact
b)	Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?				x	
c)	Expose sensitive receptors to substantial pollutant concentrations?				х	
d)	Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?				x	

#### a) Conflict with or obstruct implementation of the applicable air quality plan?

## Less Than Significant Impact/No Changes or New Information Requiring Preparation of an EIR.

Air quality in the City of Long Beach is regulated by SCAQMD, which is the agency principally responsible for comprehensive air pollution control in the South Coast Air Basin (SoCAB). The SCAQMD develops rules and regulations; establishes permitting requirements for stationary sources; inspects emissions sources; and enforces such measures through educational programs or fines, when necessary for over an approximately 10,743 square-mile area. The SCAQMD is directly responsible for reducing emissions from stationary (area and point), mobile, and indirect sources. The Proposed Project supports AQMP objectives to reduce trips, promote infill development, and balance jobs and housing and would not conflict with implementation of the AQMP.

In March of 2017, the SCAQMD Governing Board released the Final 2016 AQMP, which continues to evaluate current integrated strategies and control measures to meet the NAAQS, as well as, explore new and innovative methods to reach its goals. Some of these approaches include utilizing incentive programs, recognizing existing co-benefit programs from other sectors, and developing a strategy with fair-share reductions at the federal, state, and local levels.

The two principal criteria for conformance with the AQMP are:

- 1. Whether the project would result in an increase in the frequency or severity of existing air quality violations or contribute to new violations or delay the timely attainment of air quality standards or the interim emissions reductions specified in the AQMP.
- Whether the project would exceed the assumptions in the AQMP based on the years of Project build-out phase.

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As shown in Table 5 and Table 6, the Proposed Project, would not exceed SCAQMD thresholds for construction or operational phase emissions. Additionally, the Proposed Project would not exceed SCAG's population, housing, or employment projections. The Proposed Project would be required to comply with applicable mitigation measures identified in the Certified EIR. There would be no new significant impact or a substantial increase in the severity of previously identified effects.

Table 5 Maximum Daily Regional Construction Emissions

		Pollutants (pounds per day) <sup>1, 2</sup>					
Construction Phase	VOC	NO <sub>X</sub>	CO	SO <sub>2</sub>	PM <sub>10</sub>	PM <sub>2.5</sub>	
Year 2020	-	-	-	-	-	-	
Demolition	1	11	16	<1	1	<1	
Site Preparation	<1	6	10	<1	2	1	
Grading	<1	5	9	<1	2	1	
Building Construction	1	15	22	<1	2	1	
Year 2021							
Building Construction	1	14	21	<1	2	1	
Asphalt Paving	<1	6	10	<1	<1	<1	
Architectural Coating	25	1	3	<1	<1	<1	
Maximum Daily Emissions	25	15	22	<1	2	1	
SCAQMD Regional Construction Threshold	75	100	550	150	150	55	
Significant?	No	No	No	No	No	No	

Source: California Emissions Estimator Model, Version 2016.3.2.

Notes: Emissions totals may not equal 100 percent due to rounding.

<sup>1</sup> Construction assumptions were based on CalEEMod defaults, which are based on construction surveys conducted by South Coast Air Quality Management District (South Coast AQMD) of construction equipment.

<sup>&</sup>lt;sup>2</sup> Includes implementation Mitigation Measures AQ-1 through AQ-3 as prescribed under the Certified Midtown Specific Plan EIR. Mitigation AQ-1 requires construction equipment of 50 horsepower or more meet the Tier 4 emissions standards. For purposes of this analysis, the model utilized Tier 4 Interim equipment. Per Mitigation Measure AQ-2, the modeling includes watering disturbed areas a minimum of three times per day, reducing speed limit to 15 miles per hour on unpaved surfaces, replacing ground cover quickly, and street sweeping with Rule 1186–compliant sweepers. In accordance Mitigation Measure AQ-3, modeling assumed interior and exterior paints with a VOC content of 10 grams per liter.

Table 6 Net Maximum Daily Regional Operational Phase Emissions

	Criteria Air Pollutants (lbs/day)							
Source	ROG (VOC)	NOx	CO	SO <sub>2</sub>	PM <sub>10</sub>	PM <sub>2.5</sub>		
Existing								
Area	<1	<1	<1	0	0	0		
Energy	<1	<1	<1	<1	<1	<1		
Mobile <sup>1</sup>	3	4	21	<1	5	2		
Total	4	4	21	<1	5	1		
Proposed								
Area	4	<1	11	<1	<1	<1		
Energy	<1	1	<1	<1	<1	<1		
Mobile <sup>1</sup>	11	14	78	<1	19	5		
Total	15	14	90	<1	19	5		
Net Change	12	10	69	<1	14	4		
SCAQMD Threshold	55	55	550	150	150	55		
Exceeds Threshold	No	No	No	No	No	No		

Source: California Emissions Estimator Model, Version 2016.3.2.; Based on trip generation information provided by Fehr and Peers Notes: Highest winter or summer. Emissions totals may not equal 100 percent due to rounding.

b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?

# Less Than Significant Impact/No Changes or New Information Requiring Preparation of an EIR.

The Certified EIR disclosed that construction-related NOx and VOC emissions would be significant and unavoidable. The 138 dwelling units, 25,000 square feet of commercial, and 25,398 square feet of open space are all within the quantity analyzed under the Approved Project. Thus, the Proposed Development Project's construction-related air quality emissions would be within the scope of analysis of the Approved Project identified in the Certified EIR. The Proposed Development Project would further incorporate all applicable mitigation measures identified in the Certified EIR. Additionally, as displayed in Table 7, the maximum daily onsite construction emissions for the Proposed Development Project would not exceed localized significance thresholds and would therefore result in a less than significant impact. Therefore, the Proposed Development Project would not create a new significant impact or a substantial increase in the severity of previously identified effects.

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Based on calendar year 2023 aggregated emission rates derived EMFAC2017 Version 1.0.2 and CalEEMod methodology

Table 7 Maximum Daily Onsite Construction Emissions Compared to the Localized Significance
Thresholds

	Pollutants (pounds per day) <sup>1, 2</sup>				
Source	NOx	CO	PM <sub>10</sub>	PM <sub>2.5</sub>	
Building Construction – Year 2020	10	13	<1	<1	
Building Construction – Year 2021	10	13	<1	<1	
Asphalt Paving – Year 2021	6	10	<1	<1	
Architectural Coating	1	2	<1	<1	
1.00-Acre or Less Screening-Level LST	57	585	4	3	
Exceeds LST?	No	No	No	No	
Grading – Year 2020	4	8	2	1	
1.19-Acre Screening-Level LST	62	633	5	3	
Exceeds LST?	No	No	No	No	
Site Preparation – Year 2020	5	10	2	1	
1.44-Acre Screening-Level LST	68	697	5	4	
Exceeds LST?	No	No	No	No	
Demolition – Year 2020	9	15	<1	<1	
1.59-Acre Screening-Level LST	72	737	6	4	
Exceeds LST?	No	No	No	No	

Source: California Emissions Estimator Model, Version 2016.3.2.; South Coast AQMD 2008, 2011. In accordance with South Coast AQMD methodology, only on-site stationary sources and mobile equipment occurring on the proposed project site are included in the analysis. LSTs are based on receptors within 82 feet (25 meters) of the proposed project site.

#### c) Expose sensitive receptors to substantial pollutant concentrations?

#### Less Than Significant Impact/No Changes or New Information Requiring Preparation of an EIR.

The Proposed Development Project which includes 138 dwelling units, 25,000 square feet of commercial, and 25,398 square feet of open space are all within the quantity analyzed under the Approved Project. As such, the Proposed Development Project would not increase the development assumptions analyzed for the Approved Project and no increase in square footage, population, or vehicle trips. Construction activities would remain consistent with what was previously analyzed and therefore impacts would be consistent with what was identified under the Approved Project. As the Approved Project determined that onsite operation-related emissions would not expose sensitive receptors to substantial pollutant concentrations, the Proposed Development Project would be consistent with this finding. For construction activities related to the Proposed Development Project, like the Approved Project, Mitigation Measures AQ-1 through AQ-3 would be incorporated to lessen impacts to the greatest extent feasible. There would be no new significant impact or a substantial increase in the severity of previously identified effects.

Notes: Emissions totals may not equal 100 percent due to rounding.

<sup>1</sup> Construction assumptions were based on CalEEMod defaults, which are based on construction surveys conducted by South Coast AQMD of construction equipment.

Includes implementation Mitigation Measures AQ-1 through AQ-3 as prescribed under the Certified Midtown Specific Plan EIR. Mitigation AQ-1 requires construction equipment of 50 horsepower or more meet the Tier 4 emissions standards. For purposes of this analysis, the model utilized Tier 4 Interim equipment. Per Mitigation Measure AQ-2, the modeling includes watering disturbed areas a minimum of three times per day, reducing speed limit to 15 miles per hour on unpaved surfaces, replacing ground cover quickly, and street sweeping with Rule 1186–compliant sweepers. In accordance Mitigation Measure AQ-3, modeling assumed interior and exterior paints with a VOC content of 10 grams per liter.

# d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?

No Impact. The Initial Study to the Certified EIR found that the Approved Project's uses would result in a less than significant impact to objectionable odors. According to SCAQMD, land uses associated with odor complaints typically include agricultural uses, wastewater treatment plants, food processing plants, chemical plants, composting, refineries, landfills, dairies, and fiberglass molding facilities. The Proposed Development Project and its operations does not include any uses identified by the SCAQMD as being associated with odors and therefore would not produce objectionable odors. As such, the Proposed Development Project would have no impact related to objectionable odors. The Proposed Development Project would comply with SCAQMD Rule 402 to prevent occurrences of public nuisances (34). No changes or new information would require preparation of a subsequent EIR.

# 5.3.3 Adopted Mitigation Measures Applicable to the Proposed Project

AQ-1 Applicants for new development projects within the Midtown Specific Plan area shall require the construction contractor to use equipment that meets the United Stated Environmental Protection Agency (EPA)-Certified emissions standards. All off-road diesel-powered construction equipment greater than 50 horsepower shall meet the Tier 4 emission standards. Any emissions control device used by the contractor shall achieve emissions reductions that are no less than what could be achieved by a Level 4 diesel emissions control strategy for a similarly sized engine, as defined by the California Air Resources Board's (CARB) regulations.

Prior to construction, the project engineer shall ensure that all demolition and grading plans clearly show the requirement for EPA Tier 4 or higher emissions standards for construction equipment over 50 horsepower. During construction, the construction contractor shall maintain a list of all operating equipment in use on the construction site for verification by the City of Long Beach Building Official or their designee. The construction equipment list shall state the makes, models, and numbers of construction equipment onsite. Equipment shall be properly serviced and maintained in accordance with the manufacturer's recommendations. Construction contractors shall also ensure that all nonessential idling of construction equipment is restricted to five minutes or less in compliance with California Air Resources Board's Rule 2449.

AQ-2 Applicants for new development projects within the Midtown Specific Plan area shall require the construction contractor to prepare a dust control plan and implement the following measures during ground-disturbing activities in addition to the existing requirements for fugitive dust control under South Coast Air Quality Management District (SCAQMD) Rule 403 to further reduce PM<sub>10</sub> and PM<sub>2.5</sub> emissions. The City of Long Beach Building Official or their designee shall verify compliance that these measures have been implemented during normal construction site inspections.

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- Following all grading activities, the construction contractor shall reestablish ground cover on the construction site through seeding and watering.
- During all construction activities, the construction contractor shall sweep streets with SCAQMD Rule 1186–compliant, PM<sub>10</sub>-efficient vacuum units on a daily basis if silt is carried over to adjacent public thoroughfares or occurs as a result of hauling.
- During all construction activities, the construction contractor shall maintain a minimum 24-inch freeboard on trucks hauling dirt, sand, soil, or other loose materials and tarp materials with a fabric cover or other cover that achieves the same amount of protection.
- During all construction activities, the construction contractor shall water exposed ground surfaces and disturbed areas a minimum of every three hours on the construction site and a minimum of three times per day.
- During all construction activities, the construction contractor shall limit onsite vehicle speeds on unpaved roads to no more than 15 miles per hour.
- AQ-3 Applicants for new development projects within the Midtown Specific Plan area shall require the construction contractor to use coatings and solvents with a volatile organic compound (VOC) content lower than required under South Coast Air Quality Management District Rule 1113 (i.e., super compliant paints). The construction contractor shall also use precoated/natural-colored building materials, where feasible. Use of <a href="https://low.voc.nints.

#### **Stationary Source**

AQ-4 Prior to issuance of a building permit for new development projects within the Midtown Specific Plan area, the property owner/developer shall show on the building plans that all major appliances (dishwashers, refrigerators, clothes washers, and dryers) to be provided/installed are Energy Star appliances. Installation of Energy Star appliances shall be verified by the City of Long Building and Safety Bureau prior to issuance of a certificate of occupancy.

#### **Transportation and Motor Vehicles**

- AQ-5 Prior to issuance of building permits for residential development projects within the Midtown Specific Plan area, the property owner/developer shall indicate on the building plans that the following features have been incorporated into the design of the building(s). Proper installation of these features shall be verified by the City of Long Beach Building and Safety Bureau prior to issuance of a certificate of occupancy.
  - For multifamily dwellings, electric vehicle charging shall be provided as specified in Section A4.106.8.2 (Residential Voluntary Measures) of the CALGreen Code.

 Bicycle parking shall be provided as specified in Section A4.106.9 (Residential Voluntary Measures) of the CALGreen Code.

AQ-6 Prior to issuance of building permits for non-residential development projects within the Midtown Specific Plan area, the property owner/developer shall indicate on the building plans that the following features have been incorporated into the design of the building(s). Proper installation of these features shall be verified by the City of Long Beach Building and Safety Bureau prior to issuance of a certificate of occupancy.

- For buildings with more than ten tenant-occupants, changing/shower facilities shall be provided as specified in Section A5.106.4.3 (Nonresidential Voluntary Measures) of the CALGreen Code.
- Preferential parking for low-emitting, fuel-efficient, and carpool/van vehicles shall be provided as specified in Section A5.106.5.1 (Nonresidential Voluntary Measures) of the CALGreen Code.
- Facilities shall be installed to support future electric vehicle charging at each non-residential building with 30 or more parking spaces. Installation shall be consistent with Section A5.106.5.3 (Nonresidential Voluntary Measures) of the CALGreen Code.

Prior to issuance of building permits for development projects within the Midtown Specific Plan area that include sensitive uses (e.g., residential, day care centers), within the distances identified by the California Air Resources Board's (CARB) Air Quality and Land Use Handbook, the property owner/developer shall submit a health risk assessment (HRA) to the City of Long Beach Planning Bureau. The HRA shall be prepared in accordance with policies and procedures of the state Office of Environmental Health Hazard Assessment (OEHHA) and the South Coast Air Quality Management District (SCAQMD).

If the HRA shows that the incremental cancer risk exceeds one in one hundred thousand (1.0E-05) or the appropriate noncancer hazard index exceeds 1.0, the following is required prior to issuance of building permits:

- The HRA shall identify the level of high-efficiency Minimum Efficiency Reporting Value (MERV) filter required to reduce indoor air concentrations of pollutants to achieve the cancer and/or noncancer threshold.
- Installation of high efficiency MERV filters in the intake of residential ventilation systems consistent with the recommendations of the HRA, shall be shown on plans. Heating, air conditioning, and ventilation (HVAC) systems shall be installed with a fan unit designed to force air through the MERV filter.
- To ensure long-term maintenance and replacement of the MERV filters in the individual units, the property owner/developer shall record a covenant on the property that requires ongoing implementation of the actions below. The form of the covenant shall be approved by the Long Beach City Attorney's Office prior to recordation.

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- The property owner/developer shall provide notification to all future tenants or owners of the potential health risk for affected units and the increased risk of exposure to diesel particulates when windows are open.
- For rental units, the property owner/developer shall maintain and replace MERV filters in accordance with the manufacture's recommendations.
- For ownership units, the Homeowner's Association shall incorporate requirements for long-term maintenance in the Covenant Conditions and Restrictions and inform homeowners of their responsibility to maintain the MERV filter in accordance with the manufacturer's recommendations.

# 5.3.4 Level of Significance After Mitigation

As with the Approved Project, all impacts would be reduced to the greatest extent feasible with incorporation of mitigation, however, as identified in the Certified EIR, impacts with regard to construction-related emissions; operation-related criteria air pollutants from stationary and mobile sources; regional construction emissions; and operational phase criteria air pollutant emissions would remain significant and unavoidable even with mitigation.

#### 5.4 BIOLOGICAL RESOURCES

# 5.4.1 Summary of Impacts Identified in the EIR

The Initial Study prepared for the Approved Project scoped out Biological Resources. The Initial Study found that the Project Site would not support the eleven rare plant species and ten sensitive, federally- and state-listed wildlife species identified in the Long Beach region as the Project Site has been previously graded, disturbed, and highly urbanized. Additionally, no riparian habitat or other sensitive natural communities occur in the Project Site. It was determined that the Approved Project would not involve direct removal, filling, hydrological interruption, or other direct or indirect impact to wetlands under jurisdiction of regulatory agencies. The Approved Project would not substantially interfere with a wildlife corridor or affect wildlife movement or migration. The Initial Study also concluded that the Approved project would comply with the provisions of the City's Municipal Code under Chapter 14.28 (Trees and Shrubs) and would not conflict with local policies or ordinances protecting trees and would not conflict with the provisions of an adopted habitat conservation plan. No additional analysis was required in Certified EIR.

# 5.4.2 Impacts Associated with the Proposed Project

Would the project:

	Environmental Issues	Substantial Change in Project Requiring Major EIR Revisions	Substantial Change in Circum- stances Requiring Major EIR Revisions	New Information Showing New or Increased Significant Effects	Less Than Significant Impact/No Changes or New Information Requiring Preparation of an EIR	No Impact
a)	Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?				x	
b)	Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?					х

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	Environmental Issues	Substantial Change in Project Requiring Major EIR Revisions	Substantial Change in Circum- stances Requiring Major EIR Revisions	New Information Showing New or Increased Significant Effects	Less Than Significant Impact/No Changes or New Information Requiring Preparation of an EIR	No Impact
c)	Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?					X
d)	Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?				x	
e)	Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?					Х
f)	Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?					х

a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?

#### Less Than Significant Impact/No Changes or New Information Requiring Preparation of an EIR.

As with the Approved Project, the Project Site, located immediately west of the Approved Project site, would not support the eleven rate plant species and ten sensitive, federally- and state-listed wildlife species that have been identified in the Long Beach region. As the Project Site has been previously graded, disturbed, and highly urbanized and remains isolated from areas supporting suitable habitat for sensitive species, impacts to the habitat of candidate, sensitive, or special status species would be less than significant, as with the

Approved Project. No new impacts or substantially greater impacts than what was previously analyzed would occur that would require the preparation of a subsequent EIR.

b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?

**No Impact.** As with the Approved Project, the Project Site, located immediately west of the Approved Project site, does not contain a riparian habitat or other sensitive natural community on site. Additionally, as with the Approved Project, the Proposed Project is not included in local or regional plans, policies, and regulations that identify riparian habitat or other sensitive natural communities. No impact would occur.

c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?

**No Impact.** As with the Approved Project, the Project Site, located immediately west of the Approved Project site, would not comprise of the alteration of the channelized Los Angeles River by development, nor would it involve the direct removal, filling, hydrological interruption, or other direct impact to wetlands under jurisdiction of regulatory agencies. As with the Approved Project, no impact for the Proposed Project would occur.

d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?

Less Than Significant Impact/No Changes or New Information Requiring Preparation of an EIR. As with the Approved Project, the Project Site, located immediately west of the Approved Project site, would occur in an area that is almost entirely developed and surrounded by urban uses. Therefore, as with the Approved Project, the Project Site is not available for overland wildlife movement or migration and would therefore not substantially alter or interfere with a wildlife corridor. No new impacts or substantially greater

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impacts than what was previously analyzed would occur that would require the preparation of a subsequent EIR.

e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

**No Impact.** As with the Approved Project, the Proposed Project would comply with provisions of the City's Municipal Code and would not conflict with local policies or ordinances protecting trees and no impact would occur.

f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?

**No Impact.** As with the Approved Project, there is no Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan in the City. Therefore, as with the Approved Project, the Proposed Project would not conflict with the provisions of an adopted habitat conservation plan and no impact would occur.

## 5.4.3 Adopted Mitigation Measures Applicable to the Proposed Project

No mitigation measures related to biological resources were outlined in the Certified EIR.

# 5.4.4 Level of Significance After Mitigation

No mitigation measures are required for the Proposed Project.

## 5.5 CULTURAL RESOURCES

# 5.5.1 Summary of Impacts Identified in the Certified EIR

The Initial Study prepared for the Approved Project scoped out Cultural Resources. The Initial Study determined that the Approved Project site included one historically important resource, the Packard Motors building located on Anaheim Street at the southernmost border of the Project Site. This building remains protected by the Packard Motors Building Ordinance (Ordinance NO. C-7593), which established regulations for the on-going preservation of the building and therefore resulted in a less than significant impact with regard to historic resources. The Initial Study also found that as the Approved Project site had already been previously disturbed and developed, with no archaeological or paleontological resources discovered during construction and ground-disturbing activities, it would be unlikely that any such resources would be uncovered with the development of the Approved Project. With regard to human remains, the Initial Study concluded that although soil-disturbing activities associated with development in accordance with the Approved Project was unlikely to result in the discovery of human remains, that through compliance with the California Health and Safety Code Section 7050.5, CEQA Section 15064.5, and Public Resources Code Section 5097.98, this would ensure that significant impacts to human remains would not occur. No additional analysis was required in Certified EIR.

# 5.5.2 Impacts Associated with the Proposed Project

Would the project:

	Environmental Issues	Substantial Change in Project Requiring Major EIR Revisions	Substantial Change in Circum- stances Requiring Major EIR Revisions	New Information Showing New or Increased Significant Effects	Less Than Significant Impact/No Changes or New Information Requiring Preparation of an EIR	No Impact
a)	Cause a substantial adverse change in the significance of a historical resource pursuant to § 15064.5?				x	
b)	Cause a substantial adverse change in the significance of an archaeological resource pursuant to § 15064.5?					х
c)	Disturb any human remains, including those interred outside of dedicated cemeteries?					Х

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#### **Comments:**

a) Cause a substantial adverse change in the significance of a historical resource pursuant to § 15064.5?

Less Than Significant Impact/No Changes or New Information Requiring Preparation of an EIR.

As with the Approved Project, the Project Site, located immediately west of the Approved Project site, contains no historic properties within the Project Site. Therefore, the implementation of the Proposed Development Project would not cause a substantial adverse change in the significance of any one historic resource. No new impacts or substantially greater impacts than what was previously analyzed would occur that would require the preparation of a subsequent EIR.

b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to § 15064.5?

**No Impact.** As with the Approved Project, the Project Site, located immediately west of the Approved Project site, has been previously disturbed and developed and has been subject to similar construction and ground-disturbing activities that would be associated with the Proposed Development Project. Therefore, as with the Approved Project, it is not anticipated that implementation of the Proposed Development Project would result in the uncovering of archaeological resources. Additionally, as with the Approved Project, the Project Site is not recognized as an area having the potential for subsurface archaeological resources. No impact would occur.

c) Disturb any human remains, including those interred outside of dedicated cemeteries?

**No Impact.** As with the Approved Project, the Project Site, located immediately west of the Approved Project site, has been previously disturbed and developed and has been subject to similar construction and ground-disturbing activities that would be associated with the Proposed Development Project. Therefore, it is not anticipated that any human remains would be discovered, however, as with the Approved Project, the Proposed Development Project would be required to comply with existing law including California Health and Safety Code Section 7050.0, CEQA Section 15064.5, and Public Resources Section 5097.98 to ensure that significant impacts to human remains would not occur. No impact would occur.

# 5.5.3 Adopted Mitigation Measures Applicable to the Proposed Project

No mitigation measures related to cultural resources were outlined in the Certified EIR.

# 5.5.4 Level of Significance After Mitigation

No mitigation measures are required for the Proposed Project.

#### 5.6 ENERGY

# 5.6.1 Summary of Impacts Identified in the Certified EIR

Energy was not analyzed as a topic in the prior Certified EIR but was addressed in the Utilities and Service Systems section of the Certified EIR. The Certified EIR found that though the Approved Project would result in an increase demand for electricity and natural gas, it was found that the existing and/or proposed electricity and natural gas facilities would be able to accommodate utility demands that would be generated by the Approved Project. The net increase in demand was well within SCE's systemwide net increase in electricity supplies of approximately 13,400 GWH annually over the 2012-2040 period. Though buildout of the Approved Project would generate a net increase in natural gas demands, the forecast net increase in natural gas demands due to buildout of the Approved Project would be well within City forecasts of natural gas supplies, and would therefore not require the City to obtain new or expanded natural gas supplies. Additionally, the Approved Project was required to comply with the California Green Building Standards Code (Part 11, Title 24), California Code of Regulations, Title 20: Appliance Efficiency Regulations, and California Code of Regulations, Title 24: Building Energy Efficiency Standards.

# 5.6.2 Impacts Associated with the Proposed Project

Would the project:

	Environmental Issues	Substantial Change in Project Requiring Major EIR Revisions	Substantial Change in Circum- stances Requiring Major EIR Revisions	New Information Showing New or Increased Significant Effects	Less Than Significant Impact/No Changes or New Information Requiring Preparation of an EIR	No Impact
a)	Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?				х	
b)	Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?				X	

a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?

Less Than Significant Impact/No Changes or New Information Requiring Preparation of an EIR. The Certified EIR determined that the Approved Project would be adequately served by the existing electricity and natural gas infrastructure. The Approved Project would not require electricity or natural gas facilities

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beyond those planned or readily available or a substantial expansion of existing facilities. The development project consisting of 138 dwelling units, 25,000 square feet of commercial, and 25,398 square feet of open space are within the quantity analyzed under the Approved Project. As such, the Proposed Development Project would not increase the development assumptions analyzed for the Approved Project. Development of the Approved Project and Proposed Project would be required to comply with California energy efficiency standards. The inclusion of mixed-use development would further promote active transportation, such as walking, and reduces dependency on vehicles. Therefore, the Proposed Development Project would not be expected to result in wasteful, inefficient, or unnecessary consumption of energy resources. As a result, the Proposed Project would not create a new significant impact or a substantial increase in the severity of previously identified effects related, no change or new information would require preparation of a subsequent EIR.

#### b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?

Less Than Significant Impact/No Changes or New Information Requiring Preparation of an EIR. Energy consumption of new buildings in California is regulated by the State Building Energy Efficiency Standards, embodied in Title 24 of the California Code of Regulations (CCR) which establishes "energy budgets" and efficiency standards that regulate heating, cooling, ventilation, water heating, and lighting. The Proposed Development Project's electric and natural gas consumption would be in accordance with State and City regulations and practices. As such, the Proposed Development Project, as with the Approved Project would be considered consistent with the goals and policies of the City's Conservation Element (1973). Impacts would be less than significant and no change or new information would require preparation of a subsequent EIR.

# 5.6.3 Adopted Mitigation Measures Applicable to the Proposed Project

No mitigation measures related to energy were outlined in the Certified EIR.

# 5.6.4 Level of Significance After Mitigation

No mitigation measures are required for the Proposed Project.

# 5.7 GEOLOGY AND SOILS

# 5.7.1 Summary of Impacts Identified in the Certified EIR

The Initial Study determined that due to the generally flat nature of the Approved Project site, containing no significant slopes, and the site not being located in an area susceptible to landslides, as indicated by the State of California Hazard Zones Map, no impacts to landslides would occur. The Initial Study also concluded that future development within the Approved Project site would be required to comply with the NPDES permit by preparing and implementing a SWPPP specifying BMPs for minimizing pollution of stormwater with soil and sediment during project construction. Adherence to the BMPs in the SWPPP would reduce, prevent, or minimize soil erosion from project-related grading and construction levels to a less than significant level. Additionally, the Initial Study found that the Approved Project would involve the use of septic tanks or alternative wastewater disposal systems as the Approved Project would use City sewer lines and wastewater disposal systems. Therefore, it was determined that no impact would occur.

The Certified EIR determined that before any development could occur on sites within the Newport Inglewood Fault Zone, all such development would be required to obtain all necessary approvals, clearances, and permits from the City. It was determined that with adherence to the state regulations, impacts resulting from an Alquist-Priolo Earthquake Fault Zone were not anticipated to occur. Additionally, it was determined that the design and construction of the future development projects that would be accommodated by Approved Project would be required to adhere to the provisions of the CBC and CRC, which are imposed on project developments by the City's Development Services Department during the development review and building plan check process. Compliance with the requirements of the CBC and CRC for structural safety during a seismic event would reduce hazards from strong seismic ground shaking. The Certified EIR also concluded that future development projects that would be accommodated by the Approved Project would be required to have a site-specific geotechnical investigation report prepared by the project applicant's/developer's geotechnical consultant, in accordance with Appendix J Section J104 (Engineered Grading Requirements) of the CBC; such investigation would determine seismic design parameters for the site and the proposed building type per CBC requirements; would assess liquefaction potential onsite and provide any needed recommendations to minimize hazards from liquefaction; and would assess hazardous soil conditions onsite and would provide recommendations as needed to minimize potential soil hazards. Therefore, impacts to seismic ground shaking, liquefaction, and ground subsidence were not anticipated to be significant.

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# 5.7.2 Impacts Associated with the Proposed Project

Would the project:

a)	Environmental Issues  Directly or indirectly cause potential	Substantial Change in Project Requiring Major EIR Revisions	Substantial Change in Circum- stances Requiring Major EIR Revisions	New Information Showing New or Increased Significant Effects	Less Than Significant Impact/No Changes or New Information Requiring Preparation of an EIR	No Impact
a) 	substantial adverse effects, including the risk of loss, injury, or death involving:					
	i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map, issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.				X	
	ii) Strong seismic ground shaking?				X	
	iii) Seismic-related ground failure, including liquefaction?				X	
	iv) Landslides?					X
b)	Result in substantial soil erosion or the loss of topsoil?				X	
c)	Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?				X	
d)	Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?				x	
e)	Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?					х
f)	Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?				x	

- a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:
  - i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map, issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.

#### Less Than Significant Impact/No Changes or New Information Requiring Preparation of an EIR.

As with the Approved Project, the Proposed Development Project, located immediately west of the Approved Project site, would be required to obtain all necessary approvals, clearances, and permits from the City before development could occur and would be required to comply with state regulations including Section 2621.5 of the California Public Resources Code and Section 3600 of the California Code of Regulations. No new impacts or substantially greater impacts than what was previously analyzed would occur that would require the preparation of a subsequent EIR.

#### ii) Strong seismic ground shaking?

Less Than Significant Impact/No Changes or New Information Requiring Preparation of an EIR. As with the Approved Project, design and construction of the Proposed Development Project, located immediately west of the Approved Project would be required to adhere to the provisions of the CBC and CRC, which are imposed on project developments by the City's Development Services Department during the development review and building plan check process. Compliance with the requirements of the CBC and CRC for structural safety during a seismic event would reduce hazards from strong seismic ground shaking. As with the Approved Project, the Proposed Development Project would be required to have a site-specific geotechnical investigation report prepared by the project applicant's/developer's geotechnical consultant, in accordance with Appendix J Section J104 (Engineered Grading Requirements) of the CBC; such investigation would determine seismic design parameters for the site and the proposed building type per CBC requirements. No new impacts or substantially greater impacts than what was previously analyzed would occur that would require the preparation of a subsequent EIR.

#### iii) Seismic-related ground failure, including liquefaction?

Less Than Significant Impact/No Changes or New Information Requiring Preparation of an EIR. As with the Approved Project, design and construction of the Proposed Development Project, located immediately west of the Approved Project would be required to adhere to the provisions of the CBC and CRC, which are imposed on project developments by the City's Development Services Department during the development review and building plan check process. Compliance with the requirements of the CBC and CRC for structural safety during a seismic event would reduce hazards from strong seismic ground shaking. As with the Approved Project, the Proposed Development Project would be required to have a site-specific geotechnical investigation report prepared by the project applicant's/developer's geotechnical consultant, in accordance with Appendix J Section J104 (Engineered Grading Requirements) of the CBC; such investigation would assess liquefaction potential onsite and

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provide any needed recommendations to minimize hazards from liquefaction. No new impacts or substantially greater impacts than what was previously analyzed would occur that would require the preparation of a subsequent EIR.

#### iv) Landslides?

**No Impact.** As with the Approved Project, the Project Site, located immediately west of the Approved Project site is generally flat and not located in an area that has been identified as susceptible to landslides. No impact would occur.

b) Result in substantial soil erosion or the loss of topsoil?

Less Than Significant Impact/No Changes or New Information Requiring Preparation of an EIR. As with the Approved Project, the Proposed Development Project would be required to comply with the NPDES permit by preparing and implementing a SWPPP specifying BMPs for minimizing pollution of stormwater with soil and sediment during project construction. Adherence to the BMPs in the SWPPP would reduce, prevent, or minimize soil erosion from project-related grading and construction levels to a less than significant level. No new impacts or substantially greater impacts than what was previously analyzed would occur that would require the preparation of a subsequent EIR.

c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?

Less Than Significant Impact/No Changes or New Information Requiring Preparation of an EIR. As the Approved Project studied the area in and around the Midtown Specific Plan Area and as the Project Site includes the area immediately adjacent to the Approved Project, as development is within the scope of what was originally evaluated, no new significant impacts to geology and soils would occur as a result of the Proposed Development Project. Additionally, as mentioned previously, implementation of the Proposed Development Project would be required to have a site-specific geotechnical investigation report prepared by the project applicant's/developer's geotechnical consultant, in accordance with Appendix J Section J104 (Engineered Grading Requirements) of the CBC. This would ultimately investigate the seismic ground shaking, liquefaction, and hazardous soils state of the Project Site with appropriate recommendations. Therefore, no new impacts or substantially greater impacts than what was previously analyzed would occur that would require the preparation of a subsequent EIR.

d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?

Less Than Significant Impact/No Changes or New Information Requiring Preparation of an EIR. As the Approved Project studied the area in and around the Midtown Specific Plan Area and as the Project Site includes the area immediately adjacent to the Approved Project, as development is within the scope of what was originally evaluated, no new significant impacts to geology and soils would occur as a result of the Proposed Development Project. Additionally, as mentioned previously, implementation of the Proposed Development

Project would be required to have a site-specific geotechnical investigation report prepared by the project applicant's/developer's geotechnical consultant, in accordance with Appendix J Section J104 (Engineered Grading Requirements) of the CBC. This would ultimately investigate hazardous soil conditions onsite and would provide recommendations as needed to minimize potential soil hazards. Therefore, no new impacts or substantially greater impacts than what was previously analyzed would occur that would require the preparation of a subsequent EIR.

e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?

**No Impact.** As with the Approved Project, the Proposed Development Project does not require the use of septic tanks or alternative wastewater disposal systems. The Proposed Development Project would use City sewer lines and wastewater disposal systems. No impact would occur.

f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

**No Impact.** As with the Approved Project, the Project Site, located immediately west of the Approved Project site, has been previously disturbed and developed and has been subject to similar construction and ground-disturbing activities that would be associated with the Proposed Development Project. Therefore, as with the Approved Project, it is not anticipated that implementation of the Proposed Development Project would result in the uncovering of paleontological resources. Additionally, as with the Approved Project, the Project Site is not recognized as an area having the potential for subsurface paleontological resources. No impact would occur.

# 5.7.3 Adopted Mitigation Measures Applicable to the Proposed Project

No mitigation measures related to geology and soils were outlined in the Certified EIR.

# 5.7.4 Level of Significance After Mitigation

No mitigation measures are required for the Proposed Project.

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#### 5.8 GREENHOUSE GAS EMISSIONS

# 5.8.1 Summary of Impacts Identified in the Certified EIR

The Certified EIR determined that development of the proposed land uses within the Approved Project site would result in a substantial increase of GHG emissions that would exceed the South Coast Air Quality Management District's proposed efficiency target of 4.8 MTCO<sub>2</sub>e. The Certified EIR also concluded that the Approved Project would not conflict with plans adopted for the purpose of reducing GHG emissions. The Approved Project was found to include policies and actions to increase bike and pedestrian pathways and to create better connected alternative transportation and active transit systems. Mitigation Measures AQ-4 through AQ-6 would encourage and accommodate use of alternative-fueled vehicles and nonmotorized transportation and ensure that GHG emissions from the buildout of the Approved Project would be minimized. However, additional statewide measures would be necessary to reduce GHG emissions under the Approved Project to meet the long-term GHG reduction goals under Executive Order S-3-05, which identified a goal to reduce GHG emissions to 80 percent below 1990 levels by 2050, and Executive Order B-30-15, which identified a goal to reduce GHG emissions to 40 percent below 1990 levels by 2030. The new Executive Order B-30-15 requires CARB to prepare another update to the Scoping Plan to address the 2030 target for the state. At this time, there is no plan past 2020 that achieves the long-term GHG reduction goal established under Executive Order S-3-05 or the new Executive Order B-30-15. As identified by the California Council on Science and Technology, the state cannot meet the 2050 goal without major advancements in technology (CCST 2012). The Certified EIR concluded that with the incorporation of mitigation and state regulations, impacts would be less than significant.

# 5.8.2 Impacts Associated with the Proposed Project

Would the project:

	Environmental Issues	Substantial Change in Project Requiring Major EIR Revisions	Substantial Change in Circum- stances Requiring Major EIR Revisions	New Information Showing New or Increased Significant Effects	Less Than Significant Impact/No Changes or New Information Requiring Preparation of an EIR	No Impact
a)	Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?				x	
b)	Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?				x	

#### **Comments:**

a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

Less Than Significant Impact/No Changes or New Information Requiring Preparation of an EIR. The development project consisting of 138 dwelling units, 25,000 square feet of commercial, and 25,398 square feet of open space is within the quantity analyzed under the Approved Project. As such, the Proposed Project would not increase the development assumptions analyzed for the Approved Project and no increase in square footage, population, or vehicle trips would result in an increase in GHG emissions compared to the Approved Project. As with the Approved Project, the Proposed Project would increase development beyond what currently exists on the Project Site and would be required to comply with all state regulations and mitigations as identified in the State Certified EIR. Mitigation Measures AQ-4 through AQ-6 would be required under the Proposed Project as well. As shown in Table 8, the Proposed Project, would not exceed SCAQMD thresholds for net operational phase emissions and would result in a less than significant impact. Therefore, no new impacts or substantially greater impacts than what was previously analyzed would occur that would require the preparation of a subsequent EIR.

Table 8 Net Operational Phase GHG Emissions

	GHG Emissions
Source	MTCO₂e Per Year¹
Existing Uses	
Area	<1
Energy <sup>1</sup>	89
Mobile <sup>2</sup>	595
Solid Waste	24
Water	4
Total All Sectors	712
Proposed Use	
Area	2
Energy <sup>3</sup>	531
Mobile <sup>4</sup>	2,519
Solid Waste	109
Water	52
Construction-Amortized <sup>5</sup>	16
Total All Sectors	3,229
Net Change	2,517
Proposed SCAQMD Bright-Line Threshold	3,000 MTCO₂e
Exceeds Threshold?	No

Source: California Emissions Estimator Model, Version 2016.3.2.

Notes: Totals may not equal 100 percent due to rounding.

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Based on CalÉEMod historical energy rates as buildings are assumed to be built to meet the 2005 Building Energy Efficiency Standards.

<sup>&</sup>lt;sup>2</sup> Based on calendar year 2020 aggregated emission rates derived EMFAC2017 Version 1.0.2 and CalEEMod methodology

<sup>&</sup>lt;sup>3</sup> Buildings constructed after January 1, 2020 are required to meet the 2019 Building Energy Efficiency Standards. Multifamily residential buildings of four stories or more are 30 percent more energy efficient under the 2019 Building Energy Efficiency Standards compared to the 2016 Building Energy Efficiency Standards... Modeling also includes applicable water efficiency improvements required under CALGreen.

Based on calendar year 2023 aggregated emission rates derived EMFAC2017 Version 1.0.2 and CalEEMod methodology.

<sup>5</sup> Construction emissions are amortized over a 30-year project lifetime per recommended South Coast AQMD methodology (South Coast AQMD 2009).

b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

Less Than Significant Impact/No Changes or New Information Requiring Preparation of an EIR. The development project which consists of 138 dwelling units, 25,000 square feet of commercial, and 25,398 square feet of open space are within the quantity analyzed under the Approved Project. As such, the Proposed Development Project would not increase the development assumptions analyzed for the Approved Project and no increase in square footage, population, or vehicle trips would result in an increase in GHG emissions compared to the Approved Project. Additionally, as with the Approved Project, the Proposed Development Project would increase development beyond what currently exists on the Project Site and would be required to comply with all state regulations and mitigations as identified in the State Certified EIR. For state regulations this includes AB 32, Executive Order S-3-05, AB 1493, Title 24 California Code of Regulations, Title 20 California Code of Regulations, Title 17 California Code of Regulations, AB 1881, SB 1368, and SB 1078. Therefore, no new impacts or substantially greater impacts than what was previously analyzed would occur that would require the preparation of a subsequent EIR.

# 5.8.3 Adopted Mitigation Measures Applicable to the Proposed Project

#### **Stationary Source**

AQ-4 Prior to issuance of a building permit for new development projects within the Midtown Specific Plan area, the property owner/developer shall show on the building plans that all major appliances (dishwashers, refrigerators, clothes washers, and dryers) to be provided/installed are Energy Star appliances. Installation of Energy Star appliances shall be verified by the City of Long Building and Safety Bureau prior to issuance of a certificate of occupancy.

#### **Transportation and Motor Vehicles**

- AQ-5 Prior to issuance of building permits for residential development projects within the Midtown Specific Plan area, the property owner/developer shall indicate on the building plans that the following features have been incorporated into the design of the building(s). Proper installation of these features shall be verified by the City of Long Beach Building and Safety Bureau prior to issuance of a certificate of occupancy.
  - For multifamily dwellings, electric vehicle charging shall be provided as specified in Section A4.106.8.2 (Residential Voluntary Measures) of the CALGreen Code.
  - Bicycle parking shall be provided as specified in Section A4.106.9 (Residential Voluntary Measures) of the CALGreen Code.
- AQ-6 Prior to issuance of building permits for non-residential development projects within the Midtown Specific Plan area, the property owner/developer shall indicate on the building plans that the following features have been incorporated into the design of the building(s). Proper

installation of these features shall be verified by the City of Long Beach Building and Safety Bureau prior to issuance of a certificate of occupancy.

- For buildings with more than ten tenant-occupants, changing/shower facilities shall be provided as specified in Section A5.106.4.3 (Nonresidential Voluntary Measures) of the CALGreen Code.
- Preferential parking for low-emitting, fuel-efficient, and carpool/van vehicles shall be provided as specified in Section A5.106.5.1 (Nonresidential Voluntary Measures) of the CALGreen Code.
- Facilities shall be installed to support future electric vehicle charging at each non-residential building with 30 or more parking spaces. Installation shall be consistent with Section A5.106.5.3 (Nonresidential Voluntary Measures) of the CALGreen Code.

# 5.8.4 Level of Significance After Mitigation

As with the Approved Project, all impacts would be reduced to the greatest extent feasible with incorporation of mitigation, however, as identified in the Certified EIR, because no additional statewide measures are available to further reduce GHG emissions to meet long-term GHG reduction goals under Executive Order S-3-05, this impact would remain significant and unavoidable even with mitigation.

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#### 5.9 HAZARDS AND HAZARDOUS MATERIALS

# 5.9.1 Summary of Impacts Identified in the Certified EIR

The Initial Study scoped out a number or topics with regard to hazards and hazardous materials. For the Approved Project, the Initial Study found that for project operation and construction, the use, storage, transport, and disposal of construction-related hazardous materials and waste would be required to conform to existing laws and regulations to ensure that all potentially hazardous materials are used and handled in an appropriate manner and would minimize the potential for safety impacts to occur. Additionally, the strict adherence to all emergency response plan requirements set forth by the City of Long Beach and LBFD would be required through the duration of project construction. Impacts were found to be less than significant. The Initial Study also concluded that the Approved Project would not result in hazards related to aircraft operating to and from Long Beach Municipal Airport as the Approved Project site is not within the Long Beach Municipal Airport's land use plan and is outside of the areas where land uses are regulated. Additionally, there are no private air strips adjacent to or within the vicinity of the Approved Project site. It was determined that development of the Approved Project would not cause any hazards related to aircraft operating to or from private airstrips or heliports. The Initial Study determined that although development of the Approved Project would result in temporary lane closures or rerouting of vehicular traffic, which would include emergency response vehicles, implementation of the Approved Project would not conflict with the City of Long Beach or Los Angeles County's emergency response or evacuation plans. The Initial Study clarified that future development under the Approved Project would be required to go through the City's development review and permitting process and would be required to incorporate all applicable design and safety standards and regulations as set forth by LBFD and in the Chapter 18.48 (Fire Code) of the City's Municipal Code. Lastly, the Initial Study concluded that as the Approved Project site is located in a highly urbanized area that is a built out portion of the City, and is outside of fire hazard severity zones designated by the California Department of Forestry and Fire Protection, future development would not pose wildfire-related hazards for people or structures.

The Certified EIR found that construction and operational phases of future development projects that would be accommodated by the Approved Project would not create substantial hazards through accidental release of hazardous materials, nor emit hazardous emissions or handle hazardous materials within one-quarter mile of a school site. The Certified EIR determined that because there were numerous sites within and in proximity of the Approved Project area that have been listed in a hazardous materials database, development of the Approved Project had potential for impacts with regard to hazardous substance contamination. However, it was determined that with compliance of all applicable laws and regulations and implementation of Mitigation Measure HAZ-1 and HAZ-2, impacts related to hazardous materials site listing would not be significant. Compliance with laws, regulations, and mitigation measures would be ensured through the City's development review and building plan check process. The Certified EIR also found that a large portion of the Project Site was located under imaginary surfaces pursuant to Federal Aviation Administration (FAA) Part 77 Regulations regulating obstructions into navigable airspace surrounding Long Beach Airport. Ground elevations under the imaginary surfaces that cover the Approved Project area range from about 20 feet on Long Beach Boulevard just south of Willow Street to 114 feet at Atlantic Avenue and 31st Street. The highest elevations within the

Approved Project area, which occur near Atlantic Avenue and Spring Street, lie within the proposed Medical District portion of the Midtown Specific Plan. Ultimately the Certified EIR concluded that implementation of the Approved Project was below the set elevation of 210.4 feet amsl and would not create a hazard to air navigation.

# 5.9.2 Impacts Associated with the Proposed Project

Would the project:

	Environmental Issues	Substantial Change in Project Requiring Major EIR Revisions	Substantial Change in Circum- stances Requiring Major EIR Revisions	New Information Showing New or Increased Significant Effects	Less Than Significant Impact/No Changes or New Information Requiring Preparation of an EIR	No Impact
a)	Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?				x	
b)	Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?				X	
c)	Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?				x	
d)	Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code § 65962.5 and, as a result, would it create a significant hazard to the public or the environment?				X	
e)	For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?					X

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	Environmental Issues	Substantial Change in Project Requiring Major EIR Revisions	Substantial Change in Circum- stances Requiring Major EIR Revisions	New Information Showing New or Increased Significant Effects	Less Than Significant Impact/No Changes or New Information Requiring Preparation of an EIR	No Impact
f)	Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?				x	
g)	Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?					Х

a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?

#### Less Than Significant Impact/No Changes or New Information Requiring Preparation of an EIR.

As with the Approved Project, operation of the Proposed Development Project would involve the use of small quantities of hazardous materials for cleaning and maintenance purposes. Additionally, the Proposed Development Project would be required to adhere to existing regulations of several federal agencies for the use, storage, transport, and disposal of hazardous materials by future residents and commercial tenants. This includes the California Department of Toxic Substances Control, US Environmental Protection Agency, California Division of Occupational Safety and Health, California Department of Transportation, County of Los Angeles Department of Environmental Health, California Department of Transportation, County of Los Angeles Department of Environmental Health, and Long Beach Fire Department. The Proposed Development Project would entail the same uses as evaluated under the Approved Project and therefore, no new impacts or substantially greater impacts than what was previously analyzed would occur that would require the preparation of a subsequent EIR.

b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?

#### Less Than Significant Impact/No Changes or New Information Requiring Preparation of an EIR.

As with the Approved Project, implementation of the Proposed Development Project, would not permit the development of industrial uses or other land uses involving the storage, use, transport, and disposal of large amounts of hazardous waste. No manufacturing, industrial, or other uses using large amount of hazardous materials are permitted under the Proposed Development Project. As with the Approved Project, operation of the Proposed Development Project would involve the use of small quantities of hazardous materials for cleaning and maintenance purposes. Additionally, the Proposed Development Project would be required to adhere to existing regulations, and mitigation identified in the Certified EIR (HAZ-1 and HAZ-2), compliance with such laws, regulations, and mitigation measures would be ensured through the City's development review

and building plan check process. No new impacts or substantially greater impacts than what was previously analyzed would occur that would require the preparation of a subsequent EIR.

c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?

Less Than Significant Impact/No Changes or New Information Requiring Preparation of an EIR. See response (b) above. Additionally, the four schools identified as within one-quarter mile of the Approved Project Site, including Long Beach Polytechnic High School, Roosevelt Elementary, Burnett Elementary, and Holy Innocents Parish, are all outside of a quarter mile of the Proposed Project Site. Therefore, no new impacts or substantially greater impacts than what was previously analyzed would occur that would require the preparation of a subsequent EIR.

d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code § 65962.5 and, as a result, would it create a significant hazard to the public or the environment?

Less Than Significant Impact/No Changes or New Information Requiring Preparation of an EIR. As with the Approved Project, implementation of the Proposed Development Project, located immediately west of the Approved Project site, would be required to comply with existing laws and regulations, including compliance with CERCLA, RCRA, California Code of Regulations, Title 22, and related requirements. As the Proposed Development Project is located adjacent to the Approved Project and the Certified EIR studied listings within the Approved Project area and within a one-mile radius of the Approved Project area, the Proposed Project Site was captured in the original analysis and no new impacts or substantially greater impacts than what was previously analyzed would occur that would require the preparation of a subsequent EIR.

e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?

**No Impact.** As with the Approved Project, the Proposed Project Site, located immediately west of the Approved Project site, remains outside of an airport land use plan and no private air strips adjacent to or within the vicinity of the Proposed Project Site exist. As the Proposed Development Project is located immediately adjacent to the Approved Project, which evaluated land within and in the vicinity of the Approved Project site, no new impacts or substantially greater impacts than what was previously analyzed would occur that would require the preparation of a subsequent EIR.

f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

Less Than Significant Impact/No Changes or New Information Requiring Preparation of an EIR. The Proposed Development Project would entail the same physical improvements to Long Beach Boulevard as was studied under the Approved Project which would result in temporary lane closures or rerouting of

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vehicular traffic. As with the Approved Project, the Proposed Development Project would not decrease the number of travel lanes along Long Beach Boulevard, nor alter its functionality. The Approved Project evaluated land within and around the Approved Project site. The Proposed Project Site, which is located immediately adjacent to the Approved Project site, would ensure that continued access to the Proposed Project Site and surrounding areas by emergency vehicles would continue. As the Proposed Development Project includes uses already evaluated under the Approved Project, it would also not interfere with any of the daily operations of the City's Emergency Operation Center, Long Beach Fire Department, or the Long Beach Police Department and would be required to be performed per the City's and LBFD's standards and regulations. Therefore, as with the Approved Project, the Proposed Development Project would not impair implementation of or physically interfere with the City of Long Beach or Los Angeles County's emergency response or evacuation plans. No new impacts, or substantially greater impacts than what was previously analyzed would occur that would require the preparation of a subsequent EIR.

# g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?

No Impact. As with the Approved Project, the Proposed Project Site, located immediately west of the Approved Project site, remains in a highly-urbanized, built-out portion of the City and exists outside of fire hazard severity zones designated by the California Department of Forestry and Fire Protection (CAL FIRE). As the Proposed Development Project is located immediately adjacent to the Approved Project and proposes development within the scope of what was evaluated under the Approved Project, no new impacts or substantially greater impacts than what was previously analyzed would occur that would require the preparation of a subsequent EIR.

# 5.9.3 Adopted Mitigation Measures Applicable to the Proposed Project

Prior to the issuance of demolition permits for any buildings or structures that would be demolished in conjunction with individual development projects that would be accommodated by the Midtown Specific Plan, the project applicant/developer shall conduct the following inspections and assessments for all buildings and structures onsite and shall provide the City of Long Beach Development Services Department with a copy of the report of each investigation or assessment.

- The project applicant shall retain a California Certified Asbestos Consultant (CAC) to perform abatement project planning, monitoring (including air monitoring), oversight, and reporting of all asbestos-containing materials (ACM) encountered. The abatement, containment, and disposal of all ACM shall be conducted in accordance with the South Coast Air Quality Management District's Rule 1403 and California Code of Regulation Title 8, Section 1529 (Asbestos).
- The project applicant shall retain a licensed or certified lead inspector/assessor to conduct
  the abatement, containment, and disposal of all lead waste encountered. The contracted
  lead inspector/assessor shall be certified by the California Department of Public Health

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(CDPH). All lead abatement shall be performed by a CDPH-certified lead supervisor or a CDPH-certified worker under the direct supervision of a lead supervisor certified by CDPH. The abatement, containment, and disposal of all lead waste encountered shall be conducted in accordance with the US Occupational Safety and Health Administration Rule 29, CFR Part 1926, and California Code of Regulation, Title 8, Section 1532.1 (Lead).

 Evidence of the contracted professionals attained by the project applicant shall be provided to the City of Long Beach Development Services Department. Additionally, contractors performing ACM and lead waste removal shall provide evidence of abatement activities to the City of Long Beach Building and Safety Bureau.

Prior to the issuance of grading permits for individual development projects that would be accommodated by the Midtown Specific Plan, the project applicant/developer shall submit a Phase I Environmental Site Assessment (ESA) to the City of Long Beach Development Services to identify environmental conditions of the development site and determine whether contamination is present. The Phase I ESA shall be prepared by a Registered Professional Engineer and in accordance with the American Society for Testing and Materials (ASTM) Standard E 1527.05, Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process. If recognized environmental conditions related to soils are identified in the Phase I ESA, the project applicant shall perform soil sampling as a part of a Phase II ESA. If contamination is found at significant levels, the project applicant shall remediate all contaminated soils in accordance with state and local agency requirements (California Department of Toxic Substances Control, Regional Water Quality Control Board, Long Beach Fire Department, etc.). All contaminated soils and/or material encountered shall be disposed of at a regulated site and in accordance with applicable laws and regulations prior to the completion of grading. Prior to the issuance of building permits, a report documenting the completion, results, and any follow-up remediation on the recommendations, if any, shall be provided to the City of Long Beach Development Services Department evidencing that all site remediation activities have been completed.

# 5.9.4 Level of Significance After Mitigation

Compliance with regulatory requirements and implementation of mitigation measures identified above would reduce potential impacts associated with hazards and hazardous materials to a less than significant level. Therefore, no significant unavoidable adverse impacts relating hazards have been identified.

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# 5.10 HYDROLOGY AND WATER QUALITY

# 5.10.1 Summary of Impacts Identified in the Certified EIR

The Initial Study for the Approved Project determined that portions of the Approved Project site between Anaheim Street and Wardlow Road were mapped in Zone X in the Flood Insurance Rate Maps prepared by the Federal Emergency Management Agency (FEMA). This is not classified as a 100-year flood hazard area and therefore would not result in a significant impact. The Initial Study also concluded that the Approved Project would not result in impacts with regard to seiche zones or tsunamis as there are no water storage facilities or bodies of water on or near the Approved Project site that could pose a flood hazard to the site due to a seiche or failure of an aboveground reservoir. Additionally, the possibility of the Approved Project site being affected by a tsunami was found to be negligible as the Approved Project site is approximately two miles inland from the Pacific Ocean.

The Certified EIR determined that due to the largely developed state of the Approved Project site, that implementation of the Approved Project would have a minimal effect on suable groundwater reserves. Additionally, it was confirmed that the City of Long Beach forecasts that it would have adequate water supplies to meet water demands through the 2015-2035 period without exceeding its water rights to Central Subbasin groundwater. The Certified EIR also found that development pursuant to the Approved Project would not substantially alter the existing drainage pattern of the Approved Project site or the surrounding area in a manner that would result in substantial erosion or siltation on- or offsite. It was concluded that development pursuant to the Approved Project would increase the amount of impervious surfaces on the Approved Project Site and would therefore increase surface water flows into drainage systems within the watershed, however, existing City and LACFCD storm drain systems serving the Approved Project site were not anticipated to change as a result of the Approved Project. Additionally, through incorporation of mitigation (HYD-1 through HYD-4) in addition to the incorporation of site design, LID features and BMPs as required by the City's SUSMP/LID design requirements, it was determined that the individual development project accommodated by the Approved Project would effectively retain or treat the 85th percentile 24-hour storm water runoff.

The Certified EIR also determined that during the construction phase of development pursuant to the Approved Project, the potential for short-term unquantifiable increases in pollutant concentrations from construction activities of the development projects would exist. Upon the completion of individual development projects that would be accommodated by the Approved Project, the quality of storm runoff (sediment, nutrients, metals, pesticides, pathogens, and hydrocarbons) may be altered. However, with the incorporation of site design, LID features and BMPs as required under the City's SUSMP/LID design requirements, the individual development projects that would be accommodated by the Midtown Specific Plan would effectively retain or treat the 85th percentile 24-hour storm water runoff for pollutants such as bacteria, metals, nutrients, oil and grease, organics, pesticides, sediment, trash, and oxygen demanding substances prior to discharge offsite. Therefore, long-term surface water quality of runoff from the Midtown Specific Plan area would be expected to improve over existing conditions as more LID BMPs are implemented throughout the Midtown Specific Plan area, resulting in an overall benefit to the Approved Project site and less than significant impacts.

# **5.10.2** Impacts Associated with the Proposed Project

Would the project:

	Environmental Issues	Substantial Change in Project Requiring Major EIR Revisions	Substantial Change in Circum- stances Requiring Major EIR Revisions	New Information Showing New or Increased Significant Effects	Less Than Significant Impact/No Changes or New Information Requiring Preparation of an EIR	No Impact
a) 	Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality?				x	
b)	Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?				X	
c)	Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:					
	<ul> <li>result in substantial erosion or siltation on- or off-site;</li> </ul>				X	
	ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site;				x	
	iii) create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or				X	
	iv) impede or redirect flood flows?					X
d)	In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?					X
e)	Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?				х	

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a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality?

Less Than Significant Impact/No Changes or New Information Requiring Preparation of an EIR. The Certified EIR determined that construction and operation of the Approved Project may cause deterioration of water quality of downstream receiving waters if construction- and operation-related sediment or pollutants wash into the storm drain system and facilities. The Approved Project was required to prepare a SWPPP and NPDES permit. Construction and operation of the Proposed Development Project would comply with the SWPPP and NPDES permit for the Approved Project in addition to the LID features and BMPs as required under the City's SUSMP/LID design requirements. As such, the Proposed Development Project would not create a new significant impact or a substantial increase in the severity of previously identified effects and would not require the preparation of a subsequent EIR.

b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?

Less Than Significant Impact/No Changes or New Information Requiring Preparation of an EIR. As with the Approved Project, the Proposed Development Project, located immediately west of the Approved Project site, is located in a largely developed area of the City and is surrounded by urban uses. Groundwater remains irrelevant to the Proposed Project Site, as with the Approved Project as infiltration would not be used and because the Proposed Project Site is not in or near any groundwater recharge basin. Additionally, as the uses proposed under the Proposed Development Project are within the scope of what was analyzed under the Approved Project, the original forecast by the City of Long Beach with regard to having adequate water supplies to meet water demands through the 2015-2035 period without exceeding its water right to Central Subbasin groundwater remains applicable. As such, the Proposed Development Project would not create a new significant impact or a substantial increase in the severity of previously identified effects and would not require the preparation of a subsequent EIR.

- c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:
  - i) result in a substantial erosion or siltation on- or off-site;

Less Than Significant Impact/No Changes or New Information Requiring Preparation of an EIR. Construction and operation of the Proposed Development Project would comply with the SWPPP and NPDES permit in addition to the LID features and BMPs related to erosion control as required under the City's SUSMP/LID design requirements. This would reduce, prevent, or minimize soil erosion and siltation from project-related grading and construction activities. Therefore, the Proposed Development

Project would not conflict with or obstruct the implementation of a water quality control plan and would not impact groundwater. A less than significant impact would occur.

ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site;

Less Than Significant Impact/No Changes or New Information Requiring Preparation of an EIR. Construction and operation of the Proposed Development Project would be subject to the same drainage improvements specified for the Approved Project which are outlined in Mitigation Measures HYD-1 through HYD-4. The Proposed Development Project would also be required to comply with the City's SUSMP/LID design requirements. As the Proposed Development Project includes land uses that were within the scope of what was analyzed for the Approved Project and would comply with the same provisions outlined in the Approved Project, no new significant impact or a substantial increase in the severity of previously identified effects would occur with regard to surface runoff that would require the preparation of a subsequent EIR.

iii) create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or

Less Than Significant Impact/No Changes or New Information Requiring Preparation of an EIR. Construction and operation of the Proposed Development Project would be subject to the same drainage improvements specified for the Approved Project which are outlined in Mitigation Measures HYD-1 through HYD-4. The Proposed Development Project would also be required to comply with the City's SUSMP/LID design requirements. As the Proposed Development Project includes land uses that were within the scope of what was analyzed for the Approved Project and would comply with the same provisions outlined in the Approved Project, no new significant impact or a substantial increase in the severity of previously identified effects would occur with regard to contribution of runoff water in excess of existing or planned stormwater drainage capacity that would require the preparation of a subsequent EIR.

#### iv) impede or redirect flood flows?

**No Impact.** As with the Approved Project, the Proposed Development Project, located immediately west of the Approved Project site is located in an area with moderate flood hazard, but not within a 100-year flood hazard area. The Project Site does not contain any bodies of water that could pose a flood hazard and exists two miles inland from the Pacific Ocean. No impact would occur.

d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?

**No Impact.** As with the Approved Project, the Proposed Development Project does not contain water storage facilities or bodies of water on or near the Project Site that could pose a flood hazard to the site due to a seiche. Additionally, the Project Site, located immediately adjacent to the Approved Project exists approximately two

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miles inland from the Pacific Ocean and is outside of the Tsunami Hazard Zone as identified by the California Emergency Management Agency. No impact would occur.

e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

Less Than Significant Impact/No Changes or New Information Requiring Preparation of an EIR. Construction and operation of the Proposed Development Project would comply with the SWPPP and NPDES permit in addition to the LID features and BMPs as required under the City's SUSMP/LID design requirements. Further, the Proposed Development Project would comply with Mitigation Measures HYD-1 through HYD-4. Therefore, the Proposed Development Project would not conflict with or obstruct the implementation of a water quality control plan and would not impact groundwater. A less than significant impact would occur.

# 5.10.3 Adopted Mitigation Measures Applicable to the Proposed Project

- HYD-1 Prior to the issuance of grading or building permits for any development or redevelopment projects pursuant to the Midtown Specific Plan, the City of Long Beach shall ensure that the following drainage improvements are fully funded for and implemented:
  - Any development or redevelopment project that would impact existing storm drain facilities within the Midtown Specific Plan area (public and private) that is less than 24inches in size shall fully fund upsizing of such facilities to a minimum 24-inch pipe size or greater dependent upon the location and size of the development or redevelopment project. The increase in pipe size will serve to reduce localized flooding.
  - Any development or redevelopment project that would impact the two segments of City of Long Beach's storm drains in Willow Street for which improvements were recommended by the 2005 Master Plan of Drainage Update shall fully fund upsizing of those storm drain segments to 36 inches or other final size as prescribed by City of Long Beach Public Works Department.
- HYD-2 Prior to the issuance of grading or building permits for any development or redevelopment projects pursuant to the Midtown Specific Plan, project applicants/developers of such projects shall prepare a site-specific hydrology and hydraulic study of the onsite and immediate offsite storm drain systems to determine capacity and integrity of the existing systems. The hydrology and hydraulic study shall be submitted to City of Long Beach Public Works Department for review and approval.
- HYD-3 The project applicant/developer of each development or redevelopment project that would be accommodated by the Midtown Specific Plan shall request the "allowable discharge rate" which limits peak flow discharges as compared to existing conditions based on regional flood control constraints from the Los Angeles County Department of Public Works, and shall comply with such discharge rate. Compliance with the "allowable discharge rate" shall be

demonstrated in the hydrology and hydraulic study to be completed pursuant to Mitigation Measure HYD-2.

HYD-4

The project applicant/developer, architect, and construction contractor for each development or redevelopment project that would be accommodated by the Midtown Specific Plan shall incorporate low-impact development (LID) best management practices (BMPs) within the respective project, providing for water quality treatment and runoff reduction and/or detention in accordance with local stormwater permit requirements.

# 5.10.4 Level of Significance After Mitigation

Compliance with regulatory requirements and implementation of mitigation measures identified above would reduce potential impacts associated with hydrology and water quality to a less than significant level. Therefore, no significant unavoidable adverse impacts relating hydrology and water quality have been identified.

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#### 5.11 LAND USE AND PLANNING

# 5.11.1 Summary of Impacts Identified in the Certified EIR

The Initial Study for the Approved Project concluded that there would be no impacts with regard to physically dividing an established community. It was determined that the intent of the Approved Project was to revitalize the area and create a unique sense of place, ultimately by creating a unifying streetscape, integrating a multimodal circulation network, and encouraging strategic development opportunities along the corridor. Additionally, the Approved Project would not introduce roadways or other infrastructure improvements that would bisect or transect the surrounding communities and the proposed residential and commercial uses would be compatible with surrounding land uses. The Initial Study also concluded that the Approved Project would not conflict with the provisions of any adopted habitat conservation plan or natural community conservation plan.

The Certified EIR concluded that the Approved Project would be consistent with the vision, goals and policies of the City's adopted General Plan, including those of the Land Use, Mobility and Housing Elements but would require an amendment to the City's General Plan Land Use and Mobility elements with adoption of the Midtown Specific Plan. It was also determined that implementation of the Approved Project would require an amendment to the City's Zoning Regulations (Title 21 of The City's Municipal Code) and zoning map. More specifically, the City's Zoning Regulations and zoning map would be amended to change the existing Planning Development District 29 (PD-29) boundary to coincide with the boundaries of the Midtown Specific Plan area. Additionally, it was found that the Approved Project would establish the necessary plans, development standard, design guidelines, regulations, infrastructure requirements, financing methods, and implementation programs for subsequent project-related development activities. Implementation of the Approved Project was found to be consistent with the Central Long Beach Design Guidelines, the Long Beach Bicycle Master Plan, and the Willow Station Bike Transit Hub Access Plan. Additionally, the Approved Project was found to be consistent with SCAG's 2012-2035 RTP/SCS goals.

# Impacts Associated with the Proposed Project

Would the project:

	Environmental Issues	Substantial Change in Project Requiring Major EIR Revisions	Substantial Change in Circum- stances Requiring Major EIR Revisions	New Information Showing New or Increased Significant Effects	Less Than Significant Impact/No Changes or New Information Requiring Preparation of an EIR	No Impact
a)	Physically divide an established community?					Х
b)	Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?				х	

#### a) Physically divide an established community?

**No Impact.** As the Proposed Development Project is within the scope of what was analyzed for the Approved Project, it would not physically divide an established community. The Proposed Development Project would be consistent with the uses, scale and design as was analyzed in the Approved Project and would likewise contribute to a sense of place. No impact would occur.

b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?

Less Than Significant Impact/No Changes or New Information Requiring Preparation of an EIR. The Proposed Project Site would require a zone map change. More specifically, the City's Zoning Regulations and zoning map would be amended to change the Project Site boundary to coincide with the boundaries of the Midtown Specific Plan area. The development uses and scale for the Proposed Development Project, would however, be consistent with what was analyzed for the Approved Project. Therefore, the Proposed Development Project would not create a new significant impact or a substantial increase in the severity of previously identified effects and impacts would remain less than significant.

# 5.11.2 Adopted Mitigation Measures Applicable to the Proposed Project

LU-1 If the current General Plan Land Used Element update being undertaken by the City of Long Beach, which includes revisions to the land use designations of the current Land Use Map (including the area covered by the Midtown Specific Plan), is not adopted within 12 months after adoption of the Midtown Specific Plan, the City shall initiate a General Plan Amendment to achieve consistency between the General Plan Land Use Element and the Midtown Specific

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Plan. Specifically, the General Plan Amendment shall require an update to the current Land Use Map in order to change the current General Plan land use designations of the Midtown Specific Plan area to allow for uses and densities set forth in the Midtown Specific Plan.

A future General Plan Amendment may also require revisions to tables and exhibits in the Mobility Element pertaining to roadway classifications and closures associated with the Midtown Specific Plan. The specific roadway closures under the Midtown Specific Plan include 25th Street, 23rd Street, 21st Street, and 15th Street east and west of Long Beach Boulevard; Rhea Street east of Long Beach Boulevard; Esther Street east of Long Beach Boulevard; and 14th Street east of Long Beach Boulevard. Roadway amendments will be processed as the time of individual roadway character change projects.

# 5.11.3 Level of Significance After Mitigation

With implementation of the mitigation measure outlined above, no significant unavoidable adverse impacts relating to land use and planning would result.

#### 5.12 MINERAL RESOURCES

# 5.12.1 Summary of Impacts Identified in the Certified EIR

Mineral Resources was scoped out in the Initial Study prepared for the Certified. The Initial Study determined that no active mining operations exist in the City of Long Beach and that the Approved Project area and surrounding area does not contain significant mineral deposits. Further, the Mobility Element of the City of Long Beach General Plan indicated that oil fields are present in and around Long Beach. However, development in accordance with the Approved Project would occur on developed sites and would not expand into mineral resource recovery sites or oil fields. The Initial Study found that no impact would occur to mineral resources.

# 5.12.2 Impacts Associated with the Proposed Project

Would the project:

	Environmental Issues	Substantial Change in Project Requiring Major EIR Revisions	Substantial Change in Circum- stances Requiring Major EIR Revisions	New Information Showing New or Increased Significant Effects	Less Than Significant Impact/No Changes or New Information Requiring Preparation of an EIR	No Impact
a)	Result in the loss of availability of a known mineral resource that would be a value to the region and the residents of the state?					x
b)	Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?					х

a) Result in the loss of availability of a known mineral resource that would be a value to the region and the residents of the state?

**No Impact.** Similar to the Approved Project, the Project Site is located within an urbanized area within the City of Long Beach. No mining activities exist on site. Similar to the Approved Project, the Project Site is mapped in the San Gabriel Production-Consumption Region by the California Geological Survey, indicating that no significant mineral deposits exist on the Project Site (CGS 2010). Therefore, implementation of the Proposed Project would not cause the loss of availability of mineral resources valuable to the region or state. No impact would occur.

b) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?

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**No Impact.** The Mobility Element of the City of Long Beach General Plan indicates that oil fields are present in and around Long Beach. Similar to the Approved Project, the Proposed Development Project is located on a developed site. The Project Site does not contain mineral resource recovery sites nor oil drilling. The Proposed Project would not result in the loss of availability of locally important mineral resource recovery sites. No impact would occur.

# 5.12.3 Adopted Mitigation Measures Applicable to the Proposed Project

No mitigation measures related to mineral resources were outlined in the Certified EIR.

# 5.12.1 Level of Significance After Mitigation

No mitigation measures are required for the Proposed Project.

#### **5.13 NOISE**

# 5.13.1 Summary of Impacts Identified in the Certified EIR

The Initial Study for the Approved Project determined that because there are no private airstrips adjacent to or within the vicinity of the project site, that no impact with regard to exposure of people residing or working in the project site would occur or result in excessive noise levels. Additionally, the Initially Study concluded that the Approved Project site is not located in the Long Beach Airport land use plan's area and therefore would result in less than significant impacts.

The Certified EIR determined that construction activities associated with development projects that would be accommodated by the Approved Project would result in temporary noise increases in the vicinity of the Approved Project site. It also concluded that buildout of the Approved Project would not cause a substantial noise increase related to traffic on local roadways in the City of Long Beach. Noise-sensitive uses would also be exposed to elevated noise levels from transportation sources as a result of buildout of the Approved Project. The Certified EIR found that noise-sensitive uses would not be exposed to elevated noise levels from stationary sources as a result of buildout of the Approved Project. With implementation of Mitigation Measures N-1 through N-5, and compliance with regulatory requirements, most impacts were found to be less than significant. Construction noise was found to remain significant and unavoidable even with implementation of mitigation.

# 5.13.2 Impacts Associated with the Proposed Project

Would the project result in:

	Environmental Issues	Substantial Change in Project Requiring Major EIR Revisions	Substantial Change in Circum- stances Requiring Major EIR Revisions	New Information Showing New or Increased Significant Effects	Less Than Significant Impact/No Changes or New Information Requiring Preparation of an EIR	No Impact
a)	Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?				x	
b)	Generation of excessive groundborne vibration or groundborne noise levels?				X	

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	Environmental Issues	Substantial Change in Project Requiring Major EIR Revisions	Substantial Change in Circum- stances Requiring Major EIR Revisions	New Information Showing New or Increased Significant Effects	Less Than Significant Impact/No Changes or New Information Requiring Preparation of an EIR	No Impact
c)	For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?				x	

a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?

Less Than Significant Impact/No Changes or New Information Requiring Preparation of an EIR. The Proposed Project would not substantially increase construction noise, since the Proposed Development Project would occur within the scope of development as analyzed under Approved Project. The Proposed Project would comply with identified mitigation measures outlined in the Certified EIR. With regards to construction noise, the Proposed Development Project would not create a new significant impact or a substantial increase in the severity of previously identified effects that would require the preparation of a subsequent EIR.

Uses are consistent with what was analyzed in the Approved Project and would still include commercial and residential uses and would therefore not contribute to new types of noise that were not previously identified. The Proposed Development Project would not create a new significant impact or a substantial increase in the severity of previously identified effects that would require the preparation of a subsequent EIR.

The Certified EIR determined that the Approved Project would result in significant and unavoidable impacts with regard to construction but would implement mitigation measures to lessen impacts to the greatest extent feasible. The Proposed Development Project would be required to incorporate Mitigation Measures N-1 and N-5 as identified in the Certified EIR and outlined below. No new impacts or substantially greater impacts than what was previously analyzed would occur that would require the preparation of a subsequent EIR.

b) Generation of excessive groundborne vibration or groundborne noise levels?

Less Than Significant Impact/No Changes or New Information Requiring Preparation of an EIR. The Certified EIR determined that construction activities associated with development projects that would be accommodated by the Approved may expose sensitive uses to strong levels of groundborne vibration. The

construction of the Proposed Development Project is within the scope of what was analyzed under the Approved Project. As such, the construction of the Proposed Development Project would not increase vibration due to construction. The Proposed Development Project would be required to incorporate Mitigation Measures N-2 through N-4 to reduce impacts to ensure that impacts would be less than significant. The Proposed Development Project would not create a new significant impact or a substantial increase in the severity of previously identified effects that would require the preparation of a subsequent EIR.

c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?

Less Than Significant Impact/No Changes or New Information Requiring Preparation of an EIR. As with the Approved Project, the Proposed Development Project, located immediately west of the Approved Project site, remains outside of an airport land use plan and no private air strips adjacent to or within the vicinity of the Project Site exist. The Proposed Project is located immediately adjacent to the Approved Project, which evaluated land within and in the vicinity of the Approved Project site, no new impacts or substantially greater impacts than what was previously analyzed would occur that would require the preparation of a subsequent EIR.

# 5.13.3 Adopted Mitigation Measures Applicable to the Proposed Project

The following mitigation measures have been carried through from the 2016 Midtown Specific Plan EIR (Certified EIR). These mitigation measures have been incorporated into the MMRP for this Addendum. Any modifications to the mitigation measures from the Certified EIR are shown as strikethrough for deleted text and **bold** for new, inserted text.

- N-1 Prior to issuance of demolition, grading and/or building permits for development projects accommodated by the Midtown Specific Plan, a note shall be provided on development plans indicating which indicates that during grading, demolition, and construction, the property owner/developer shall be responsible for requiring contractors to implement the following measures to limit construction-related noise:
  - Construction activity is limited to the daytime hours between 7 AM to 7 PM on Monday through Friday and 9 AM to 6PM on Saturday, as prescribed in the City's Municipal Code. Construction is prohibited on Sundays.
  - All internal combustion engines on construction equipment and trucks are fitted with properly maintained mufflers.
  - Stationary equipment such as generators and air compressors shall be located as far as feasible from nearby noise-sensitive uses.
  - Stockpiling is located as far as feasible from nearby noise-sensitive receptors.

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 Construction traffic shall be limited to the haul routes established by the City of Long Beach.

Prior to issuance of a building permit for any development project requiring pile driving or blasting during construction, the project applicant/developer shall prepare a noise and vibration analysis to assess and mitigate potential noise and vibration impacts related to these activities. The maximum levels shall not exceed 0.2 inches/second, which is the level that can cause architectural damage for typical residential construction. If maximum levels would exceed these thresholds, alternative uses such static rollers, non-explosive blasting, and drilling piles as opposed to pile driving shall be used.

N-3 Prior to the issuance of building permits for development projects accommodated by the Midtown Specific Plan, if proposed vibration-sensitive land uses are located within 200 feet of any railroad line, the property owner/developer shall retain an acoustical engineer to conduct an acoustic analysis that includes a vibration analysis for potential impacts from vibration generated by operation of the rail line. Mixed-use buildings shall be designed to eliminate vibration amplifications due to resonances of floors, walls, and ceilings. The detailed acoustical analysis shall be submitted to the City of Long Beach Development Services Department prior to issuance of building permits and shall demonstrate that the vibration levels would be below 65, 72, or 75 VdB, which are the Federal Transit Administration's rail-focused groundborne vibration criteria for Category 1, 2, and 3 land uses, respectively. Category 1 uses are buildings where vibration would interfere with interior operations; Category 2 uses are residences and buildings were people normally sleep; and Category 3 uses are institutional land uses with primarily daytime use.

Prior to issuance of a building permit for projects involving the development of new industrial uses within 200 feet of any existing residential use or Development District 3 of the Midtown Specific Plan, the property owner/developer shall retain an acoustical engineer to conduct an acoustic analysis that includes a vibration analysis for potential impacts from vibration generated by industrial activities. The detailed acoustical analysis shall be submitted to the City of Long Beach Development Services Department for review and shall demonstrate that the vibration levels to any nearby residential use would be below 78 VdB during the daytime (7 AM to 10 PM) and 72 VdB during the nighttime (10 PM to 7 AM), which are the Federal Transit Administration's daytime and nighttime criteria to regulate general vibration impacts at affected residential uses.

Prior to issuance of a building permit for residential development projects accommodated by the Midtown Specific Plan, the project applicant/developer shall submit a final acoustical report prepared to the satisfaction of the City of Long Beach Development Services Department. The report shall demonstrate that the residential development will be sound-attenuated against present and projected noise levels, including roadway, railway, aircraft, helicopter, and stationary sources (e.g., industrial, commercial, etc.) to meet City interior standards. Specifically, the report shall demonstrate that the proposed residential design will

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N-2

N-4

N-5

result in compliance with the 45 dBA CNEL interior noise levels, as required by the California Building Code and California Noise Insulation Standards (Title 24 and 25 of the California Code of Regulations). The project applicant/developer shall submit the final acoustical report to the City of Long Beach Development Services Department for review and approval. Upon approval by the City, the project's acoustical design features shall be incorporated into construction of the proposed development project.

# 5.13.4 Level of Significance After Mitigation

As with the Approved Project, all impacts would be reduced to a less than significant level with incorporation of mitigation, however, as identified in the Certified EIR, as construction equipment and usage would be similar to what was identified in the Approved Project, construction noise for both the Approved and Proposed Development Project would remain significant and unavoidable.

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#### 5.14 POPULATION AND HOUSING

# 5.14.1 Summary of Impacts Identified in the Certified EIR

The Initial Study for the Approved Project found that the Approved Project would not lead to the displacement of a substantial number of existing housing or people as implementation would gradually convert existing vacant land, and auto-related businesses to other land uses including a transit-oriented mixed-use, medical use, and multifamily and single-family residential uses.

The Certified EIR determined that buildout of the Approved Project would result in population, housing, and employment growth in the City of Long Beach. The estimated population growth due to buildout of the Approved Project was found to be within SCAG's forecast population increase for the City of Long Beach of 71,900 by 2035 and represented only 5.8 percent of the forecast population growth by 2035. The Approved Project would accommodate the development of up to 1,736 new residential units within the Approved Project area and would be consistent with the City's and SCAG's goals to provide additional housing opportunities in the City of Long Beach. Employment growth was also found to be well within SCAG's forecast employment increase for the City. No significant impacts related to jobs-housing balance was anticipated from the Approved Project. With the implementation of the California Housing Element Law: Government Code Section 65300, impacts were found to be less than significant.

# 5.14.2 Impacts Associated with the Proposed Project

Would the project:

	Environmental Issues	Substantial Change in Project Requiring Major EIR Revisions	Substantial Change in Circum- stances Requiring Major EIR Revisions	New Information Showing New or Increased Significant Effects	Less Than Significant Impact/No Changes or New Information Requiring Preparation of an EIR	No Impact
a)	Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?				x	
b)	Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?				x	

a) Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?

Less Than Significant Impact/No Changes or New Information Requiring Preparation of an EIR. As with the Approved Project, the Proposed Development Project would not displace a substantial number of existing housing or people. The Proposed Development Project would result in the demolition of an existing neighborhood market building and a vacant building to be replaced with a mixed-use residential development. Consistent with the Approved Project, this would ultimately provide more opportunities for housing in the area. Therefore, the Proposed Development Project would not create a new significant impact or a substantial increase in the severity of previously identified effects and impacts would remain less than significant.

b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?

Less Than Significant Impact/No Changes or New Information Requiring Preparation of an EIR. The Midtown Specific Plan area currently contains approximately 1,900 residential units and a little over 2.6 million square feet of commercial and employment uses, as well as medical facilities with over 950 licensed hospital beds and three hotels with approximately 200 hotel rooms. The Midtown Specific Plan 2016 Certified EIR studied the increase of the number of permitted residential units to just over 3,600 units—1,736 units more than existing conditions. As the number of units under the Proposed Development Project (138 dwelling units) is well within the number of units analyzed for the Approved Project (1,736 dwelling units) and does not entail additive units, the Proposed Project would be consistent with the findings found in the Certified EIR. Consistent with the Approved Project, the Proposed Development Project would contribute to population, housing, and employment growth and as it falls within the scope of what was previously analyzed would be consistent with City and SCAG projections and goals. The Proposed Development Project would also help in achieving an expansion of housing opportunities for the City of Long Beach and would comply with California Housing Element Law: Government Code Section 65300 as identified in the Approved Project. Therefore, the Proposed Development Project would not create a new significant impact or a substantial increase in the severity of previously identified effects and impacts would remain less than significant.

# 5.14.3 Adopted Mitigation Measures Applicable to the Proposed Project

No mitigation measures related to population and housing were outlined in the Certified EIR.

# 5.14.4 Level of Significance After Mitigation

No mitigation measures are required for the Proposed Project.

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# 5.15 PUBLIC SERVICES

# 5.15.1 Summary of Impacts Identified in the Certified EIR

The Certified EIR determined that the Approved Project would introduce new dwelling units, residents, nonresidential uses, and workers into the Long Beach Fire Department and Long Beach Police Department's service boundaries, thereby increasing the demand for fire protection, police protection, and emergency services. However, all development projects that would be accommodated under the Approved Project would be required to comply with the most current adopted fire codes, building codes, and nationally recognized fire and life safety standards of Long Beach, Los Angeles County, and the State of California. For example, development projects would be required to comply with the most current edition (2013) of the CFC, which is incorporated by reference in Chapter 18.48 (Fire Code) of the City's Municipal Code. Compliance with these codes and standards is ensured through the City's and LBFD's development review and building plan check process. Additionally, as development occurs in accordance with the Approved Project, the City's General Funds would increase proportionally and would allocate additional funds to LBPD to hire and train additional police officers or administrative personnel. In addition, applicants of individual development projects would be required to pay police facilities impact fees in accordance with Chapter 18.22 (Police Facilities Impact Fees) of the City's Municipal Code, which would contribute to LBPD's funds to acquire, construct, and furnish new law enforcement facilities and purchase new equipment. The funds collected pursuant to this chapter are utilized for payment of the actual or estimated costs of police facilities, apparatus, and equipment related to new residential and nonresidential construction. Payment of the Police Facilities Impact Fee ensures that individual project applicant's pay their fair share of costs related to police protection services and facilities. Therefore, the Certified EIR concluded that implementation of the Approved Project would not result in substantial adverse impacts related to fire protection, police protection, or emergency services.

The Certified EIR concluded that the Approved Project would result in the generation of 640 additional students, which would impact the school enrollment capacities of LBUSD schools that serve the Project Site, however, it was concluded that LBUSD would have the capacity to serve these additional students. Additionally, the need for additional services would be addressed through compliance with the school impact fee assessment and impact were found to be less than significant.

The Certified EIR studied impacts to parks in its Recreation section. It was determined that implementation of the Approved Project would lead to the generation of an additional 4,195 residents within Long Beach, which would in turn lead to an increase in the use of existing City parks and recreational facilities. However, all new residential development that would be accommodated under the Approved Project would be required to pay the parks and recreation facilities impact fees, which would be placed into the City's park fee account, and used solely and exclusively for the purpose of funding future park land acquisition and recreation improvements. This would gradually increase the City's park funds and allow the City to acquire new parks or improve on existing parks and recreational facilities. Overall, with implementation of the approved Open Space District in the Approved Project site and the required park and recreation facilities impact fees required of all new residential development under the Approved Project, impacts were found to be less than significant.

Finally, the Certified EIR concluded that the Proposed Project would result in the generation of up to 4,195 additional residents in the Approved Project site, which would lead to an increase in demand for local library services. However, it was determined that with access to all 12 libraries within the LBPL's system in addition to the Main Library proposed as part of the new civic center for the City of Long Beach, that this would be adequate for the Approved Project. Additionally, LBPL would continue to receive funding for library facilities and resources. Impacts were determined to be less than significant.

# 5.15.2 Impacts Associated with the Proposed Project

Would the project:

Environmental Issues	Substantial Change in Project Requiring Major EIR Revisions	Substantial Change in Circum- stances Requiring Major EIR Revisions	New Information Showing New or Increased Significant Effects	Less Than Significant Impact/No Changes or New Information Requiring Preparation of an EIR	No Impact
a) Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the public services:					
Fire protection?				Х	
Police protection?				Х	
Schools?				Х	
Parks?				Х	
Other public facilities?				Х	

a) Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the public services:

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#### Fire protection?

Less Than Significant Impact/No Changes or New Information Requiring Preparation of an EIR. The Midtown Specific Plan area currently contains approximately 1,900 residential units and a little over 2.6 million square feet of commercial and employment uses, as well as medical facilities with over 950 licensed hospital beds and three hotels with approximately 200 hotel rooms. The Midtown Specific Plan 2016 Certified EIR studied the increase of the number of permitted residential units to just over 3,600 units—1,736 units more than existing conditions. As the number of units under the Proposed Development Project (138 dwelling units) is well within the number of units analyzed for the Approved Project (1,736 dwelling units), and does not entail additive units, the Proposed Project would be consistent with the findings found in the Certified EIR. The Proposed Development Project would not increase the demand for fire protection and emergency services more than what was identified under the Approved Project. However, the Proposed Development Project would be required to comply with the most current adopted fire codes, building codes, and nationally recognized fire and life safety standards of Long Beach, Los Angeles County, and the State of California. Therefore, the Proposed Development Project would not create a new significant impact or a substantial increase in the severity of previously identified effects and impacts would remain less than significant.

#### Police protection?

Less Than Significant Impact/No Changes or New Information Requiring Preparation of an EIR. As the number of units under the Proposed Development Project (138 dwelling units) is well within the number of units analyzed for the Approved Project (1,736 dwelling units), the Proposed Development Project would be consistent with the findings found in the Certified EIR. The Proposed Development Project would not increase the demand for police protection services more than what was identified under the Approved Project. However, the Proposed Development Project would be required to pay police facilities impact fees in accordance with Chapter 18.22 (Police Facilities Impact Fees) of the City's Municipal Code, which would contribute to LBPD's funds to acquire, construct, and furnish new law enforcement facilities and purchase new

equipment. Therefore, the Proposed Development Project would not create a new significant impact or a substantial increase in the severity of previously identified effects and impacts would remain less than significant.

#### Schools?

Less Than Significant Impact/No Changes or New Information Requiring Preparation of an EIR.

As the number of units under the Proposed Development Project (138 dwelling units) is well within the number of units analyzed for the Approved Project (1,736 dwelling units), the Proposed Development Project would be consistent with the findings found in the Certified EIR and generation of students would fall within what was previously analyzed. However, as with the Approved Project, the Proposed Development Project would be required to pay SB 50 school impact fees. Payment of school impact fees will ensure that the impact of the Proposed Project on school services are at a less than significant level; the Proposed Project would not result in the need for new or physically altered schools or result in the construction of a new school. Therefore, the Proposed Project would not create a new significant impact or a substantial increase in the severity of previously identified effects and impacts would remain less than significant.

#### Parks?

Less Than Significant Impact/No Changes or New Information Requiring Preparation of an EIR.

As the number of units under the Proposed Development Project (138 dwelling units) is well within the number of units analyzed for the Approved Project (1,736 dwelling units), the Proposed Project would be consistent with the findings found in the Certified EIR. However, as with the Approved Project, the Proposed Project would be required to pay parks and recreation facilities impact fees. Payment of these fees which would be placed into the City's park fee account would help gradually increase the City's park funds and allow the City to acquire new parks or improve existing parks and recreational facilities. Additionally, as with the Approved Project, the Proposed Project designates open space uses within the Project Site. Therefore, the Proposed Project would not create a new significant impact or a substantial increase in the severity of previously identified effects and impacts would remain less than significant.

#### Other public facilities?

Less Than Significant Impact/No Changes or New Information Requiring Preparation of an EIR. As indicated in the Certified EIR, the Project Site is served by the Long Beach Public Library System. As with the Approved Project, future residents of the Proposed Development Project would have access to the 12 libraries in the LBPL system in addition to the Main Library which has been proposed as part of the new civic center for the City of Long Beach. As the generation of residents is within what was analyzed for the Approved Project, the Proposed Project is not anticipated to affect library services more than what was already analyzed in the Certified EIR. Additionally, the addition of the Proposed Project, as with the Approved Project would contribute to the library by paying property taxes. Therefore, the Proposed Project would not create a new significant impact or a substantial increase in the severity of previously identified effects and impacts would remain less than significant.

## 5.15.3 Adopted Mitigation Measures Applicable to the Proposed Project

No mitigation measures related to public services were outlined in the Certified EIR.

## 5.15.4 Level of Significance After Mitigation

No mitigation measures are required for the Proposed Project.

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#### 5.16 RECREATION

## 5.16.1 Summary of Impacts Identified in the Certified EIR

The Certified EIR determined that implementation of the Approved Project would lead to the generation of an additional 4,195 residents within Long Beach, which would in turn lead to an increase in the use of existing City parks and recreational facilities. However, all new residential development that would be accommodated under the Approved Project would be required to pay the parks and recreation facilities impact fees, which would be placed into the City's park fee account, and used solely and exclusively for the purpose of funding future park land acquisition and recreation improvements. This would gradually increase the City's park funds and allow the City to acquire new parks or improve on existing parks and recreational facilities. Overall, with implementation of the approved Open Space District in the Approved Project site and the required park and recreation facilities impact fees required of all new residential development under the Approved Project, impacts were found to be less than significant.

Additionally, the Certified EIR determined that project implementation would not result in environmental impacts as a result of new and/or expanded parks and recreational facilities that would be needed to serve future project residents. It was found that development that would be accommodated under the Approved Project would not require the construction of new or expansion of existing City parks and recreational facilities due to use of these parks and facilities by future project residents. As noted above, all new residential development that would be accommodated under the Approved Project would be required to pay the parks and recreation facilities impact fees outlined in Chapter 18.18 (Park and Recreation Facilities Fee) of the City's Municipal Code, which would be placed into the City's park fee account, and used solely and exclusively for the purpose of funding future park land acquisition and recreation improvements. Payment of the parks and recreation facilities impact fees would help offset any impacts to existing parks and recreational facilities.

## 5.16.2 Impacts Associated with the Proposed Project

	Environmental Issues	Substantial Change in Project Requiring Major EIR Revisions	Substantial Change in Circum- stances Requiring Major EIR Revisions	New Information Showing New or Increased Significant Effects	Less Than Significant Impact/No Changes or New Information Requiring Preparation of an EIR	No Impact
a)	Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?				x	

	Environmental Issues	Substantial Change in Project Requiring Major EIR Revisions	Substantial Change in Circum- stances Requiring Major EIR Revisions	New Information Showing New or Increased Significant Effects	Less Than Significant Impact/No Changes or New Information Requiring Preparation of an EIR	No Impact
b)	Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?				x	

a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?

Less Than Significant Impact/No Changes or New Information Requiring Preparation of an EIR. As the number of units under the Proposed Development Project (138 dwelling units) is well within the number of units analyzed for the Approved Project (1,736 dwelling units), the Proposed Project would be consistent with the findings found in the Certified EIR. However, as with the Approved Project, the Proposed Project

with the findings found in the Certified EIR. However, as with the Approved Project, the Proposed Project would be required to pay parks and recreation facilities impact fees. Payment of these fees which would be placed into the City's park fee account would help gradually increase the City's park funds and allow the City to acquire new parks or improve existing parks and recreational facilities. Additionally, as with the Approved Project, the Proposed Project designates open space uses within the Project Site. The development of the Proposed Project would not result in the substantial physical deterioration of area parks or recreational facilities. Therefore, the Proposed Project would not create a new significant impact or a substantial increase in the severity of previously identified effects and impacts would remain less than significant.

b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?

Less Than Significant Impact/No Changes or New Information Requiring Preparation of an EIR.

As the number of units under the Proposed Development Project (138 dwelling units) is well within the number of units analyzed for the Approved Project (1,736 dwelling units), the Proposed Project would be consistent with the findings found in the Certified EIR. However, as with the Approved Project, the Proposed Project would be required to pay parks and recreation facilities impact fees. Payment of these fees which would be placed into the City's park fee account would help gradually increase the City's park funds and allow the City to acquire new parks or improve existing parks and recreational facilities. Additionally, as with the Approved Project, the Proposed Project designates open space uses within the Project Site. The Proposed Project would not require the construction or expansion of recreational facilities. Therefore, the Proposed Project would not create a new significant impact or a substantial increase in the severity of previously identified effects and impacts would remain less than significant.

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# 5.16.3 Adopted Mitigation Measures Applicable to the Proposed Project

No mitigation measures related to recreation were outlined in the Certified EIR.

## 5.16.4 Level of Significance After Mitigation

No mitigation measures are required for the Proposed Project.

#### 5.17 TRANSPORTATION

## 5.17.1 Summary of Impacts Identified in the Certified EIR

The Initial Study for the Approved Project concluded that upon project completion, improvements to Long Beach Boulevard would improve vehicular, pedestrian, and bicycle mobility in the project areas. The Approved Project would also comply with the roadway design standards adopted by the City of Long Beach and Long Beach Fire Department that preclude the construction of any unsafe design features. The Approved Project would also be required to adhere to the City's Standard Engineering Plans and LBFD's design standards. Additionally, future development under the Approved Project would be required to incorporate all applicable design and safety requirements as set forth in the most current fire codes, building codes, and nationally recognized fire and life safety standards of the City and LBFD to ensure that there would be no impact to emergency access. This would also be ensured through the building plan check and development review process and coordination with LBFD and LBPD.

The Certified EIR determined that project-related trip generation would impact levels of service for the existing area roadway system. It concluded that the Approved Project would result in a significant impact at the intersection of Atlantic Avenue and Spring Street under Existing (2014) With Project conditions and at the intersections of Long Beach Boulevard and Spring Street, Pacific Avenue and Willow Street, Atlantic Avenue and Spring Street, and Atlantic Avenue and 27th Street under the Cumulative Year (2035) With Project conditions. Mitigation would be required to lessen impacts. Additionally, individual development projects that would be accommodated under the Approved Project would be reviewed by the City and would be required to comply with the requirements in effect at the time building permits are issued, including the payment of the transportation improvement fee, per Chapter 18.17 (Transportation Improvement Fee) of the City's Municipal Code. Per Chapter 18.17, a transportation improvement fee is imposed on new development in the City for the purpose of assuring that the transportation level of service goals of the City as set forth in the traffic mitigation program are met with respect to the additional demands placed on the transportation system by traffic generated from such development.

The Certified EIR found that project-related traffic would not result in significant impacts to congestion management plan facilities in the study area. Additionally, it was determined that the Approved Project would comply with adopted policies, plans, and programs for alternative transportation and would ultimately improve transit, bicycle and pedestrian facilities and infrastructure throughout the Approved Project site. The Approved Project was guided by the City's Mobility Element and was consistent with several policies to promote complete streets and alternative transportation modes.

## 5.17.2 Impacts Associated with the Proposed Project

Would the project:

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	Environmental Issues	Substantial Change in Project Requiring Major EIR Revisions	Substantial Change in Circum- stances Requiring Major EIR Revisions	New Information Showing New or Increased Significant Effects	Less Than Significant Impact/No Changes or New Information Requiring Preparation of an EIR	No Impact
a)	Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?				x	
b)	Conflict or be inconsistent with CEQA Guidelines § 15064.3, subdivision (b)?				х	
c)	Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?				x	
d)	Result in inadequate emergency access?				X	

#### **Traffic Assessment**

On June 17, 2020, Fehr & Peers completed a traffic assessment for the Proposed Project. The purpose of the assessment was to present trip generation of the existing and proposed site and to provide an assessment of Vehicle Miles Traveled (VMT), and a site access analysis. This information is included in the discussion below.

#### SB 743

SB 743, signed by the Governor in 2013, has directed the Office of Planning and Research (OPR) to look at different metrics for identifying transportation impacts under CEQA. The Final OPR Technical Advisory was released in December 2018 and identified vehicle miles of travel (VMT) as the preferred metric moving forward. The Natural Resources Agency completed the rule making process to modify the CEQA guidelines in December of 2018. The CEQA Guidelines identify that, by July of 2020 all lead agencies must use VMT as the new transportation metric for identifying impacts for land use projects.

The City of Long Beach has not yet adopted local guidelines for VMT assessment. However, Draft Traffic Impact Analysis Guidelines were released in June 2020. The assessment assumes that the City will adopt screening criteria consistent with the information in those draft guidelines. However, the assessment should be confirmed once the City's finalized guidelines have been released.

a) Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?

Less Than Significant Impact/No Changes or New Information Requiring Preparation of an EIR. Trip generation rates from Trip Generation, 10th Edition (Institute of Transportation Engineers [ITE], 2017)

were used to estimate the number of trips associated with the Project. The Environmental Protection Agency (EPA), in corporation with Institute of Transportation Engineers (ITE), has developed a methodology to calculate trip generation more accurately for mixed use sites. The methodology developed trip internalization estimates. These internalization estimates are based on a series of factors related to built environment variables including demographics, project specifics, and the projects ability to internally capture trips. This methodology was utilized to better assess the mixed used nature of the development of the Project. The Proposed Project is expected to generate a net increase of 2,554 daily trips. The Approved Project estimated that the final trip generation estimate was a total of 13,754 daily trips. The 2,554 daily trips are well within what was analyzed under the Certified EIR. Additionally, as with the Approved Project, development of the Proposed Project would be reviewed by the City and would be required to comply with the requirements in effect at the time building permits are issued, including the payment of the transportation improvement fee, per Chapter 18.17 (Transportation Improvement Fee) of the City's Municipal Code. Therefore, the Proposed Project would not create a new significant impact or a substantial increase in the severity of previously identified effects and impacts would remain less than significant.

#### b) Conflict or be inconsistent with CEQA Guidelines § 15064.3, subdivision (b)?

Less Than Significant Impact/No Changes or New Information Requiring Preparation of an EIR. Since the Proposed Project is a mixed-use project, the draft City guidelines indicate the land uses should be evaluated separately, or predominant land use should be used to evaluate the potential VMT impacts of the Project. For the purposes of this evaluation the land uses were evaluated separately. The draft City guidelines includes a list of screening criteria that screen projects from project-level assessment under the presumption that those projects will result in a less-than-significant impact. The following is from the draft City guidelines regarding residential project screening:

"The OPR Technical Advisory on Evaluating Transportation Impacts in CEQA states that residential and office projects that have similar density, mix of uses, and transit accessibility as surrounding similar uses will likely have similar VMT generation as those uses. Therefore, maps showing VMT-efficient areas can be used to screen residential and office projects from further analysis. Figure 2 presents a map of VMT per capita for all existing Long Beach residential areas. These data were obtained from the 2016 Southern California Association of Governments (SCAG) Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) travel demand model... In these green areas, projects with similar characteristics to the surrounding development would be presumed to have a less than significant transportation impact."

The Project is located in a "green" area for VMT per capita, which indicate that the apartments would be eligible for screening in a VMT efficient area as projects in those areas are assumed to generate VMT per capita more than 15% below the regional average.

The following is from the City guidelines regarding retail project screening:

"Retail development that is 50,000 square feet (sf) or less is likely to be local-serving and tends to shorten trips within Long Beach. Therefore, any retail project 50,000 sf or less will be presumed

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to have a less than significant transportation impact related to CEQA Guidelines Section 15064.3, subdivision (b)."

The grocery store and cafe would qualify as local-serving retail under 50,000 square feet.

Projects located within a Transit Priority Area (TPA) may also be screened from a full VMT assessment. A TPA is defined as a half mile area around an existing major transit stop or an existing stop along a high-quality transit corridor per the definitions below. The project site is located within a half mile of a high-quality transit corridor and within a half mile of a major transit stop. There is an existing bus stop on the Project frontage. Torrance Transit Route 3 (12-minute headways) stops at this bus stop and along Pacific Coast Highway, making this a high-quality transit corridor. Furthermore, approximately 1/3 mile from the project site is the Pacific Coast Highway stop for the Metro A Line light rail service. Given that the retail land use is local-serving retail under 50,000 square feet, the location of the project is within identified VMT-efficient areas for VMT per population, and the project is located in a TPA, this project should be screened from a full VMT assessment under the presumption that it will result in a less than significant impact. As noted above, this conclusion should be confirmed once the City of Long Beach has finalized their screening criteria and guidance.

# c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?

Less Than Significant Impact/No Changes or New Information Requiring Preparation of an EIR. As with the Approved Project, the Proposed Project would comply with the roadway design standards adopted by the City of Long Beach and Long Beach Fire Department that preclude the construction of any unsafe design features. The Proposed Project would also be required to adhere to the City's Standard Engineering Plans and LBFD's design standards. Additionally, the Proposed Project does not include any geometric design feature that would increase hazards or be considered incompatible. Therefore, the Proposed Project would not create a new significant impact or a substantial increase in the severity of previously identified effects and impacts would remain less than significant.

#### d) Result in inadequate emergency access?

#### Less Than Significant Impact/No Changes or New Information Requiring Preparation of an EIR.

The Proposed Project would entail the same physical improvements to Long Beach Boulevard as was studied under the Approved Project which would result in temporary lane closures or rerouting of vehicular traffic. As with the Approved Project, the Proposed Project would not decrease the number of travel lanes along Long Beach Boulevard, nor alter its functionality. The Approved Project evaluated land within and around the Approved Project site. The Proposed Project, located immediately adjacent to the Approved Project site, would ensure that continued access to the Project Site and surrounding areas by emergency vehicles would continue. As the Proposed Project includes uses already evaluated under the Approved Project, it would also not interfere with any of the daily operations of the City's Emergency Operation Center, Long Beach Fire Department, or the Long Beach Police Department and would be required to be performed per the City's and LBFD's standards and regulations. Therefore, as with the Approved Project, the Proposed Project would not impair emergency

access to the Project Site. No new impacts, or substantially greater impacts than what was previously analyzed would occur that would require the preparation of a subsequent EIR.

## 5.17.3 Adopted Mitigation Measures Applicable to the Proposed Project

- TRAF-1 As part of the subsequent environmental review for development projects that would be accommodated by the Midtown Specific Plan, a site-specific traffic study shall be prepared by the project applicant/developer to evaluate the project's potential traffic and transportation impacts and to identify specific improvements, as deemed necessary, to provide safe and efficient onsite circulation and access to the Midtown Specific Plan area.
- TRAF -2 Prior to issuance of occupancy permits for development projects that would be accommodated by the Midtown Specific Plan, project applicants/developers shall make fair-share payments to the City of Long Beach toward construction of the traffic improvements listed below. The following traffic improvements and facilities are necessary to mitigate impacts of the Midtown Specific Plan and shall be included in the fee mechanism(s) to be determined by the City of Long Beach:

#### Existing (2014) With Project Improvements

Atlantic Avenue and Spring Street: Improve the northbound approach by modifying the shared through-right lane to an exclusive through lane and an addition of an exclusive right-turn lane. The intersection is currently built out to capacity and would require rightof-way acquisition by the City of Long Beach.

#### Cumulative Year (2035) With Project Improvements

- Long Beach Boulevard and Spring Street: Improve the northbound approach by modifying the shared through-right lane to an exclusive through lane and an addition of an exclusive right-turn lane. Given the 74-foot cross section of Long Beach Boulevard, this improvement could be completed with restriping of the approach.
- Pacific Avenue and Willow Street: Improve the northbound approach by modifying the shared through-right lane to an exclusive through lane and an addition of an exclusive right-turn lane. Given the 74-foot cross section of Long Beach Boulevard, this improvement could be completed with restriping of the approach.
- Atlantic Avenue and Willow Street: Improve the northbound approach by modifying the shared through-right lane to an exclusive through lane and an addition of an exclusive right-turn lane. Given the 50-foot cross section of Atlantic Avenue, this improvement could be completed with restriping of the approach.

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- Atlantic Avenue and Spring Street: Improve the southbound approach by modifying the shared through-right lane to an exclusive through lane and an addition of an exclusive right-turn lane. Implementation of this improvement also requires improving the southbound approach by modifying the shared through-right lane to an exclusive through lane and an addition of an exclusive right-turn lane. The intersection is currently built out to capacity and would require right-of-way acquisition by the City of Long Beach.
- Atlantic Avenue and 27th Street: Construct a traffic signal at the intersection.

## 5.17.4 Level of Significance After Mitigation

Mitigation Measures TRAF-1 and TRAF-2 identified above would reduce potential impacts associated with transportation and traffic to a level that is less than significant at all intersections. Therefore, with implementation of these mitigation measures no significant unavoidable traffic impacts would occur.

## 5.18 TRIBAL CULTURAL RESOURCES

## 5.18.1 Summary of Impacts Identified in the Certified EIR

Tribal Cultural Resources was not analyzed as a topic in the prior Initial Study or Certified EIR but did address physical integrity and potential for physical evidence of the crafts of a particular culture or people during a period in history or prehistory. Due to the disturbed and urbanized nature of the site, it was determined that the likelihood of uncovering resources in the Approved Project site would be unlikely.

## 5.18.2 Impacts Associated with the Proposed Project

	Environmental Issues	Substantial Change in Project Requiring Major EIR Revisions	Substantial Change in Circum- stances Requiring Major EIR Revisions	New Information Showing New or Increased Significant Effects	Less Than Significant Impact/No Changes or New Information Requiring Preparation of an EIR	No Impact
a)	Would the project cause a substantial adverse change in the significance of a tribal					
	cultural resource, defined in Public					
	Resources Code § 21074 as either a site,					
	feature, place, cultural landscape that is					
	geographically defined in terms of the size					
	and scope of the landscape, sacred place, or					
	object with cultural value to a California					
	Native American tribe, and that is:					
	i) Listed or eligible for listing in the					
	California Register of Historical					
	Resources, or in a local register of historical resources as defined in				X	
	Public Resources Code section					
	5020.1(k), or					
	ii) A resource determined by the lead agency, in its discretion and supported					
	by substantial evidence, to be					
	significant pursuant to criteria set forth					
	in subdivision (c) of Public Resources					
	Code § 5024.1. In applying the criteria				X	
	set forth in subdivision (c) of Public					
	Resource Code § 5024.1, the lead					
	agency shall consider the significance					
	of the resource to a California Native					
	American tribe.					

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- a) Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:
  - i) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or
  - ii) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision?

Less Than Significant Impact/No Changes or New Information Requiring Preparation of an EIR. As with the Approved Project, the Proposed Project, located immediately west of the Approved Project site, has been previously disturbed and developed and has been subject to similar construction and ground-disturbing activities that would be associated with the Proposed Project. Therefore, it is not anticipated that any tribal resources would be unearthed, however, as with the Approved Project, the Proposed Project would be required to comply with existing law including California Health and Safety Code Section 7050.0, CEQA Section 15064.5, and Public Resources Section 5097.98 to ensure that significant impacts to human remains would not occur. Additionally, the City of Long Beach conducted SB-18 and AB-52 Consultation for the Proposed Project on May 25, 2019. No significant new impact or substantial increase in the severity of a previously described impact would occur, and there are no substantial changes in the circumstances, or new information that was not known and could not have been known at the time of the adoption of the Certified EIR with respect to Tribal Cultural Resources and a subsequent EIR is not required.

## 5.18.3 Adopted Mitigation Measures Applicable to the Proposed Project

No mitigation measures related to tribal cultural resources were outlined in the Certified EIR.

## 5.18.4 Level of Significance After Mitigation

No mitigation measures are required for the Proposed Project.

#### 5.19 UTILITIES AND SERVICE SYSTEMS

## 5.19.1 Summary of Impacts Identified in the Certified EIR

The Initial Study for the Approved Project concluded that the as of 2006, the City of Long Beach was exceeding its waste diversion rate of 50 percent by an additional 19 percent. Future development under the Approved Project would be required to comply with laws and regulations governing solid waste, and no adverse impact would occur. This topic was no further analyzed in the Certified EIR.

The Certified EIR determined that project-generated wastewater could result in an impact on the City of Long Beach's and County Sanitation Districts of Los Angeles County's wastewater treatment and conveyance systems. However, it was concluded that wastewater from the Approved Project is treated at LACSDS's JWPCP, which has capacity of 400 mgd, and had average daily effluent flows of approximately 263 mgd in 2014 (LACSD 2015). There is approximately 137 mgd residual capacity at the JWPCP, which was found to be more than adequate to accommodate the net increase in wastewater generation from development that would be accommodated by the Approved Project. Therefore, the Approved Project would not require construction of new or expanded wastewater treatment facilities. Furthermore, new residential and commercial development that would be accommodated by the Approved Project would be required to pay a sewer capacity fee required under Part 18 (Sewer Capacity Charge) of the Rules, Regulations, and Charges approved by the Long Beach Board of Water Commissioners in 2011. Additionally, mitigation requiring "Will Serve" letters from the Sanitation Districts would ensure less than significant impacts.

The Certified EIR also determined that the water supply and distribution systems were adequate to meet the requirements of the Approved Project. Additionally, future development that would be accommodated by the Approved Project would also be required to comply with the provisions of the most current (2013) California Green Building Standards Code (CALGreen; adopted by reference in Chapter 18.47 [Green Building Standards Code] of the City's Municipal Code), which contains requirements for indoor water use reduction and site irrigation conservation.

The Certified EIR found that existing solid waste facilities could accommodate the solid waste that would be generated by the Approved Project. The Approved Project would also be required to adhere to the provisions of Chapter 18.67 (Construction and Demolition Recycling Program) of the City's Municipal Code, in addition to Section 5.408 (Construction Waste Reduction, Disposal, and Recycling) of the 2013 California Green Building Standards Code.

## 5.19.2 Impacts Associated with the Proposed Project

Would the project:

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	Environmental Issues	Substantial Change in Project Requiring Major EIR Revisions	Substantial Change in Circum- stances Requiring Major EIR Revisions	New Information Showing New or Increased Significant Effects	Less Than Significant Impact/No Changes or New Information Requiring Preparation of an EIR	No Impact
a)	Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?				x	
b)	Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?				x	
c)	Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?				x	
d)	Generate solid waste in excess of state or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?				X	
e)	Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?				x	

a) Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?

Less Than Significant Impact/No Changes or New Information Requiring Preparation of an EIR. Implementation of the Proposed Project would not result the need for additional utilities or services systems, including water and wastewater collection and treatment facilities and systems, drainage facilities and systems, and solid waste facilities. The Proposed Project would be required to comply with Mitigation Measures USS-1 and USS-2 of the 2016 Certified EIR. The demand for utilities and service systems would not change under the Proposed Project, and no new or substantially greater impacts related to utilities and service systems would occur that would require the preparation of a subsequent EIR.

b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?

Less Than Significant Impact/No Changes or New Information Requiring Preparation of an EIR. As the Proposed Project includes development that is within the scope of what was analyzed for the Approved Project, the water supply and distribution systems would be adequate to meet the requirements of the Proposed Project. Additionally, as with the Approved Project, the Proposed Project would be required to comply with the provisions of the most current (2016) California Green Building Standards Code (CALGreen; adopted by reference in Chapter 18.47 [Green Building Standards Code] of the City's Municipal Code), which contains requirements for indoor water use reduction and site irrigation conservation. No new or substantially greater impacts related to utilities and service systems would occur that would require the preparation of a subsequent EIR.

c) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?

Less Than Significant Impact/No Changes or New Information Requiring Preparation of an EIR. As the Proposed Project includes development that is within the scope of what was analyzed for the Approved Project, capacity at LACSDS's JWPCP would be adequate to accommodate the Proposed Project and the Proposed Project would not require the construction of new or expanded wastewater treatment facilities. Additionally, as with the Approved Project, the Proposed Project would be required to pay a sewer capacity fee required under Part 18 (Sewer Capacity Charge) of the Rules, Regulations, and Charges approved by the Long Beach Board of Water Commissioners in 2011 and would produce "Will Serve" letters as outlined in the mitigation measures under the Certified EIR. Therefore, project-generated wastewater would not result in new or substantially greater impacts than what was previously analyzed and there are no substantial changes in the circumstances that would require the preparation of a subsequent EIR.

d) Generate solid waste in excess of state or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?

Less Than Significant Impact/No Changes or New Information Requiring Preparation of an EIR. As the Proposed Project includes development that is within the scope of what was analyzed for the Approved Project, the existing solid waste facilities would accommodate the solid waste that would be generated by the Proposed Project. Additionally, as with the Approved Project, the Proposed Project would also be required to adhere to the provisions of Chapter 18.67 (Construction and Demolition Recycling Program) of the City's Municipal Code, in addition to Section 5.408 (Construction Waste Reduction, Disposal, and Recycling) of the 2016 California Green Building Standards Code. No significant new impact or substantial increase in the severity of a previously described impact would occur, and there are no substantial changes in the circumstances, or new information that was not known and could not have been known at the time of the adoption of the Certified EIR with respect to solid waste and a subsequent EIR is not required.

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e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?

Less Than Significant Impact/No Changes or New Information Requiring Preparation of an EIR. As with the Approved Project, the Proposed Project would be required to comply with laws and regulations governing solid waste, and no adverse impact would occur. Additionally, as the Proposed Project includes development that is within the scope of what was studied under the Approved Project, it would not result in new or substantially greater impacts than what was previously analyzed and there are no substantial changes in the circumstances that would require the preparation of a subsequent EIR.

## 5.19.3 Adopted Mitigation Measures Applicable to the Proposed Project

Prior to the issuance of grading permits for individual development projects that would occur within the Midtown Specific Plan area and in lieu of implementing the sewer line replacement and upsizing improvements outlined in the Infrastructure Technical Report for Hydrology, Sewer, Water, and Water Quality prepared by Fuscoe Engineering (dated July 1, 2015), the project applicant/developer shall submit a site-specific sewer flow monitoring study to provide a more detailed analysis of the true sewer flow depths over time to determine if the potential for surcharge conditions would occur due to project development. The sewer flow monitoring study may indicate that there is sufficient capacity for the sewer lines identified in the Infrastructure Technical Report, as well indicate that they are above the design criteria (>0.75 d/D); and thereby, conclude that the replacement and upsizing improvements are not necessary. The sewer flow monitoring study shall be submitted to the City of Long Beach Development Services Department for review and approval.

USS-2 Prior to the issuance of grading permits for individual development projects that would be accommodated by the Midtown Specific Plan, the project applicant/developer shall provide evidence to the City of Long Beach Development Services Department that that the development project has been reviewed by the County Sanitation Districts of Los Angeles County (Sanitation Districts) and that a "Will Serve" letter has been issued by the Sanitation Districts. The "Will Serve" letter process is necessary in order to determine whether or not sufficient trunk sewer capacity exists to serve each development project and if the Sanitation Districts facilities will be affected by the development project.

# 5.19.4 Level of Significance After Mitigation

Compliance with regulatory requirements and implementation of mitigation measures identified above would reduce impacts to a less than significant level. Therefore, no significant unavoidable adverse impacts have been identified.

## 5.20 WILDFIRE

## 5.20.1 Summary of Impacts Identified in the Certified EIR

Wildfire was not analyzed as a topic in the Certified EIR; however, it was addressed as part of the Hazards and Hazardous Materials section and was scoped out in the Initial Study. The Initial Study determined that the Project Site is located in a highly urbanized area, built-out portion of the City and is outside of fire hazard severity zones designated by the California Department of Forestry and Fire Protection (CAL FIRE). Additionally, the Initial Study found that the Approved Project would not conflict with the City's or Los Angeles County's emergency response or evacuation plans.

## 5.20.2 Impacts Associated with the Proposed Project

If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:

	Environmental Issues	Substantial Change in Project Requiring Major EIR Revisions	Substantial Change in Circum- stances Requiring Major EIR Revisions	New Information Showing New or Increased Significant Effects	Less Than Significant Impact/No Changes or New Information Requiring Preparation of an EIR	No Impact
a)	Substantially impair an adopted emergency response plan or emergency evacuation plan?					x
b)	Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?					X
c)	Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?					x
d)	Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?					x

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a) Substantially impair an adopted emergency response plan or emergency evacuation plan?

Less Than Significant Impact/No Changes or New Information Requiring Preparation of an EIR. The Proposed Project would entail the same physical improvements to Long Beach Boulevard as was studied under the Approved Project which would result in temporary lane closures or rerouting of vehicular traffic. As with the Approved Project, the Proposed Project would not decrease the number of travel lanes along Long Beach Boulevard, nor alter its functionality. The Approved Project evaluated land within and around the Approved Project site. The Proposed Project, located immediately adjacent to the Approved Project site, would ensure that continued access to the Project Site and surrounding areas by emergency vehicles would continue. As the Proposed Project includes uses already evaluated under the Approved Project, it would also not interfere with any of the daily operations of the City's Emergency Operation Center, Long Beach Fire Department, or the Long Beach Police Department and would be required to be performed per the City's and LBFD's standards and regulations. Therefore, as with the Approved Project, the Proposed Project would not impair implementation of or physically interfere with the City of Long Beach or Los Angeles County's emergency response or evacuation plans. No new impacts, or substantially greater impacts than what was previously analyzed would occur that would require the preparation of a subsequent EIR.

b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?

**No Impact.** The Proposed Project is located in an urban environment and is surrounded by existing development. There are no wildland areas, nor wildland interface areas located in the vicinity. Consequently, no wildland fires would affect, or be affected by implementation of the Proposed Project. No impact would occur for the Proposed Project and no changes or new information would require preparation of a subsequent EIR.

c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?

**No Impact.** The Proposed Project is located in an urban environment and is surrounded by existing development. Installation or maintenance of associated infrastructures would not exacerbate fire risk or result in temporary ongoing impacts to the environment as wildland nor wildland interface areas exist at or around the Project Site area. No impact would occur for the Proposed Project and no changes or new information would require preparation of a subsequent EIR.

d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?

Less Than Significant Impact/No Changes or New Information Requiring Preparation of an EIR. As discussed in the Certified EIR, the Project Site is flat and located in an urbanized area. The Project Site is not subject to landslides or slope instability. The Project Site is not located in or adjacent to wildland area. As with the Approved Project, adherence to appropriate mitigation would assure that impacts related to runoff

and drainage changes for the Proposed Project would remain less than significant. As documented in this analysis, the Proposed Project would not result in new significant impacts or a substantial increase in the severity of previously identified effects and is consistent with the Certified EIR and would not require the preparation of a subsequent EIR.

# 5.20.3 Adopted Mitigation Measures Applicable to the Proposed Project

No mitigation for wildfire was identified in the Certified EIR.

## 5.20.4 Level of Significance After Mitigation

No mitigation measures are required for the Proposed Project.

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## 5.21 MANDATORY FINDINGS OF SIGNIFICANCE

	Environmental Issues	Substantial Change in Project Requiring Major EIR Revisions	Substantial Change in Circum- stances Requiring Major EIR Revisions	New Information Showing New or Increased Significant Effects	Less Than Significant Impact/No Changes or New Information Requiring Preparation of an EIR	No Impact
a)	Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?				X	
c)	Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.)				x	
d)	Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?				x	

a) Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?

Less Than Significant Impact/No Changes or New Information Requiring Preparation of an EIR. The Project Site does not contain any significant biological resources. As demonstrated in this Addendum, the Proposed Project would not result in new significant impacts to biological or cultural resources, nor would it substantially increase the severity of impacts evaluated and determined in the Certified EIR. Because the

Proposed Project would not meet any of the criteria identified in Section 15162 of the State CEQA Guidelines requiring preparation of a subsequent or supplemental EIR, an Addendum to the Certified EIR is the appropriate document type for the Proposed Project.

b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.)

Less Than Significant Impact/No Changes or New Information Requiring Preparation of an EIR. With approval of the discretionary requests, the Proposed Project would be consistent with the amount of development planned for the Project Site. Therefore, the Proposed Project will not result in any new cumulatively considerable impacts or substantially increase the severity of the cumulative effects previously disclosed in the Certified EIR. As demonstrated in this Addendum, the Proposed Project would not result in new significant impacts, nor would it substantially increase the severity of impacts evaluated and determined in the Certified EIR. Because the Proposed Project would not meet any of the criteria identified in Section 15162 of the State CEQA Guidelines requiring preparation of a subsequent or supplemental EIR, an Addendum to the Certified EIR is the appropriate document type for the Proposed Project.

c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?

Less Than Significant Impact/No Changes or New Information Requiring Preparation of an EIR. As demonstrated in this Addendum, the Proposed Project would not result in new significant impacts, nor would it substantially increase the severity of impacts evaluated and determined in the Certified EIR. Because the Proposed Project would not meet any of the criteria identified in Section 15162 of the State CEQA Guidelines requiring preparation of a subsequent or supplemental EIR, an Addendum to the Certified EIR is the appropriate document type for the Proposed Project.

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# 6. List of Preparers

## **PLACEWORKS**

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# 6. List of Preparers

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## 7. References

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## **Appendix**

# Appendix A Focused Air Quality Analysis

# Appendix

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 Criteria Air Pollutant and GHG Emissions Worksheets This page intentionally left blank.

# **Regional Construction Emissions Worksheet**

\*CalEEMod, Version 2016.3.2

Demolition							
		ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Onsite		2020 Summer					
	Fugitive Dust				<u> </u>	0.4495	0.0681
	Off-Road	0.463	8.5434	15.4154	0.0241	0.0375	0.0375
Official	Total	0.463	8.5434	15.4154	0.0241	0.487	0.1055
Offsite	Hauling	0.0400	4 6400	0.2569	4 425 02	0.0064	0.0304
	Hauling Vendor	0.0489 0.0142	1.6102	0.3568	4.42E-03	0.0964	0.0301 8.89E-03
	Worker	0.0142	0.4255 0.0426	0.1115 0.5692	1.04E-03 1.54E-03	0.026 0.1352	0.0369
	Total	0.123	2.0783	1.0375	7.00E-03	0.2575	0.0759
TOTAL	Total	0.5860	10.6217	16.4529	0.0311	0.7445	0.1814
Omeide		2020 Winter					
Onsite	Fugitive Duet	2020 Winter		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		0.4405	0.0694
	Fugitive Dust Off-Road	0.463	Q 5/2/	15 /15/	0.0241	0.4495	0.0681 0.0375
	On-Road Total	0.463 <b>0.463</b>	8.5434 <b>8.5434</b>	15.4154 <b>15.4154</b>	0.0241	0.0375 <b>0.487</b>	0.0375 <b>0.1055</b>
Offsite	IUIAI	0.403	0.3434	13.4134	0.0241	U.40 <i>1</i>	0.1000
Official	Hauling	0.0501	1.6311	0.3792	4.35E-03	0.0965	0.0302
	Vendor	0.0149	0.4254	0.123	1.01E-03	0.026	8.92E-03
	Worker	0.0664	0.0471	0.5213	1.45E-03	0.1352	0.0369
	Total	0.1314	2.1036	1.0235	6.81E-03	0.2576	0.076
TOTAL		0.5944	10.6470	16.4389	0.0309	0.7446	0.1815
Onsite		2020					
	Fugitive Dust	0	0	0	0	0.4495	0.0681
	Off-Road	0.463	8.5434	15.4154	0.0241	0.0375	0.0375
	Total	0.463	8.5434	15.4154	0.0241	0.487	0.1055
Offsite							
	Hauling	0.0501	1.6311	0.3792	0.00442	0.0965	0.0302
	Vendor	0.0149	0.4255	0.123	0.00104	0.026	0.00892
	Worker	0.0664	0.0471	0.5692	0.00154	0.1352	0.0369
	Total	0.1314	2.1036	1.0375	0.007	0.2576	0.076
TOTAL		0.5944	10.6470	16.4529	0.0311	0.7446	0.1815
Site Preparation							
Onsite		ROG 2020 Summer	NOx	СО	SO2	PM10 Total	PM2.5 Total
Offsite	Fugitive Dust	2020 Summer		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	 	2.1487	1.0944
	Off-Road	0.2998	5.0659	9.8221	0.0172	0.0281	0.0281
	Total	0.2998	5.0659	9.8221	0.0172	2.1768	1.1224
Offsite	rotar	0.200	0.000		••••		
	Hauling	0	0	0	0	0	0
	Vendor	0.0142	0.4255	0.1115	1.04E-03	0.026	8.89E-03
	Worker	0.0368	0.0262	0.3503	9.40E-04	0.0832	0.0227
	Total	0.0511	0.4517	0.4618	1.98E-03	0.1091	0.0316
TOTAL		0.3509	5.5176	10.2839	0.0192	2.2859	1.1540

Onsite	2020	Winter					
Fugitive Dust						2.1487	1.0944
Off-Road		0.2998	5.0659	9.8221	0.0172	0.0281	0.0281
Total		0.2998	5.0659	9.8221	0.0172	2.1768	1.1224
Offsite		=					
Hauling		0	0	0	0	0	0
Vendor		0.0149	0.4254	0.123	1.01E-03	0.026	8.92E-03
Worker		0.0409	0.029	0.3208	8.90E-04	0.0832	0.0227
Total		0.0558	0.4544	0.4438	1.90E-03	0.1092	0.0316
TOTAL		0.3556	5.5203	10.2659	0.0191	2.2860	1.1540
Onsite	2020						
Fugitive Dust	2020	0	0	0	0	2.1487	1.0944
Off-Road		0.2998	5.0659	9.8221	0.0172	0.0281	0.0281
Total		0.2998	5.0659	9.8221	0.0172	2.1768	1.1224
Offsite		0.2000	0.000	0.022	0.01.1		
Hauling		0	0	0	0	0	0
Vendor		0.0149	0.4255	0.123	0.00104	0.026	0.00892
Worker		0.0409	0.029	0.3503	0.00094	0.0832	0.0227
Total		0.0558	0.4544	0.4618	0.00198	0.1092	0.0316
TOTAL		0.3556	5.5203	10.2839	0.0192	2.2860	1.1540
Grading							
		ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Onsite	2020	Summer		·····	<u>.</u>		
Fugitive Dust						1.8207	0.9357
Off-Road		0.2466	4.1795	8.0841	0.0141	0.023	0.023
Total		0.2466	4.1795	8.0841	0.0141	1.8437	0.9587
Offsite		<b>=</b>			<b></b>		
Hauling		0	0	0	0	0	0
Vendor		0.0142	0.4255	0.1115	1.04E-03	0.026	8.89E-03
Worker		0.0368	0.0262	0.3503	9.40E-04	0.0832	0.0227
TOTAL		0.0511	0.4517	0.4618 9.5450	1.98E-03	0.1091 4.0529	0.0316
TOTAL		0.2977	4.6312	8.5459	0.0161	1.9528	0.9903
Onsite	2020	Winter					
Fugitive Dust	2020	**************************************		Ĭ		1.8207	0.9357
Off-Road		0.2466	4.1795	8.0841	0.0141	0.023	0.023
Total		0.2466	4.1795	8.0841	0.0141	1.8437	0.9587
Offsite							
Hauling		0	0	0	0	0	0
Vendor		0.0149	0.4254	0.123	1.01E-03	0.026	8.92E-03
Worker		0.0409	0.029	0.3208	8.90E-04	0.0832	0.0227
Total		0.0558	0.4544	0.4438	1.90E-03	0.1092	0.0316
TOTAL		0.3024	4.6339	8.5279	0.0160	1.9529	0.9903
Onsite	2020						
Fugitive Dust		0	0	0	0	1.8207	0.9357
Off-Road		0.2466	4.1795	8.0841	0.0141	0.023	0.023
Total		0.2466	4.1795	8.0841	0.0141	1.8437	0.9587
Offsite		0	0	0	^	•	^
Hauling		0	0	0	0	0	0
Vendor		0.0149	0.4255	0.123	0.00104	0.026	0.00892
Worker		0.0409	0.029	0.3503	0.00094	0.0832	0.0227
TOTAL		0.0558	0.4544 4.6330	0.4618 8.5450	0.00198	0.1092 <i>1.</i> 9529	0.0316
TOTAL		0.3024	4.6339	8.5459	0.0161	1.9529	0.9903

<b>Building Construction</b>							
		ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Onsite		Summer					· · · · · · · · · · · · · · · · · · ·
Off-Road		0.401	9.9925	13.4786	0.022	0.1617	0.1617
Total Offsite		0.401	9.9925	13.4786	0.022	0.1617	0.1617
Hauling		0	0	0	0	0	0
Vendor		0.1387	4.1485	1.087	0.0101	0.2532	0.0866
Worker		0.7363	0.5238	7.0055	0.0189	1.6634	0.4537
Total		0.875	4.6724	8.0925	0.029	1.9166	0.5404
TOTAL		1.2760	14.6649	21.5711	0.0510	2.0783	0.7021
Ongito	2020	) Winter					
Onsite Off-Road		0.401	9.9925	13.4786	0.022	0.1617	0.1617
Total		5	. <del></del>	Å	ā		
		0.401	9.9925	13.4786	0.022	0.1617	0.1617
Offsite		0	^		^	Δ	^
Hauling Vendor		0 0.145	0 4.1477	0 1.1988	0 9.84E-03	0 0.2535	0 0.0869
Worker		Į			ā		<u></u>
Total		0.8176 <b>0.9627</b>	0.58 <b>4.7276</b>	6.4162 <b>7.615</b>	0.0178 <b>0.0276</b>	1.6634 <b>1.9169</b>	0.4537 <b>0.5407</b>
TOTAL		1.3637	14.7201	21.0936	0.0496	2.0786	0.7024
TOTAL		1.3037	14.7201	21.0930	0.0490	2.0700	0.7024
Onsite	2020	)					
Off-Road		0.401	9.9925	13.4786	0.022	0.1617	0.1617
Total		0.401	9.9925	13.4786	0.022	0.1617	0.1617
Offsite							
Hauling		0	0	0	0	0	0
Vendor		0.145	4.1485	1.1988	0.0101	0.2535	0.0869
Worker		0.8176	0.58	7.0055	0.0189	1.6634	0.4537
Total		0.9627	4.7276	8.0925	0.029	1.9169	0.5407
TOTAL		1.3637	14.7201	21.5711	0.0510	2.0786	0.7024
		ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Onsite		Summer		 !	 	Ĭ	
Off-Road		0.401	9.9925	13.4786	0.0221	0.1617	0.1617
Total		0.401	9.9925	13.4786	0.0221	0.1617	0.1617
Offsite						1	
Hauling		0	0	0	0	0	0
Vendor		0.1185	3.7865	0.9899	0.01	0.2414	0.0754
Worker		0.6859	0.4714	6.4444	0.0183	1.6629	0.4533
Total <b>TOTAL</b>		0.8044 <b>1.2054</b>	4.2579 <b>14.2504</b>	7.4343 <b>20.9129</b>	0.0283 <b>0.0504</b>	1.9044	0.5286 <b>0.6903</b>
			14.2504	20.9129	0.0304	2.0661	0.0903
Onsite		Winter	·				·
Off-Road		0.401	9.9925	13.4786	0.0221	0.1617	0.1617
Total		0.401	9.9925	13.4786	0.0221	0.1617	0.1617
Offsite		<u> </u>	·	·	¥		
Hauling		0	0	0	0	0	0
Vendor		0.1245	3.7787	1.095	9.76E-03	0.2417	0.0756
Worker		0.7629	0.5218	5.8921	0.0172	1.6629	0.4533
Total		0.8874	4.3005	6.9871	0.027	1.9046	0.5289
TOTAL		1.2884	14.2930	20.4657	0.0491	2.0663	0.6906

Onsite		2021						
Offsite	Off-Road	2021	0.401	9.9925	13.4786	0.0221	0.1617	0.1617
	Total		0.401	9.9925	13.4786	0.0221	0.1617	0.1617
Offsite	10101		•	0.0020	1011100	0.022.	••	
	Hauling		0	0	0	0	0	0
	Vendor		0.1245	3.7865	1.095	0.01	0.2417	0.0756
	Worker		0.7629	0.5218	6.4444	0.0183	1.6629	0.4533
	Total		0.8874	4.3005	7.4343	0.0283	1.9046	0.5289
TOTAL			1.2884	14.2930	20.9129	0.0504	2.0663	0.6906
Asphalt Paving								
			ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Onsite		2021	Summer		: :			
	Off-Road		0.2149	5.7133	9.8512	0.0135	0.0213	0.0213
	Paving		0				0	0
:	Total		0.2149	5.7133	9.8512	0.0135	0.0213	0.0213
Offsite			Į	,	·			
	Hauling		0	0	0	0	0	0
	Vendor		0	0	0	0	0	0
	Worker		0.0557	0.0383	0.5236	1.49E-03	0.1351	0.0368
TOTAL	Total		0.0557	0.0383 E 7546	0.5236	1.49E-03	0.1351	0.0368
TOTAL			0.2706	5.7516	10.3748	0.0150	0.1564	0.0581
Onsite		2021	Winter					
Offsite	Off-Road	2021	0.2149	5.7133	9.8512	0.0135	0.0213	0.0213
	Paving		0.2110	0.7 100	0.0012	0.0100	0.0210	0.0210
	Total		0.2149	5.7133	9.8512	0.0135	0.0213	0.0213
Offsite	7 0 101		0.21.0					
Choice	Hauling		0	0	0	0	0	0
	Vendor		0	0	0	0	0	0
			0.062	0.0424	0.4787	1.40E-03	0.1351	0.0368
	Worker Total			0.0424 <b>0.0424</b>	0.4787 <b>0.4787</b>	1.40E-03 <b>1.40E-03</b>	0.1351 <b>0.1351</b>	0.0368 <b>0.0368</b>
TOTAL	Worker		0.062					l
	Worker	2024	0.062 0.062 0.2769	0.0424	0.4787	1.40E-03	0.1351	0.0368
TOTAL Onsite	Worker Total	2021	0.062 0.062 0.2769	0.0424 <b>5.7557</b>	0.4787 <b>10.3299</b>	1.40E-03 <b>0.0149</b>	0.1351 <b>0.1564</b>	0.0368 <b>0.0581</b>
	Worker Total Off-Road	2021	0.062 0.062 0.2769 0.2149	0.0424 <b>5.7557</b> 5.7133	0.4787 <b>10.3299</b> 9.8512	1.40E-03 <b>0.0149</b> 0.0135	0.1351 0.1564 0.0213	0.0368 <b>0.0581</b> 0.0213
	Worker Total Off-Road Paving	2021	0.062 0.062 0.2769 0.2149 0	0.0424 <b>5.7557</b> 5.7133 0	0.4787 <b>10.3299</b> 9.8512 0	1.40E-03 0.0149 0.0135	0.1351 0.1564 0.0213	0.0368 <b>0.0581</b> 0.0213 0
Onsite	Worker Total Off-Road	2021	0.062 0.062 0.2769 0.2149	0.0424 <b>5.7557</b> 5.7133	0.4787 <b>10.3299</b> 9.8512	1.40E-03 <b>0.0149</b> 0.0135	0.1351 0.1564 0.0213	0.0368 <b>0.0581</b> 0.0213
	Worker Total Off-Road Paving Total	2021	0.062 0.062 0.2769 0.2149 0	0.0424 <b>5.7557</b> 5.7133 0 <b>5.7133</b>	0.4787 10.3299 9.8512 0 9.8512	1.40E-03 0.0149 0.0135	0.1351 0.1564 0.0213	0.0368 0.0581 0.0213 0 0.0213
Onsite	Worker Total Off-Road Paving	2021	0.062 0.062 0.2769 0.2149 0 0.2149	0.0424 <b>5.7557</b> 5.7133 0	0.4787 <b>10.3299</b> 9.8512 0	1.40E-03 0.0149 0.0135 0 0.0135	0.1351 0.1564 0.0213 0 0.0213	0.0368 <b>0.0581</b> 0.0213 0
Onsite	Worker Total Off-Road Paving Total Hauling	2021	0.062 0.062 0.2769 0.2149 0 0.2149	0.0424 <b>5.7557</b> 5.7133 0 <b>5.7133</b>	0.4787 10.3299 9.8512 0 9.8512 0	1.40E-03 0.0149 0.0135 0 0.0135	0.1351 0.1564 0.0213 0 0.0213	0.0368 0.0581 0.0213 0 0.0213
Onsite	Worker Total Off-Road Paving Total Hauling Vendor	2021	0.062 0.062 0.2769 0.2149 0 0.2149 0	0.0424 5.7557 5.7133 0 5.7133	0.4787 10.3299 9.8512 0 9.8512 0 0	1.40E-03 0.0149 0.0135 0 0.0135	0.1351 0.1564 0.0213 0 0.0213	0.0368 0.0581 0.0213 0 0.0213
Onsite	Worker Total Off-Road Paving Total Hauling Vendor Worker	2021	0.062 0.062 0.2769 0.2149 0 0.2149 0 0.2149	0.0424 5.7557 5.7133 0 5.7133 0 0 0 0	0.4787 10.3299 9.8512 0 9.8512 0 0 0.5236	1.40E-03 0.0149 0.0135 0 0.0135 0 0 0.00149	0.1351 0.1564 0.0213 0 0.0213 0 0.0213	0.0368 0.0581 0.0213 0 0.0213 0 0.0268
Onsite	Worker Total Off-Road Paving Total Hauling Vendor Worker	2021	0.062 0.062 0.2769 0.2149 0 0.2149 0 0.062 0.062 0.062 0.2769	0.0424 5.7557 5.7133 0 5.7133 0 0 0.0424 0.0424 5.7557	0.4787 10.3299 9.8512 0 9.8512 0 0.5236 0.5236 10.3748	1.40E-03 0.0149 0.0135 0 0.0135 0 0.0149 0.00149 0.00150	0.1351 0.1564 0.0213 0 0.0213 0 0.0213 0 0.1351 0.1351 0.1564	0.0368 0.0581 0.0213 0 0.0213 0 0.0368 0.0368 0.0368
Onsite  Offsite  TOTAL  Architectural Coating	Worker Total Off-Road Paving Total Hauling Vendor Worker		0.062 0.062 0.2769 0.2149 0 0.2149 0 0.062 0.062 0.062 0.2769	0.0424 5.7557 5.7133 0 5.7133 0 0 0 0.0424 0.0424	0.4787 10.3299 9.8512 0 9.8512 0 0 0.5236 0.5236	1.40E-03 0.0149 0.0135 0 0.0135 0 0.0149 0.00149	0.1351 0.1564 0.0213 0 0.0213 0 0.0213 0 0.1351 0.1351 0.1564	0.0368 0.0581 0.0213 0 0.0213 0 0.0368 0.0368
Onsite Offsite	Worker Total Off-Road Paving Total Hauling Vendor Worker Total		0.062 0.062 0.2769  0.2149 0 0.2149 0 0.062 0.062 0.062 0.2769  ROG Summer	0.0424 5.7557 5.7133 0 5.7133 0 0 0.0424 0.0424 5.7557	0.4787 10.3299 9.8512 0 9.8512 0 0.5236 0.5236 10.3748	1.40E-03 0.0149 0.0135 0 0.0135 0 0.0149 0.00149 0.00150	0.1351 0.1564  0.0213 0 0.0213 0 0.0213 0 0.1351 0.1351 0.1564  PM10 Total	0.0368 0.0581  0.0213 0 0.0213  0 0.0368 0.0368 0.0368 0.0581
Onsite  Offsite  TOTAL  Architectural Coating	Worker Total  Off-Road Paving Total  Hauling Vendor Worker Total  Archit. Coating		0.062 0.062 0.2769  0.2149 0 0.2149 0 0.062 0.062 0.062 0.2769  ROG Summer 24.6845	0.0424 5.7557 5.7133 0 5.7133 0 0 0.0424 0.0424 5.7557	0.4787 10.3299 9.8512 0 9.8512 0 0.5236 0.5236 10.3748	1.40E-03 0.0149 0.0135 0 0.0135 0 0.00149 0.00149 0.00150	0.1351 0.1564  0.0213 0 0.0213  0 0.0213  0 0.1351 0.1351 0.1564  PM10 Total	0.0368 0.0581  0.0213 0 0.0213  0 0.0368 0.0368 0.0368 0.0581  PM2.5 Total
Onsite  Offsite  TOTAL  Architectural Coating	Worker Total  Off-Road Paving Total  Hauling Vendor Worker Total  Archit. Coating Off-Road		0.062 0.062 0.2769  0.2149 0 0.2149 0 0.062 0.062 0.062 0.2769  ROG Summer 24.6845 0.0545	0.0424 5.7557 5.7133 0 5.7133 0 0 0.0424 0.0424 5.7557 NOx	0.4787 10.3299 9.8512 0 9.8512 0 0.5236 0.5236 10.3748  CO	1.40E-03 0.0149 0.0135 0 0.0135 0 0.0135 0 0.00149 0.00149 0.00150 SO2	0.1351 0.1564  0.0213 0 0.0213 0 0.0213 0 0.1351 0.1351 0.1564  PM10 Total	0.0368 0.0581  0.0213 0 0.0213  0 0.0368 0.0368 0.0368 0.0581  PM2.5 Total
Onsite  Offsite  TOTAL  Architectural Coating  Onsite	Worker Total  Off-Road Paving Total  Hauling Vendor Worker Total  Archit. Coating		0.062 0.062 0.2769  0.2149 0 0.2149 0 0.062 0.062 0.062 0.2769  ROG Summer 24.6845	0.0424 5.7557 5.7133 0 5.7133 0 0 0.0424 0.0424 5.7557	0.4787 10.3299 9.8512 0 9.8512 0 0.5236 0.5236 10.3748	1.40E-03 0.0149 0.0135 0 0.0135 0 0.00149 0.00149 0.00150	0.1351 0.1564  0.0213 0 0.0213  0 0.0213  0 0.1351 0.1351 0.1564  PM10 Total	0.0368 0.0581  0.0213 0 0.0213  0 0.0368 0.0368 0.0368 0.0581  PM2.5 Total
Onsite  Offsite  TOTAL  Architectural Coating	Worker Total  Off-Road Paving Total  Hauling Vendor Worker Total  Archit. Coating Off-Road Total		0.062 0.062 0.2769  0.2149 0 0.2149 0 0.062 0.062 0.062 0.062 0.065 20.2769  ROG Summer 24.6845 0.0545 24.739	0.0424 5.7557 5.7133 0 5.7133 0 0 0.0424 0.0424 5.7557 NOx	0.4787 10.3299 9.8512 0 9.8512 0 0.5236 0.5236 10.3748  CO	1.40E-03 0.0149  0.0135 0 0.0135 0 0.0135 0 0.00149 0.00149 0.0150  SO2	0.1351 0.1564  0.0213 0 0.0213 0 0.0213 0 0 0.1351 0.1351 0.1564  PM10 Total  0 3.96E-03 3.96E-03	0.0368 0.0581  0.0213 0 0.0213  0 0.0213  0 0.0368 0.0368 0.0368 0.0581  PM2.5 Total  0 3.96E-03 3.96E-03
Onsite  Offsite  TOTAL  Architectural Coating  Onsite	Worker Total  Off-Road Paving Total  Hauling Vendor Worker Total  Archit. Coating Off-Road Total  Hauling		0.062 0.062 0.2769  0.2149 0 0.2149 0 0.062 0.062 0.062 0.062 0.2769  ROG Summer 24.6845 0.0545 24.739	0.0424 5.7557 5.7133 0 5.7133 0 0.0424 0.0424 5.7557  NOx	0.4787 10.3299 9.8512 0 9.8512 0 0.5236 0.5236 10.3748  CO  1.8324 1.8324	1.40E-03 0.0149 0.0135 0 0.0135 0 0.0135 0 0.00149 0.00149 0.0150 SO2 2.97E-03 2.97E-03	0.1351 0.1564  0.0213 0 0.0213 0 0.0213 0 0.1351 0.1351 0.1351 0.1564  PM10 Total  0 3.96E-03 3.96E-03	0.0368 0.0581 0.0213 0 0.0213 0 0.0213 0 0.0368 0.0368 0.0368 0.0581  PM2.5 Total  0 3.96E-03 3.96E-03
Onsite  Offsite  TOTAL  Architectural Coating  Onsite	Worker Total  Off-Road Paving Total  Hauling Vendor Worker Total  Archit. Coating Off-Road Total  Hauling Vendor		0.062 0.062 0.2769  0.2149 0 0.2149 0 0.062 0.062 0.062 0.062 0.2769  ROG Summer 24.6845 0.0545 24.739	0.0424 5.7557 5.7133 0 5.7133 0 0.0424 0.0424 5.7557  NOx  1.0598 1.0598	0.4787 10.3299 9.8512 0 9.8512 0 0.5236 0.5236 10.3748  CO  1.8324 1.8324 0 0	1.40E-03 0.0149 0.0135 0 0.0135 0 0.00149 0.00149 0.00150 SO2 2.97E-03 2.97E-03	0.1351 0.1564  0.0213 0 0.0213 0 0.0213 0 0.1351 0.1351 0.1564  PM10 Total  0 3.96E-03 3.96E-03	0.0368 0.0581  0.0213 0 0.0213 0 0.0213  0 0.0368 0.0368 0.0581  PM2.5 Total  0 3.96E-03 3.96E-03
Onsite  Offsite  TOTAL  Architectural Coating  Onsite	Worker Total  Off-Road Paving Total  Hauling Vendor Worker Total  Archit. Coating Off-Road Total  Hauling Vendor Worker		0.062 0.062 0.2769  0.2149 0 0.2149 0 0.062 0.062 0.062 0.062 0.2769  ROG Summer 24.6845 0.0545 24.739  0 0 0.1372	0.0424 5.7557 5.7133 0 5.7133 0 0 0.0424 0.0424 5.7557  NOx  1.0598 1.0598 0 0 0.0943	0.4787 10.3299 9.8512 0 9.8512 0 0.5236 0.5236 10.3748  CO  1.8324 1.8324 0 0 1.2889	1.40E-03 0.0149  0.0135 0 0.0135 0 0.0135 0 0.00149 0.00149 0.0150  SO2  2.97E-03 2.97E-03 0 0 3.66E-03	0.1351 0.1564  0.0213 0 0.0213 0 0.0213 0 0.1351 0.1351 0.1351 0.1564  PM10 Total  0 3.96E-03 3.96E-03 0 0 0 0.3326	0.0368 0.0581  0.0213 0 0.0213 0 0.0368 0.0368 0.0368 0.0581  PM2.5 Total  0 3.96E-03 3.96E-03 0 0 0
Onsite  Offsite  TOTAL  Architectural Coating  Onsite	Worker Total  Off-Road Paving Total  Hauling Vendor Worker Total  Archit. Coating Off-Road Total  Hauling Vendor		0.062 0.062 0.2769  0.2149 0 0.2149 0 0.062 0.062 0.062 0.062 0.2769  ROG Summer 24.6845 0.0545 24.739	0.0424 5.7557 5.7133 0 5.7133 0 0.0424 0.0424 5.7557  NOx  1.0598 1.0598	0.4787 10.3299 9.8512 0 9.8512 0 0.5236 0.5236 10.3748  CO  1.8324 1.8324 0 0	1.40E-03 0.0149 0.0135 0 0.0135 0 0.00149 0.00149 0.00150 SO2 2.97E-03 2.97E-03	0.1351 0.1564  0.0213 0 0.0213 0 0.0213 0 0.1351 0.1351 0.1564  PM10 Total  0 3.96E-03 3.96E-03	0.0368 0.0581  0.0213 0 0.0213 0 0.0213  0 0.0368 0.0368 0.0581  PM2.5 Total  0 3.96E-03 3.96E-03

Onsite	20	<b>021</b> Winter					
	Archit. Coating	24.6845				0	0
	Off-Road	0.0545	1.0598	1.8324	2.97E-03	3.96E-03	3.96E-03
	Total	24.739	1.0598	1.8324	2.97E-03	3.96E-03	3.96E-03
Offsite							
	Hauling	0	0	0	0	0	0
	Vendor	0	0	0	0	0	0
	Worker	0.1526	0.1044	1.1784	3.44E-03	0.3326	0.0907
	Total	0.1526	0.1044	1.1784	3.44E-03	0.3326	0.0907
TOTAL		24.8916	1.1642	3.0108	0.0064	0.3366	0.0947
Onsite	20	021					
	Archit. Coating	24.6845	0	0	0	0	0
	Off-Road	0.0545	1.0598	1.8324	0.00297	0.00396	0.00396
	Total	24.739	1.0598	1.8324	0.00297	0.00396	0.00396
Offsite							
	Hauling	0	0	0	0	0	0
	Vendor	0	0	0	0	0	0
	Worker	0.1526	0.1044	1.2889	0.00366	0.3326	0.0907
	Total	0.1526	0.1044	1.2889	0.00366	0.3326	0.0907
TOTAL		24.8916	1.1642	3.1213	0.0066	0.3366	0.0947
MAX DAILY		24.89	14.72	21.57	0.05	2.29	1.15
Regional Thresholds		75	100	550	150	150	55
Exceeds Thresholds?		No	No	No	No	No	No

# **Localized Construction Emissions Worksheet**

\*CalEEMod, Version 2016.3.2

Demolition						
			NOx	CO	PM10 Total	PM2.5 Total
Onsite		2020				
	Fugitive Dust				0.4495	0.0681
	Off-Road	111	8.5434	15.4154	0.0375	0.0375
	Total		8.5434	15.4154	0.487	0.1055
TOTAL			8.5434	15.4154	0.4870	0.1055
Onsite		2020				
	Fugitive Dust				0.4495	0.0681
	Off-Road		8.5434	15.4154	0.0375	0.0375
	Total		8.5434	15.4154	0.487	0.1055
TOTAL			8.5434	15.4154	0.4870	0.1055
Onsite		2020				
	Fugitive Dust		0	0	0.4495	0.0681
	Off-Road		8.5434	15.4154	0.0375	0.0375
	Total		8.5434	15.4154	0.487	0.1055
TOTAL			8.5434	15.4154	0.4870	0.1055
	1.59-Acre LSTs		72	737	5.77	4.18
	Exceeds LST?		No	No	No	No
Site Preparation						
•			NOx	СО	PM10 Total	PM2.5 Total
Site Preparation Onsite		2020	NOx	СО	T	
•	Fugitive Dust	2020			2.1487	1.0944
•	Off-Road	2020	5.0659	9.8221	2.1487 0.0281	1.0944 0.0281
Onsite	•	2020	5.0659 <b>5.0659</b>	9.8221 <b>9.8221</b>	2.1487 0.0281 <b>2.1768</b>	1.0944 0.0281 1.1224
Onsite TOTAL	Off-Road		5.0659	9.8221	2.1487 0.0281	1.0944 0.0281
Onsite	Off-Road Total	2020	5.0659 <b>5.0659</b>	9.8221 <b>9.8221</b>	2.1487 0.0281 2.1768 2.1768	1.0944 0.0281 1.1224 1.1224
Onsite TOTAL	Off-Road Total Fugitive Dust		5.0659 5.0659 5.0659	9.8221 9.8221 9.8221	2.1487 0.0281 2.1768 2.1768	1.0944 0.0281 1.1224 1.1224
Onsite TOTAL	Off-Road Total Fugitive Dust Off-Road		5.0659 5.0659 5.0659	9.8221 9.8221 9.8221 9.8221	2.1487 0.0281 2.1768 2.1768 2.1487 0.0281	1.0944 0.0281 1.1224 1.1224 1.0944 0.0281
Onsite  TOTAL Onsite	Off-Road Total Fugitive Dust		5.0659 5.0659 5.0659 5.0659	9.8221 9.8221 9.8221 9.8221 9.8221	2.1487 0.0281 2.1768 2.1768 2.1487 0.0281 2.1768	1.0944 0.0281 1.1224 1.1224 1.0944 0.0281
Onsite TOTAL	Off-Road Total Fugitive Dust Off-Road		5.0659 5.0659 5.0659	9.8221 9.8221 9.8221 9.8221	2.1487 0.0281 2.1768 2.1768 2.1487 0.0281	1.0944 0.0281 1.1224 1.1224 1.0944 0.0281
Onsite  TOTAL Onsite	Off-Road Total Fugitive Dust Off-Road Total		5.0659 5.0659 5.0659 5.0659	9.8221 9.8221 9.8221 9.8221 9.8221 9.8221	2.1487 0.0281 2.1768 2.1768 2.1487 0.0281 2.1768 2.1768	1.0944 0.0281 1.1224 1.1224 1.0944 0.0281 1.1224 1.1224
Onsite  TOTAL Onsite  TOTAL	Off-Road Total  Fugitive Dust Off-Road Total  Fugitive Dust	2020	5.0659 5.0659 5.0659 5.0659 5.0659 5.0659	9.8221 9.8221 9.8221 9.8221 9.8221 9.8221	2.1487 0.0281 2.1768 2.1768 2.1487 0.0281 2.1768 2.1768	1.0944 0.0281 1.1224 1.1224 1.0944 0.0281 1.1224 1.1224 1.10944
Onsite  TOTAL Onsite  TOTAL	Off-Road Total  Fugitive Dust Off-Road Total  Fugitive Dust Off-Road	2020	5.0659 5.0659 5.0659 5.0659 5.0659 5.0659	9.8221 9.8221 9.8221 9.8221 9.8221 9.8221 0 9.8221	2.1487 0.0281 2.1768 2.1768 2.1487 0.0281 2.1768 2.1768	1.0944 0.0281 1.1224 1.1224 1.0944 0.0281 1.1224 1.1224
Onsite  TOTAL Onsite  TOTAL	Off-Road Total  Fugitive Dust Off-Road Total  Fugitive Dust	2020	5.0659 5.0659 5.0659 5.0659 5.0659 5.0659	9.8221 9.8221 9.8221 9.8221 9.8221 9.8221	2.1487 0.0281 2.1768 2.1768 2.1487 0.0281 2.1768 2.1768 2.1487 0.0281 2.1768	1.0944 0.0281 1.1224 1.1224 1.0944 0.0281 1.1224 1.1224 1.10944
Onsite  TOTAL Onsite  TOTAL	Off-Road Total  Fugitive Dust Off-Road Total  Fugitive Dust Off-Road	2020	5.0659 5.0659 5.0659 5.0659 5.0659 0 5.0659	9.8221 9.8221 9.8221 9.8221 9.8221 9.8221 0 9.8221	2.1487 0.0281 2.1768 2.1768 2.1487 0.0281 2.1768 2.1768 2.1768	1.0944 0.0281 1.1224 1.1224 1.0944 0.0281 1.1224 1.1224 1.0944 0.0281
TOTAL Onsite  TOTAL Onsite	Off-Road Total  Fugitive Dust Off-Road Total  Fugitive Dust Off-Road	2020	5.0659 5.0659 5.0659 5.0659 5.0659 0 5.0659 5.0659 5.0659	9.8221 9.8221 9.8221 9.8221 9.8221 9.8221 0 9.8221 9.8221 9.8221	2.1487 0.0281 2.1768 2.1768 2.1487 0.0281 2.1768 2.1768 2.1487 0.0281 2.1768	1.0944 0.0281 1.1224 1.0944 0.0281 1.1224 1.0944 0.0281 1.1224 1.1224 1.1224

Grading						
			NOx	CO	PM10 Total	PM2.5 Total
Onsite		2020				
	Fugitive Dust				1.8207	0.9357
	Off-Road	1111	4.1795	8.0841	0.023	0.023
	Total		4.1795	8.0841	1.8437	0.9587
TOTAL			4.1795	8.0841	1.8437	0.9587
Onsite		2020				
	Fugitive Dust	1111			1.8207	0.9357
	Off-Road	100	4.1795	8.0841	0.023	0.023
	Total		4.1795	8.0841	1.8437	0.9587
TOTAL			4.1795	8.0841	1.8437	0.9587
Onsite		2020				
	Fugitive Dust		0	0	1.8207	0.9357
	Off-Road		4.1795	8.0841	0.023	0.023
	Total		4.1795	8.0841	1.8437	0.9587
TOTAL			4.1795	8.0841	1.8437	0.9587
	1.19-Acre LSTs		62	633	4.56	3.37
	Exceeds LST?		No	No	No	No
<b>Building Construction</b>						
			NOx	CO	PM10 Total	PM2.5 Total
Onsite		2020	NOx	CO	PM10 Total	PM2.5 Total
Onsite	Off-Road	2020	NOx 9.9925	CO 13.4786	PM10 Total	PM2.5 Total
Onsite	Off-Road Total	2020			·	
Onsite  TOTAL		2020	9.9925	13.4786	0.1617	0.1617
		2020	9.9925 <b>9.9925</b>	13.4786 13.4786	0.1617 <b>0.1617</b>	0.1617 <b>0.1617</b>
TOTAL			9.9925 <b>9.9925</b>	13.4786 13.4786	0.1617 <b>0.1617</b>	0.1617 <b>0.1617</b>
TOTAL	Total		9.9925 9.9925 9.9925	13.4786 13.4786 13.4786	0.1617 0.1617 0.1617	0.1617 <b>0.1617</b> <b>0.1617</b>
TOTAL	Total Off-Road		9.9925 9.9925 9.9925 9.9925	13.4786 13.4786 13.4786	0.1617 0.1617 0.1617	0.1617 0.1617 <b>0.1617</b> 0.1617
<i>TOTAL</i> Onsite	Total Off-Road		9.9925 9.9925 9.9925 9.9925 9.9925	13.4786 13.4786 13.4786 13.4786 13.4786	0.1617 0.1617 0.1617 0.1617	0.1617 <b>0.1617</b> <b>0.1617</b> 0.1617
TOTAL Onsite TOTAL	Total Off-Road	2020	9.9925 9.9925 9.9925 9.9925 9.9925	13.4786 13.4786 13.4786 13.4786 13.4786	0.1617 0.1617 0.1617 0.1617	0.1617 <b>0.1617</b> <b>0.1617</b> 0.1617
TOTAL Onsite TOTAL	Total Off-Road Total	2020	9.9925 9.9925 9.9925 9.9925 9.9925 9.9925	13.4786 13.4786 13.4786 13.4786 13.4786 13.4786	0.1617 0.1617 0.1617 0.1617 0.1617 0.1617	0.1617 <b>0.1617</b> <b>0.1617</b> 0.1617 <b>0.1617</b>
TOTAL Onsite TOTAL	Total Off-Road Total Off-Road	2020	9.9925 9.9925 9.9925 9.9925 9.9925 9.9925 9.9925	13.4786 13.4786 13.4786 13.4786 13.4786 13.4786	0.1617 0.1617 0.1617 0.1617 0.1617 0.1617	0.1617 0.1617 0.1617 0.1617 0.1617 0.1617
TOTAL Onsite  TOTAL Onsite	Total Off-Road Total Off-Road	2020	9.9925 9.9925 9.9925 9.9925 9.9925 9.9925 9.9925 9.9925	13.4786 13.4786 13.4786 13.4786 13.4786 13.4786 13.4786 13.4786	0.1617 0.1617 0.1617 0.1617 0.1617 0.1617 0.1617	0.1617 0.1617 0.1617 0.1617 0.1617 0.1617 0.1617 0.1617

			NOx	CO	PM10 Total	PM2.5 Total
Onsite		2021			·	
	Off-Road		9.9925	13.4786	0.1617	0.1617
	Total		9.9925	13.4786	0.1617	0.1617
TOTAL			9.9925	13.4786	0.1617	0.1617
Onsite		2021				·
	Off-Road	111	9.9925	13.4786	0.1617	0.1617
	Total		9.9925	13.4786	0.1617	0.1617
TOTAL			9.9925	13.4786	0.1617	0.1617
Onsite		2021				
	Off-Road		9.9925	13.4786	0.1617	0.1617
	Total		9.9925	13.4786	0.1617	0.1617
TOTAL			9.9925	13.4786	0.1617	0.1617
	<=1.00-Acre LSTs		<i>57</i>	585	4.00	3.00
	Exceeds LST?		No	No	No	No
Asphalt Paving						
			NOx	CO	PM10 Total	PM2.5 Total
Onsite		2021				
	Off-Road		5.7133	9.8512	0.0213	0.0213
	Paving				0	0
	Total		5.7133	9.8512	0.0213	0.0213
TOTAL			5.7133	9.8512	0.0213	0.0213
Onsite		2021				
	Off-Road	***	5.7133	9.8512	0.0213	0.0213
	Paving	111			0	0
	Total		5.7133	9.8512	0.0213	0.0213
TOTAL			5.7133	9.8512	0.0213	0.0213
Onsite		2021				
	Off-Road		5.7133	9.8512	0.0213	0.0213
	Paving		0	0	0	0
	Total		5.7133	9.8512	0.0213	0.0213
TOTAL			5.7133	9.8512	0.0213	0.0213
	<=1.00-Acre LSTs		57	585	4.00	3.00
	Exceeds LST?		No	No	No	No

Architectural Coating						
			NOx	CO	PM10 Total	PM2.5 Total
Onsite		2021				
	Archit. Coating				0	0
	Off-Road		1.0598	1.8324	3.96E-03	3.96E-03
	Total		1.0598	1.8324	3.96E-03	3.96E-03
TOTAL			1.0598	1.8324	0.0040	0.0040
Onsite		2021				
	Archit. Coating				0	0
	Off-Road	***	1.0598	1.8324	3.96E-03	3.96E-03
	Total		1.0598	1.8324	3.96E-03	3.96E-03
TOTAL			1.0598	1.8324	0.0040	0.0040
Onsite		2021				
	Archit. Coating		0	0	0	0
	Off-Road		1.0598	1.8324	0.00396	0.00396
	Total		1.0598	1.8324	0.00396	0.00396
TOTAL			1.0598	1.8324	0.0040	0.0040
	<=1.00-Acre LSTs		57	585	4.00	3.00
	Exceeds LST?		No	No	No	No

# Regional Operation Emissions Worksheet\*

\*CalEEMod, Version 2016.3.2

Existing-	-20	23
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#### Summer

Area Energy Mobile **Total** 

	ROG	NOx	СО	SO2	PM10 Total	PM2.5 Total
	0.2034	1.00E-05	1.06E-03	0	0	0
ĺ	6.27E-03	0.057	0.0479	3.40E-04	4.33E-03	4.33E-03
1	3.1867	3.9324	20.8865	0.0496	4.5614	1.2451
-	3 3964	3 9894	20 9355	0.05	4 5658	1 2495

#### Winter

Area Energy Mobile **Total** 

_	ROG	NOx	СО	SO2	PM10 Total	PM2.5 Total
	0.2034	1.00E-05	1.06E-03	0	0	0
	6.27E-03	0.057	0.0479	3.40E-04	4.33E-03	4.33E-03
	3.3158	4.167	21.0226	0.0479	4.5609	1.2449
-	3 5254	4 224	21 0716	0 0482	4 5652	1 2493

## **Max Daily**

	ROG	NOx	СО	SO2	PM10 Total	PM2.5 Total
Area	0.203	0.000	0.001	0.000	0.000	0.000
Energy	0.006	0.057	0.048	0.000	0.004	0.004
Mobile	3.316	4.167	21.023	0.050	4.561	1.245
Total	3.525	4.224	21.072	0.050	4.566	1.250

## **Proposed Project**

#### Summer

Area Energy Mobile **Total** 

	ROG	NOx	СО	SO2	PM10 Total	PM2.5 Total
1	4.0507	0.1314	11.4031	6.00E-04	0.0631	0.0631
Ĭ	0.0719	0.6286	0.365	3.92E-03	0.0497	0.0497
7	10.6697	12.9314	78.1482	0.194	18.5823	5.0556
-	14.7924	13.6914	89.9162	0.1986	18.6951	5.1684

#### Winter

Area Energy Mobile **Total** 

ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
4.0507	0.1314	11.4031	6.00E-04	0.0631	0.0631
0.0719	0.6286	0.365	3.92E-03	0.0497	0.0497
11.0841	13.7362	77.5368	0.1866	18.5804	5.055
15.2067	14.4962	89.3049	0.1911	18.6932	5.1678

## **Max Daily**

	ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Area	4.051	0.131	11.403	0.001	0.063	0.063
Energy	0.072	0.629	0.365	0.004	0.050	0.050
Mobile	11.084	13.736	78.148	0.194	18.582	5.056
Total	15.207	14.496	89.916	0.199	18.695	5.168

## **Net Change**

#### Summer

Area	
Energy	
Mobile	
Total	

	ROG	NOx	СО	SO2	PM10 Total	PM2.5 Total
	3.8473	1.31E-01	11.40204	0.0006	6.31E-02	6.31E-02
	6.56E-02	0.5716	0.3171	3.58E-03	4.54E-02	4.54E-02
ı	7.483	8.999	57.2617	0.1444	14.0209	3.8105
	11.396	9.702	68.9807	0.1486	14.1293	3.9189

#### Winter

Area	
Energy	
Mobile	
Total	

	ROG	NOx	СО	SO2	PM10 Total	PM2.5 Total
	3.8473	1.31E-01	11.40204	0.0006	6.31E-02	6.31E-02
21111111111	6.56E-02	0.5716	0.3171	3.58E-03	4.54E-02	4.54E-02
	7.7683	9.5692	56.5142	0.1387	14.0195	3.8101
-	11.6813	10.2722	68.2333	0.1429	14.128	3.9185

## **Max Daily**

-	ROG	NOx	СО	SO2	PM10 Total	PM2.5 Total
Area	3.847	0.131	11.402	0.001	0.063	0.063
Energy	0.066	0.572	0.317	0.004	0.045	0.045
Mobile	7.768	9.569	57.262	0.144	14.021	3.811
Total	11.681	10.272	68.981	0.149	14.129	3.919
Regional Thresholds	55	55	550	150	150	550
Exceeds Thresholds?	No	No	No	No	No	No

## **GHG Emissions Inventory**

# **Proposed Project Buildout**

#### **Construction**

MTCO₂e Total*
2020 238
2021 243
Total Construction 482

<sup>\*</sup>CalEEMod, Version 2016.3.2.

#### Operation\*

<u>Operation</u>		
Existing-2020		
Area	0.0003	MTCO <sub>2</sub> e/Year**
Energy	89	MTCO <sub>2</sub> e/Year
Mobile	595	MTCO <sub>2</sub> e/Year
Solid Waste	24	MTCO <sub>2</sub> e/Year
Water	4	MTCO₂e/Year
Total	712	MTCO₂e/Year
Proposed		
Area	2	MTCO₂e/Year**
Energy	531	MTCO <sub>2</sub> e/Year
Mobile	2,519	MTCO <sub>2</sub> e/Year
Solid Waste	109	MTCO <sub>2</sub> e/Year
Water	52	MTCO <sub>2</sub> e/Year
Amortized Construction Emissions***	16	MTCO₂e/Year
Total	3,229	MTCO₂e/Year
Net Change		
Area	2	MTCO₂e/Year**
Energy	442	MTCO <sub>2</sub> e/Year
Mobile	1,924	MTCO <sub>2</sub> e/Year
Solid Waste	85	MTCO <sub>2</sub> e/Year
Water	48	MTCO <sub>2</sub> e/Year
Amortized Construction Emissions***	16	MTCO <sub>2</sub> e/Year
Total	2,517	MTCO₂e/Year
SCAQMD Bright-Line Screening Threshold	3,000	MTCO₂e/Year
Exceed Threshold?	No	

<sup>\*</sup>CalEEMod, Version 2016.3.2.

<sup>\*\*</sup> MTCO<sub>2</sub>e=metric tons of carbon dioxide equivalent.

<sup>\*\*\*</sup> Total construction emissions are amortized over 30 years per SCAQMD methodology; SCAQMD. 2009, November 19. Greenhouse Gases (GHG) CEQA Significance Thresholds Working Group Meeting 14. http://www.aqmd.gov/docs/default-source/ceqa/handbook/greenhouse-gases-(ghg)-ceqa-significance-thresholds/year-2008-2009/ghg-meeting-14/ghg-meeting-14-main-presentation.pdf?sfvrsn=2.

2. Criteria Air Pollutant and GHG Modeling Inputs and Assumptions

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## **CalEEMod Land Use Inputs: Existing**

				Land Use Size		Land Use Square	
Гуре		Land Use Type	Land Use Unit Amount	Metric	Lot Acreage	Feet	
Retail	Sup	ermarket	9.100	1000BSF	0.28	9,100	
Parking	Oth	er Asphalt Surfaces	1.31	acre	1.31	0	
					1.59	9,100.00	
Project Location:		Los Angeles SC					
Climate Zone:		9					
Operation Year		2020, 2023					
Land Use Setting		Urban					
Utility Company		SCE					
Source Receptor Area:							
Trip Generation							
			Weekday Trip				
Land Use		<b>Unit Amount</b>	Generation Rate*	Trips Per Day	Primary (%)	Diverted (%)	Pass-By Rate (%)
	Supermarket	9.100	106.78	972	34%	30%	36%
				972			
			Saturday Trip				
Land Use		<b>Unit Amount</b>	Generation Rate**	Trips Per Day	Primary (%)	Diverted (%)	Pass-By Rate (%)
	Supermarket	9.100	177.62	1,616	34%	30%	36%
				1,616			
			Sunday Trip Generation				
Land Use		Unit Amount	Rate**	Trips Per Day	Primary (%)	Diverted (%)	Pass-By Rate (%)

166.47

1,515

1,515

34%

30%

36%

9.100

Supermarket

<sup>\*</sup>Based on information provided by Fehr & Peers. 2020, June 17. 201 W. Pacific Coast Highway Traffic Assessment.

<sup>\*\*</sup>Institute of Traffic Engineers. 2017. Trip Generation Manual, 10th Edition.

## Water Use\*

## **CalEEMod Inputs**

Land Use		Indoor	Outdoor	Total
Supermarket		1,047,779.83	32,405.56	1,080,185.39
Other Asphalt Surfaces		0	0	0
	Total	1,047,780	32,406	1,080,185

<sup>\*</sup>CalEEMod defaults

# Solid Waste\*

#### **Annual Solid Waste Generated**

Land Use		(tpy) <sup>3</sup>	
Supermarket		47.94	
Other Asphalt Surfaces		0.00	
	Total	48	

<sup>\*</sup>CalEEMod defaults

## **Electricity (Buildings)**

Utilizes CalEEMod historical energy rates, which are based on the 2007 Building Energy Efficiency Standards.

#### **Architectural Coating**

			Total Paintable		Total Paintable
Land Use	Land Use Amount (BSF)	CalEEMod Paintable Surface Area Multiplier*	Surface Area (BSF)	Total Paintable Interior Surface Area (BSF)*	Exterior Surface Area (BSF)*
Supermarket	9,100	2.0	18,200	13,650	4,550
		Non-Resid	ential Sub-Total	13,650	4,550
Parking Lot	0	6%	0	0	0

<sup>\*</sup>Based on CalEEMod methodology in calculating the paintable surface areas for a residential building and surface parking lot.

#### **Carbon Intensity Factors**

#### **Southern California Edison Carbon Intensity Factors**

SCE CO <sub>2</sub> e Intensity Factor <sup>1</sup>	534	pounds per megawatt hour
CO2: <sup>1,2</sup>	531.43634	pounds per megawatt hour
CH4: <sup>3</sup>	0.029	pound per megawatt hour
N2O: <sup>3</sup>	0.00617	pound per megawatt hour

<sup>&</sup>lt;sup>1</sup> Based on CO<sub>2</sub>e intensity factor of 534 pounds per megawatt hour; Southern California Edison. 2020. 2019 Sustainability Report. https://www.edison.com/content/dam/eix/documents/sustainability/eix-2019-sustainability-report.pdf.

<sup>&</sup>lt;sup>3</sup> CalEEMod default values.

<b>General Conversion Factors</b>		
lbs to kg	0.4536	
kg to MTons	0.001	
Mmbtu to Therm	0.1	
Therms to kwh	29.30711111	
kilowatt hrs to megawatt hrs	0.001	
lbs to Tons	2000	
Tons to MTon	0.9071847	

Source: California Air Resources Board (CARB). 2010. Local Government Operations Protocol. Version 1.1. Appendix F, Standard Conversion Factors

#### **Global Warming Potentials (GWP)**

CO <sub>2</sub>	1
CH <sub>4</sub>	25
N <sub>2</sub> O	298

Based on Intergovernmental Panel on Climate Change Fourth Assessment Report global warming potentials for CH4 and N2O; Intergovernmental Panel on Climate Change (IPCC). 2007. Fourth Assessment Report: Climate Change 2007.

<sup>&</sup>lt;sup>2</sup> Based on Intergovernmental Panel on Climate Change Fourth Assessment Report global warming potentials for CH4 and N2O; Intergovernmental Panel on Climate Change (IPCC). 2007. Fourth Assessment Report: Climate Change 2007.

# CalEEMod Land Use Inputs: Project

					Land Use Square
Туре	Land Use Type	Land Use Unit Amount	Land Use Size Metric	Lot Acreage	Feet
Residential	Mid-Rise Apartment	138	DU	0	156,525
Retail	Supermarket	23.000	1000BSF	0.53	23,000
Recreational	Fast Food w/o Drivethru	2.000	1000BSF	0.05	2,000
Parking	Parking Structure	99.915	1000BSF	0.43	99,915
Parking	Other Asphalt Surfaces		acre		
Parking	Other NonAsphalt Surfaces	25.398	1000BSF	0.58	25,398
				1.59	306,838.00

Los Angeles SC Project Location: Climate Zone: 9 2023 **Operation Year** Urban Land Use Setting SCE **Utility Company** Source Receptor Area: 4 - South Coast LA

## **Trip Generation**

		Weekday Trip							
Land Use	<b>Unit Amount</b>	Generation Rate*	<b>Trips Per Day</b>	Internal Capture	<b>Net Trips</b>	<b>Adjust Trip Rates</b>	Primary (%)	Diverted (%)	Pass-By Rate (%)
Mid-Rise Apartment	138	5.44	751	-60.0576	691	5.0048	86%	11%	3%
Supermarket	23.000	106.78	2,456	-196.4752	2,259	98.2376	34%	30%	36%
Fast Food w/o Drivethru	2.000	315.17	630	-50.4272	580	289.9564	51%	37%	12%
			3,837	(307)	3,530				

			Saturday Trip							
	Land Use	<b>Unit Amount</b>	Generation Rate**	<b>Trips Per Day</b>	<b>Internal Capture</b>	Net Trips	<b>Adjust Trip Rates</b>	Primary (%)	Diverted (%)	Pass-By Rate (%)
-	Mid-Rise Apartment	138	4.91	678	-54.2064	623	4.5172	86%	11%	3%
	Supermarket	23.000	177.62	4,085	-326.8208	3,758	163.4104	34%	30%	36%
	Fast Food w/o Drivethru	2.000	318.62	637	-50.9792	586	293.1304	51%	37%	12%
				5.400	(432)	4.968				

		Sunday Trip							
Land Use	<b>Unit Amount</b>	Generation Rate**	<b>Trips Per Day</b>	Internal Capture	Net Trips	<b>Adjust Trip Rates</b>	Primary (%)	Diverted (%)	Pass-By Rate (%)
Mid-Rise Apartment	138	4.09	564	-45.1536	519	3.7628	86%	11%	3%
Supermarket	23.000	166.47	3,829	-306.3048	3,523	153.1524	34%	30%	36%
Fast Food w/o Drivethru***	2.000	421.82	844	-67.4912	776	388.0744	51%	37%	12%
			5,237	(419)	4,818				

<sup>\*</sup>Based on information provided by Fehr & Peers. 2020, June 17. 201 W. Pacific Coast Highway Traffic Assessment.

## Water Use\*

#### **Water Demand**

Land Use	Indoor <sup>3</sup>	Outdoor <sup>3</sup>	Total
Mid-Rise Apartment	8,991,255.54	5,668,400.23	14,659,655.77
Supermarket	2,835,168.94	87,685.64	2,922,854.58
Fast Food w/o Drivethru	607,067.42	38,748.98	645,816.40
Tot	tal 12 433 492	5 794 835	18 228 327

216

# Solid Waste\*

## **Solid Waste Generation**

	<b>Annual Solid Waste Generated</b>
Land Use	(tpy) <sup>3</sup>
Mid-Rise Apartment	63.48
Supermarket	129.72
Fast Food w/o Drivethru	23.04

Total

A-20

<sup>\*\*</sup>Institute of Traffic Engineers. 2017. Trip Generation Manual, 10th Edition.

<sup>\*\*\*</sup>Based Fast-Food Restaurant without Drive-Through Window (ITE Code 933) since no Sunday data provided for Fast Casual Restaurant (ITE Code 930) in the ITE Handbook.

<sup>\*</sup>CalEEMod defaults

#### \*CalEEMod defaults

## **Electricity (Buildings)**

Buildings constructed after January 1, 2020 are required to meet the 2019 Building Energy Efficiency Standards, which are result in 7 percent more energy efficiency for single-family uses compared to the 2016 Building Energy Efficiency Standards.

#### **Architectural Coating\***

\*Assumes paints with a VOC content of 10 g/L per Mitigation Measure AQ-3 of the Certified MidTown Specific Plan EIR.

		CalEEMod Paintable	e		<b>Total Paintable</b>
		Surface Area	<b>Total Paintable Surface</b>	<b>Total Paintable Interior</b>	<b>Exterior Surface</b>
Land Use	Land Use Amount (BSF)	Multiplier*	Area (BSF)	Surface Area (BSF)*	Area (BSF)*
Mid-Rise Apartment	156,525	2.7	422,618	316,963	105,654
Supermarket	23,000	2.0	46,000	34,500	11,500
Fast Food w/o Drivethru	2,000	2.0	4,000	3,000	1,000
			Non-Residential Sub-Total	37,500	12,500
Parking Lot	99,915	6%	5,995	0	5,995

<sup>\*</sup>Based on CalEEMod methodology in calculating the paintable surface areas for a residential building and surface parking lot.

#### **Hearths**

	Dwelling Units with Gas Fireplace	Dwelling Units W/O Fireplace*
<b>Apartments Mid Rise</b>	0	138

<sup>\*</sup> Assumed no fireplaces for multi-family dwellings based on SCAQMD Rule 445, Wood-Burning Devices.

#### **Carbon Intensity Factors**

#### **Southern California Edison Carbon Intensity Factors**

SCE CO <sub>2</sub> e Intensity Factor <sup>1</sup>	534	pounds per megawatt hou
CO2: <sup>1,2</sup>	531.43634	pounds per megawatt hour
CH4: <sup>3</sup>	0.029	pound per megawatt hour
N2O: <sup>3</sup>	0.00617	pound per megawatt hour

<sup>&</sup>lt;sup>1</sup> Based on CO<sub>2</sub>e intensity factor of 534 pounds per megawatt hour; Southern California Edison. 2020. 2019 Sustainability Report.

https://www.edison.com/content/dam/eix/documents/sustainability/eix-2019-sustainability-report.pdf.

<sup>&</sup>lt;sup>3</sup> CalEEMod default values.

<b>General Conversion Factors</b>		
lbs to kg	0.4536	
kg to MTons	0.001	
Mmbtu to Therm	0.1	
Therms to kwh	29.30711111	
kilowatt hrs to megawatt hrs	0.001	
lbs to Tons	2000	
Tons to MTon	0.9071847	

Source: California Air Resources Board (CARB). 2010. Local Government Operations Protocol. Version 1.1. Appendix F, Standard Conversion Factors

	Global Warming Potentials (GWP)		
CO <sub>2</sub>	1		
CH <sub>4</sub>	25		
$N_2O$	298		
Based on Intergovernmental Panel on Climate Change Fourth Assessment Report global warming potentials for CH4 and N2O; Intergovernmental Panel on Climate Change (IPCC). 2007. Fourth Assessment Report: Climate Change 2007.			

<sup>&</sup>lt;sup>2</sup> Based on Intergovernmental Panel on Climate Change Fourth Assessment Report global warming potentials for CH4 and N2O; Intergovernmental Panel on Climate Change (IPCC). 2007. Fourth Assessment Report: Climate Change 2007.

<u>Demolition</u>		
<b>Building Demolition</b>		
Empty Building	2,950	BSF
Existing Market	9,100	BSF
Total	12,050	BSF
Tons	554	tons
Asphalt Demolition		
Square feet	39,131	BSF
Tons	580	tons
Total Tons	1,134	tons

# **Construction Activities and Schedule Assumptions\***

\* Based on CalEEMod defaults.

Construction Activities	Construction Schedule				
	Start Date	End Date	Duration (Work Days)		
Demolition	7/18/2020	8/14/2020	20		
Site Preparation	8/15/2020	8/18/2020	2		
Grading	8/19/2020	8/24/2020	4		
Building Construction	8/25/2020	5/31/2021	200		
Paving	6/1/2021	6/14/2021	10		
Architectural Coating	6/15/2021	6/28/2021	10		

# **Construction Equipment Mix\***

Demolition         Default         Default           Concrete/Industrial Saws         1         8         81         0.73           Rubber Tired Dozers         1         8         247         0.40           Tractors/Loaders/Backhoes         3         8         97         0.37           Water truck**         1         8         97         0.37	endor fault+4
Concrete/Industrial Saws       1       8       81       0.73         Rubber Tired Dozers       1       8       247       0.40         Tractors/Loaders/Backhoes       3       8       97       0.37         Water truck**       1       Default Default Default         Site Preparation       1       8       187       0.41	
Concrete/Industrial Saws       1       8       81       0.73         Rubber Tired Dozers       1       8       247       0.40         Tractors/Loaders/Backhoes       3       8       97       0.37         Water truck**       1       Default Default Default         Site Preparation       1       8       187       0.41	
Rubber Tired Dozers       1       8       247       0.40         Tractors/Loaders/Backhoes       3       8       97       0.37         Water truck**       1       Default Default Default         Site Preparation       1       8       187       0.41	
Tractors/Loaders/Backhoes         3         8         97         0.37           Water truck**         1         5         Default         Default           Site Preparation         1         8         187         0.41	į
Water truck**  Site Preparation  Graders  1  8  187  0.41  Default	
Site PreparationDefaultDeGraders181870.41	
Graders 1 8 187 0.41	4
	fault+4
Rubber Tired Dozers 1 7 247 0.40	
Tractors/Loaders/Backhoes 1 8 97 0.37	
Water truck**  1	4
Grading Default De	fault+4
Graders 1 6 187 0.41	
Rubber Tired Dozers 1 6 247 0.40	
Tractors/Loaders/Backhoes 1 7 97 0.37	
Water truck 1	4
Building Construction Default D	efault
Cranes 1 6 231 0.29	
Forklifts 1 6 89 0.20	
Generator Sets 1 8 84 0.74	
Tractors/Loaders/Backhoes 1 6 97 0.37	
Welders <b>3</b> 8 <b>46 0.45</b>	
Asphalt Paving Default D	efault
Cement and Mortar Mixers 1 6 9 0.56	
Pavers 1 6 130 0.42	
Paving Equipment 1 8 132 0.36	
Rollers 1 7 80 0.38	
Tractors/Loaders/Backhoes 1 8 97 0.37	
	efault
Air Compressors 1 6 78 0.48	

<sup>\*</sup>CalEEMod default unless otherwise noted.

<sup>\*\*</sup>Assumes water truck and four trips per day for the water truck.

# **Changes to the CalEEMod Defaults - Year 2023**

Total ADTs: 3,530

Commercial														
Default	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH	
FleetMix (Model Default)	0.545842	0.044768	0.205288	0.119317	0.015350	0.006227	0.020460	0.031333	0.002546	0.002133	0.005184	0.000692	0.000862	100%
Trips	1,927	158	725	421	54	22	72	111	9	8	18	2	3	3,530
Percent	94%					3%		3%						100%
Proportion	0.583321	0.047842	0.219384	0.127510	0.016404	0.189156	0.621507	1.000000	0.077339	0.064793	0.005540	0.021021	0.026185	
Assumed Mix	99.00%					0.50%		0.50%						100.00%
adjusted with Assumed	0.577488	0.047363	0.217190	0.126235	0.016240	0.000946	0.003108	0.005000	0.000387	0.000324	0.005485	0.000105	0.000131	100%
Trips	2,039	167	767	446	57	3	11	18	1	1	19	0	0	3,530
	58%	5%	22%	13%	2%	0%	0%	1%	0%	0%	1%	0%	0%	100%
Modified	0.577488	0.047363	0.217190	0.126235	0.016240	0.000946	0.003108	0.005000	0.000387	0.000324	0.005485	0.000105	0.000131	100.0%
Final Check Trips	2,039	167	767	446	57	3	11	18	1	1	19	0	0	3,530

EMFAC2017 Derived CalEEMod Annual Emission Rates: Year 2020<sup>1,2</sup>

Season	Pollutant	LDA	LDT1	LDT2	MDV	LHDT1	LHDT2	MHDT	HHDT	OBUS	UBUS	MCY	SBUS	МН
Annual	CH4_IDLEX	0	0	0	0	0.0061107	0.004380481	0.004496953	0.026957934	0.0090435	0	0	0.0656648	0
Annual	CH4_RUNEX	0.0040136	0.0102229	0.0063277	0.0092304	0.0072756	0.005049836	0.009471698	0.083382427	0.0121223	6.2198061	0.383298	0.0079701	0.0034336
Annual	CH4_STREX	0.0585234	0.0855323	0.0789954	0.0967437	0.0194091	0.013746514	0.013618844	5.41159E-07	0.0230646	0.0108995	0.2371012	0.0061513	0
Annual	CO_IDLEX	0	0	0	0	0.1970035	0.159214191	0.396926211	5.64419367	0.6053788	0	0	2.6757115	0
Annual	CO_RUNEX	0.8609716	1.8378331	1.2347636	1.6347101	0.8514493	0.572981809	0.867904437	0.783861347	1.2384771	42.743129	19.743985	0.6745089	0.3081721
Annual	CO_STREX	2.2315619	2.4463171	2.8612765	3.4823836	1.2733892	0.892953023	1.62829758	0.011240873	2.536935	0.712484	8.4678701	0.8622488	0
Annual	CO2_NBIO_IDLEX	0	0	0	0	8.9621693	13.42256787	70.04306991	1146.115029	98.402819	0	0	354.14429	0
Annual	CO2_NBIO_RUNEX	286.75517	336.32044	367.52793	449.17396	695.35216	698.0155001	1130.501219	1557.295076	1457.5284	1985.0977	223.45396	1133.3376	992.05348
Annual	CO2_NBIO_STREX	56.45708	67.00745	73.708373	89.666497	13.432058	10.60905275	12.85945337	0.113824148	19.876029	8.7420597	60.302861	5.2190888	0
Annual	NOX_IDLEX	0	0	0	0	0.0535158	0.089881596	0.622773207	6.44621692	0.7100767	0	0	3.3578551	0
Annual	NOX_RUNEX	0.0536903	0.1598831	0.1143513	0.1589705	0.8103323	1.080993031	2.735571228	4.61891891	2.5110401	1.2050294	1.1337571	5.2289105	3.8510536
Annual	NOX_STREX <sup>3</sup>	0.2095214	0.3044993	0.3450027	0.423254	0.3778929	0.269076809	0.998385698	1.755021511	0.6200788	0.0834593	0.2631913	0.7970624	0
Annual	PM10_IDLEX	0	0	0	0	0.0006753	0.001174191	0.002234335	0.013058929	0.00336	0	0	0.0048914	0
Annual	PM10_PMBW	0.03675	0.03675	0.03675	0.03675	0.07644	0.089180026	0.130340037	0.061041559	0.13034	0.0726803	0.01176	0.7448002	0.13034
Annual	PM10_PMTW	0.008	0.008	0.008	0.008	0.0095182	0.010396907	0.012000003	0.035579073	0.012	0.0318756	0.004	0.0107491	0.016
Annual	PM10_RUNEX	0.002047	0.003245	0.002138	0.0023869	0.0069407	0.010687595	0.074904569	0.060283049	0.0532838	0.0036952	0.0023146	0.031878	0.091837
Annual	PM10_STREX	0.0020733	0.0030811	0.0020991	0.0023461	0.0003336	0.000191487	0.000154926	2.8198E-06	0.000199	3.639E-05	0.0034455	4.535E-05	0
Annual	PM25_IDLEX	0	0	0	0	0.0006461	0.001123396	0.002137678	0.012494005	0.0032147	0	0	0.0046798	0
Annual	PM25_PMBW	0.01575	0.01575	0.01575	0.01575	0.03276	0.038220011	0.055860016	0.026160668	0.05586	0.0311487	0.00504	0.3192001	0.05586
Annual	PM25_PMTW	0.002	0.002	0.002	0.002	0.0023796	0.002599227	0.003000001	0.008894768	0.003	0.0079689	0.001	0.0026873	0.004
Annual	PM25_RUNEX	0.0018863	0.0029867	0.0019677	0.0022023	0.0066075	0.010205891	0.071657144	0.057675185	0.0509641	0.0035328	0.0021659	0.0304862	0.0878642
Annual	PM25_STREX	0.0019065	0.0028333	0.0019301	0.0021597	0.0003072	0.000176065	0.000142449	2.61362E-06	0.0001831	3.346E-05	0.0032508	4.17E-05	0
Annual	ROG_DIURN	0.0619524	0.1539653	0.0810719	0.0931978	0.0029778	0.001903454	0.000809021	1.05845E-05	0.0018642	0.0006134	1.0983263	0.0009329	0
Annual	ROG_HTSK	0.1156846	0.2378027	0.140076	0.157956	0.0936034	0.064296603	0.030908904	0.000445431	0.0220091	0.007631	0.691877	0.0079894	0
Annual	ROG_IDLEX	0	0	0	0	0.0241018	0.019469199	0.024903039	0.462580586	0.0681472	0	0	0.3082361	0
Annual	ROG_RESTL	0.057173	0.126114	0.080261	0.096081	0.0017697	0.001133223	0.000498743	7.40247E-06	0.0009319	0.00045	0.6818764	0.0004738	0
Annual	ROG_RUNEX	0.0164765	0.0462388	0.0268219	0.0450318	0.0581221	0.058130969	0.148631725	0.153864977	0.1448009	0.1558745	2.6470837	0.1040379	0.0739241
Annual	ROG_RUNLS	0.2308451	0.8246625	0.4447163	0.4719953	0.6420858	0.437830389	0.167592509	0.002280475	0.2609155	0.0470188	2.1632509	0.0571704	0
Annual	ROG_STREX	0.2724539	0.4418226	0.3785311	0.4927663	0.0970246	0.068393935	0.074460859	2.857E-06	0.1224183	0.0472472	1.8360739	0.0355215	0
Annual	SO2_IDLEX	0	0	0	0	8.726E-05	0.000128927	0.000665678	0.0106642	0.000936	0	0	0.0033776	0
Annual	SO2_RUNEX	0.0028369	0.0033281	0.0036361	0.0044414	0.0068007	0.006767096	0.010810364	0.014252527	0.0141098	0.0014781	0.0022113	0.0108317	0.0093785
Annual	SO2_STREX	0.0005587	0.0006631	0.0007294	0.0008873	0.0001329	0.000104985	0.000127255	1.12638E-06	0.0001967	8.651E-05	0.0005967	5.165E-05	0
Annual	TOG_DIURN	0.0619524	0.1539653	0.0810719	0.0931978	0.0029778	0.001903454	0.000809021	1.05845E-05	0.0018642	0.0006134	1.0983263	0.0009329	0
Annual	TOG_HTSK	0.1156846	0.2378027	0.140076	0.157956	0.0936034	0.064296603	0.030908904	0.000445431	0.0220091	0.007631	0.691877	0.0079894	0
Annual	TOG_IDLEX	0	0	0	0	0.0343104	0.026967338	0.033422445	0.532125018	0.0862825	0	0	0.4421652	0
Annual	TOG_RESTL	0.057173	0.126114	0.080261	0.096081	0.0017697	0.001133223	0.000498743	7.40247E-06	0.0009319	0.00045	0.6818764	0.0004738	0
Annual	TOG_RUNEX	0.0239506	0.067359	0.0390566	0.0620791	0.0752026	0.070560296	0.174487523	0.252126325	0.1755249	6.424139	3.2685613	0.1249119	0.0841576
Annual	TOG_RUNLS					0.6420858	0.437830389	0.167592509	0.002280475	0.2609155	0.0470188	2.1632509	0.0571704	0
Annual	TOG_STREX	0.2982995	0.4837354	0.414442	0.5394354	0.1062121	0.07488275	0.081525268	3.12806E-06	0.1340222	0.0517297	1.9979677	0.0388916	0
Summer	CH4_IDLEX	0	0	0	0	0.0061237	0.004389936	0.004255358	0.027809841	0.0090382	0	0	0.065697	0
Summer	CH4_RUNEX	0.0042787	0.010805	0.0067251	0.0096792	0.0074194	0.005115834	0.009551486	0.083384834	0.0122784	6.2198161	0.3754727	0.0080602	0.0034336
Summer	CH4_STREX	0.0526184	0.0764149	0.0709662	0.0868311	0.0187431	0.013277092	0.013118116	5.18424E-07	0.022176	0.0101333	0.2113879	0.0054885	0
Summer	CO_IDLEX	0	0	0	0	0.1970035	0.159214191	0.316038851	5.484387709	0.5667868	0	0	2.6346235	0

Summer	CO_RUNEX	0.942954	1.9889565	1.3461486	1.7502113	0.8654659	0.580029951	0.877261414	0.784582127	1.2564612 42.74362	18.944965	0.6842365	0.3081721
Summer	CO_STREX	1.9025438	2.0775737	2.437517	2.9688759	1.2166054	0.853178121	1.546571358	0.010676891	2.3993846 0.6271297	7.7295271	0.7035641	0
Summer	CO2_NBIO_IDLEX	0	0	0	0	8.9621693	13.42256787	71.6641988	1147.089702	99.60592 0	0	363.0037	0
Summer	CO2_NBIO_RUNEX	299.35288	349.17412	380.44271	462.7683	695.37767	698.0280099	1130.517778	1557.296285	1457.5602 1985.0986	221.93776	1133.355	992.05348
Summer	CO2_NBIO_STREX	55.836787	66.25641	72.89916	88.67189	13.33002	10.53759657	12.72009555	0.112929817	19.641499 8.5950303	58.431353	4.9546515	0
Summer	NOX_IDLEX	0	0	0	0	0.0535158	0.089881596	0.632329564	6.312287403	0.7156144 0	0	3.4358631	0
Summer	NOX_RUNEX	0.0471865	0.1395881	0.1001953	0.1392736	0.7581272	1.018372359	2.576398983	4.371148591	2.3562847 1.2026542	0.9902538	4.9331883	3.63764
Summer	NOX_STREX <sup>3</sup>	0.1939913	0.2820081	0.3194518	0.3919492	0.3620631	0.257810129	0.993058968	1.75493382	0.6094974 0.0798132	0.249366	0.7937447	0
Summer	PM10_IDLEX	0	0	0	0	0.0006753	0.001174191	0.001885816	0.012252105	0.0028372 0	0	0.0041305	0
Summer	PM10_PMBW	0.03675	0.03675	0.03675	0.03675	0.07644	0.089180026	0.130340037	0.061041559	0.13034 0.0726803	0.01176	0.7448002	0.13034
Summer	PM10_PMTW	0.008	0.008	0.008	0.008	0.0095182	0.010396907	0.012000003	0.035579073	0.012 0.0318756	0.004	0.0107491	0.016
Summer	PM10_RUNEX	0.002047	0.003245	0.002138	0.0023869	0.0069407	0.010687595	0.074904569	0.060283049	0.0532838 0.0036952	0.0023146	0.031878	0.091837
Summer	PM10_STREX	0.0020733	0.0030811	0.0020991	0.0023461	0.0003336	0.000191487	0.000154926	2.8198E-06	0.000199 3.639E-05	0.0034455	4.535E-05	0
Summer	PM25_IDLEX	0	0	0	0	0.0006461	0.001123396	0.001804236	0.011722085	0.0027145 0	0	0.0039518	0
Summer	PM25_PMBW	0.01575	0.01575	0.01575	0.01575	0.03276	0.038220011	0.055860016	0.026160668	0.05586 0.0311487	0.00504	0.3192001	0.05586
Summer	PM25_PMTW	0.002	0.002	0.002	0.002	0.0023796	0.002599227	0.003000001	0.008894768	0.003 0.0079689	0.001	0.0026873	0.004
Summer	PM25_RUNEX	0.0018863	0.0029867	0.0019677	0.0022023	0.0066075	0.010205891	0.071657144	0.057675185	0.0509641 0.0035328	0.0021659	0.0304862	0.0878642
Summer	PM25_STREX	0.0019065	0.0028333	0.0019301	0.0021597	0.0003072	0.000176065	0.000142449	2.61362E-06	0.0001831 3.346E-05	0.0032508	4.17E-05	0
Summer	ROG_DIURN	0.0953444	0.2369288	0.1247601	0.1434717	0.0043916	0.002805009	0.001206888	1.66712E-05	0.00269 0.0008898	1.745976	0.0013452	0
Summer	ROG_HTSK	0.1195759	0.2479078	0.1448012	0.1626543	0.0959215	0.066336853	0.031935569	0.000452343	0.0225083 0.0078714	0.7470017	0.0081038	0
Summer	ROG_IDLEX	0	0	0	0	0.0241018	0.019469199	0.023717212	0.478944965	0.067697 0	0	0.3078087	0
Summer	ROG_RESTL	0.0797138	0.1770017	0.1113125	0.1333621	0.0024685	0.001579756	0.000710135	1.13886E-05	0.0013038 0.0006206	1.0947567	0.0006591	0
Summer	ROG_RUNEX	0.0174387	0.0486604	0.0283385	0.0464091	0.058868	0.058441244	0.149032253	0.15387963	0.1455585 0.1559029	2.5769202	0.1044981	0.0739241
Summer	ROG_RUNLS	0.2178194	0.7619195	0.4131507	0.4403536	0.6214572	0.422854988	0.161619417	0.002254628	0.2541014 0.0427012	2.031064	0.0512502	0
Summer	ROG_STREX	0.2430254	0.3922006	0.3375591	0.4389275	0.0934388	0.065888411	0.071536582	2.7448E-06	0.1175011 0.0437507	1.6250491	0.0316753	0
Summer	SO2_IDLEX	0	0	0	0	8.726E-05	0.000128927	0.000681162	0.010672051	0.0009473 0	0	0.0034613	0
Summer	SO2_RUNEX	0.0029615	0.0034553	0.0037639	0.004576	0.006801	0.00676722	0.010810527	0.014252539	0.0141101 0.0014781	0.0021963	0.0108319	0.0093785
Summer	SO2_STREX	0.0005526	0.0006557	0.0007214	0.0008775	0.0001319	0.000104278	0.000125876	1.11753E-06	0.0001944 8.505E-05	0.0005782	4.903E-05	0
Summer	TOG_DIURN	0.0953444	0.2369288	0.1247601	0.1434717	0.0043916	0.002805009	0.001206888	1.66712E-05	0.00269 0.0008898	1.745976	0.0013452	0
Summer	TOG_HTSK	0.1195759	0.2479078	0.1448012	0.1626543	0.0959215	0.066336853	0.031935569	0.000452343	0.0225083 0.0078714	0.7470017	0.0081038	0
Summer	TOG_IDLEX	0	0	0	0	0.0343104	0.026967338	0.031768156	0.550846128	0.08577 0	0	0.4416786	0
Summer	TOG_RESTL	0.0797138	0.1770017	0.1113125	0.1333621	0.0024685	0.001579756	0.000710135	1.13886E-05	0.0013038 0.0006206	1.0947567	0.0006591	0
Summer	TOG_RUNEX	0.0253544	0.0708928	0.0412697	0.0642849	0.076316	0.071013049	0.175071972	0.252148601	0.1766358 6.4241804	3.1846151	0.1255835	0.0841576
Summer	TOG_RUNLS	0.2178194	0.7619195	0.4131507	0.4403536		0.422854988	0.161619417	0.002254628	0.2541014 0.0427012	2.031064	0.0512502	0
Summer	TOG_STREX	0.2660797	0.4294066	0.3695832	0.4805001	0.1022872	0.072139517	0.078323553	3.00521E-06	0.128639 0.0479015	1.7684096	0.0346805	0

Winter	CH4_IDLEX	0	0	0	0	0.0061081	0.004378579	0.004842587	0.020419006	0.0090689	0	0	0.0656817	0
Winter	CH4_RUNEX	0.0039296	0.010035	0.0062016	0.0090788	0.0072362	0.005032015	0.009446957	0.006941381	0.0120776	6.2198037	0.3850485	0.0079428	0.0034336
Winter	CH4_STREX	0.0598619	0.0875995	0.0808168	0.09899	0.0195529	0.013848049	0.013715046	5.46514E-07	0.0232793	0.0110727	0.2425477	0.0063035	0
Winter	CO_IDLEX	0	0	0	0	0.1970035	0.159214191	0.509805745	5.778100962	0.6586724	0	0	2.7324521	0
Winter	CO_RUNEX	0.8308537	1.781604	1.1937065	1.5892081	0.8475862	0.571081502	0.86522268	0.604268269	1.2333058	42.743006	19.903262	0.6715229	0.3081721
Winter	CO_STREX	2.3078684	2.5317599	2.9601659	3.602144	1.2835636	0.900172719	1.644415873	0.011352817	2.565479	0.7294941	8.6096122	0.892323	0
Winter	CO2_NBIO_IDLEX	0	0	0	0	8.9621693	13.42256787	67.7972226	1127.637331	96.741393	0	0	341.90986	0
Winter	CO2_NBIO_RUNEX	282.09898	331.5689	362.7545	444.14438	695.34513	698.0121206	1130.496468	1508.512564	1457.5193	1985.0975	223.76219	1133.3323	992.05348
Winter	CO2_NBIO_STREX	56.600246	67.180185	73.896055	89.8969	13.450765	10.62230595	12.88726259	0.114001674	19.925243	8.77168	60.677201	5.2697207	0
Winter	NOX_IDLEX	0	0	0	0	0.0535158	0.089881596	0.609575384	6.525561244	0.7024295	0	0	3.2501297	0
Winter	NOX_RUNEX	0.0520801	0.1553878	0.1109883	0.1543677	0.7951783	1.061254592	2.683806455	4.482790982	2.4643782	1.2045217	1.1071949	5.1377298	3.7789442
Winter	NOX_STREX <sup>3</sup>	0.2129777	0.3095365	0.3506982	0.4302422	0.381479	0.271628917	0.999652549	1.755042357	0.6226227	0.0843001	0.2664458	0.7980324	0
Winter	PM10_IDLEX	0	0	0	0	0.0006753	0.001174191	0.002715622	0.013872359	0.004082	0	0	0.0059422	0
Winter	PM10_PMBW	0.03675	0.03675	0.03675	0.03675	0.07644	0.089180026	0.130340037	0.060185438	0.13034	0.0726803	0.01176	0.7448002	0.13034
Winter	PM10_PMTW	0.008	0.008	0.008	0.008	0.0095182	0.010396907	0.012000003	0.035079877	0.012	0.0318756	0.004	0.0107491	0.016
Winter	PM10_RUNEX	0.002047	0.003245	0.002138	0.0023869	0.0069407	0.010687595	0.074904569	0.060169613	0.0532838	0.0036952	0.0023146	0.031878	0.091837
Winter	PM10_STREX	0.0020733	0.0030811	0.0020991	0.0023461	0.0003336	0.000191487	0.000154926	2.8198E-06	0.000199	3.639E-05	0.0034455	4.535E-05	0
Winter	PM25_IDLEX	0	0	0	0	0.0006461	0.001123396	0.002598146	0.013272247	0.0039054	0	0	0.0056851	0
Winter	PM25_PMBW	0.01575	0.01575	0.01575	0.01575	0.03276	0.038220011	0.055860016	0.025793759	0.05586	0.0311487	0.00504	0.3192001	0.05586
Winter	PM25_PMTW	0.002	0.002	0.002	0.002	0.0023796	0.002599227	0.003000001	0.008769969	0.003	0.0079689	0.001	0.0026873	0.004
Winter	PM25_RUNEX	0.0018863	0.0029867	0.0019677	0.0022023	0.0066075	0.010205891	0.071657144	0.057566656	0.0509641	0.0035328	0.0021659	0.0304862	0.0878642
Winter	PM25_STREX	0.0019065	0.0028333	0.0019301	0.0021597	0.0003072	0.000176065	0.000142449	2.61362E-06	0.0001831	3.346E-05	0.0032508	4.17E-05	0
Winter	ROG_DIURN	0.0608579	0.155245	0.0782728	0.0893946	0.0031701	0.002003834	0.000855196	1.11829E-05	0.0019741	0.0006007	1.1932818	0.0009696	0
Winter	ROG_HTSK	0.125827	0.2691164	0.1517926	0.169645	0.1087842	0.073743363	0.033858071	0.000525338	0.0235602	0.008148	0.8901119	0.008617	0
Winter	ROG_IDLEX	0	0	0	0	0.0241018	0.019469199	0.026558681	0.439615594	0.0687689	0	0	0.3088264	0
Winter	ROG_RESTL	0.0546043	0.1205973	0.0765887	0.0918338	0.001753	0.00110736	0.000492095	7.43312E-06	0.0009195	0.0004279	0.6544677	0.0004594	0
Winter	ROG_RUNEX	0.0161532	0.0454136	0.0263131	0.0444751	0.0579148	0.058045794	0.148515653	0.147609299	0.1445811	0.1558674	2.6627956	0.1038965	0.0739241
Winter	ROG_RUNLS	0.261942	0.9758104	0.5206898	0.5484499	0.6955506	0.47667963	0.183790803	0.002413815	0.2795528	0.0571214	2.4776173	0.0701644	0
Winter	ROG_STREX	0.2790722	0.4529361	0.3877473	0.5048577	0.0977936	0.06893301	0.075134314	2.88284E-06	0.1236009	0.0480391	1.8811136	0.0364039	0
Winter	SO2_IDLEX	0	0	0	0	8.726E-05	0.000128927	0.000644225	0.010653358	0.0009203	0	0	0.003262	0
Winter	SO2_RUNEX	0.0027908	0.003281	0.0035889	0.0043917	0.0068007	0.006767063	0.010810317	0.014252523	0.0141097	0.0014781	0.0022143	0.0108316	0.0093785
Winter	SO2_STREX	0.0005601	0.0006648	0.0007313	0.0008896	0.0001331	0.000105116	0.00012753	1.12814E-06	0.0001972	8.68E-05	0.0006005	5.215E-05	0
Winter	TOG_DIURN	0.0608579	0.155245	0.0782728	0.0893946	0.0031701	0.002003834	0.000855196	1.11829E-05	0.0019741	0.0006007	1.1932818	0.0009696	0
Winter	TOG_HTSK	0.125827	0.2691164	0.1517926	0.169645	0.1087842	0.073743363	0.033858071	0.000525338	0.0235602	0.008148	0.8901119	0.008617	0
Winter	TOG_IDLEX	0	0	0	0	0.0343104	0.026967338	0.035733308	0.50046889	0.0869903	0	0	0.4428372	0
Winter	TOG_RESTL	0.0546043	0.1205973	0.0765887	0.0918338	0.001753	0.00110736	0.000492095	7.43312E-06	0.0009195	0.0004279	0.6544677	0.0004594	0
Winter	TOG_RUNEX	0.0234791	0.0661557	0.0383145	0.0612283	0.0748941	0.07043601	0.174318151	0.168228548	0.1752026	6.4241286	3.2873103	0.1247056	0.0841576
Winter	TOG_RUNLS	0.261942	0.9758104	0.5206898	0.5484499	0.6955506	0.47667963	0.183790803	0.002413815	0.2795528	0.0571214	2.4776173	0.0701644	0
Winter	TOG_STREX	0.3055456	0.4959031	0.4245325	0.5526715	0.107054	0.075472969	0.082262616	3.15635E-06	0.1353169	0.0525968	2.0469656	0.0398577	0

<sup>1</sup> Source: California Air Resources Board. EMFAC2017 Web Database. https://www.arb.ca.gov/emfac/2017/; California Air Pollution Control Officers Association (CAPCOA). 2017, November. California Emissions Estimator Model User's Guide, Version 2016.3.2, Appendix A.

<sup>2</sup> Unless otherwise noted, per CalEEMod methodology, the calculated CalEEMod emission rates are derived from the emission rates obtained using the EMFAC2017 Web Database for the Los Angeles (SC) region.

<sup>3</sup> Because EMFAC2017 provides vehicle trips data for MHDT and HHDT diesel trucks, the formula provided in Appendix A of the CalEEMod User's Guide in calculating the NO  $_{\rm X}$  STREX emission rates are utilized.

# LDA CalEEMod Emission Rate Worksheet

	LDA CalEEMod Er	nission kate wor	ksneet			Vehicle Class:	LDA								
Season	Pollutant	Adjustment Factor		Emission Rates		154.0	Population	1545	154.6	VMT	1545	154.6	Trips	1545	CalEEMod Emission
Annual	CH4_IDLEX		Gas 0	DSL 0	ELEC	LDA Gas 3866064.188	LDA DSL 30352 05656	LDA Elec 56582 80628	LDA Gas	LDA DSL 1219039 023	LDA Elec 2228699.14	LDA Gas 18232131.5	LDA DSL 143014 557	LDA Elec 283769.3296	Rate 0
Annual	CH4_IDLLX CH4_RUNEX		_	0.001302578		3866064.188					2228699.14			283769.3296	0.004013581
Annual	CH4_STREX		0.059893348			3866064.188					2228699.14			283769.3296	0.058523413
Annual	CO_IDLEX	1	0	0	0	3866064.188	30352.05656	56582.80628	150964604.6	1219039.023	2228699.14	18232131.5	143014.557	283769.3296	0
Annual	CO_RUNEX	1	0.877955225	0.33180297	0	3866064.188	30352.05656	56582.80628	150964604.6	1219039.023	2228699.14	18232131.5	143014.557	283769.3296	0.860971615
Annual	CO_STREX	1	2.28379901			3866064.188					2228699.14			283769.3296	2.231561857
Annual	CO2_NBIO_IDLEX	1	0	_		3866064.188					2228699.14			283769.3296	0
Annual	CO2_NBIO_RUNEX	1	291.4/43113 57.77864684	226.5999481		3866064.188 3866064.188					2228699.14 2228699.14			283769.3296	286.7551748 56.45708045
Annual Annual	CO2_NBIO_STREX NOX_IDLEX	1	0 37.77804084			3866064.188					2228699.14			283769.3296 283769.3296	0
Annual	NOX_RUNEX	1	•	0.114729302		3866064.188								283769.3296	0.053690315
Annual	NOX_STREX	1	0.214425986			3866064.188					2228699.14			283769.3296	0.209521438
Annual	PM10_IDLEX	1	0	0	0	3866064.188	30352.05656	56582.80628	150964604.6	1219039.023	2228699.14	18232131.5	143014.557	283769.3296	0
Annual	PM10_PMBW		0.036750011	0.036750011	0.036750011	3866064.188	30352.05656	56582.80628	150964604.6	1219039.023	2228699.14	18232131.5	143014.557	283769.3296	0.036750011
Annual	PM10_PMTW			0.008000002							2228699.14			283769.3296	0.008000002
Annual	PM10_RUNEX	1	0.001980649	0.01400937		3866064.188					2228699.14			283769.3296	0.002047025
Annual	PM10_STREX	1	0.002121857	0		3866064.188					2228699.14			283769.3296	0.002073324
Annual Annual	PM25_IDLEX PM25_PMBW	1	0 0 015750005	0.015750005		3866064.188					2228699.14 2228699.14			283769.3296 283769.3296	0 0.015750005
Annual	PM25_PMTW			0.013730003										283769.3296	0.002000001
Annual	PM25_RUNEX	1		0.013403331		3866064.188					2228699.14			283769.3296	0.001886349
Annual	PM25_STREX		0.001951162			3866064.188					2228699.14			283769.3296	0.001906533
Annual	ROG_DIURN		0.298674885	0	0.022407439	3866064.188	30352.05656	56582.80628	150964604.6	1219039.023	2228699.14	18232131.5	143014.557	283769.3296	0.061952377
Annual	ROG_HTSK		0.118316517	0	0.004888026	3866064.188	30352.05656	56582.80628	150964604.6	1219039.023	2228699.14	18232131.5	143014.557	283769.3296	0.115684611
Annual	ROG_IDLEX		0	_		3866064.188					2228699.14			283769.3296	0
Annual	ROG_RESTL		0.275826153			3866064.188					2228699.14			283769.3296	0.057172991
Annual	ROG_RUNEX			0.028043737		3866064.188								283769.3296	0.016476543
Annual	ROG_RUNLS		0.236248824			3866064.188 3866064.188							143014.557	283769.3296	0.230845124 0.272453931
Annual Annual	ROG_STREX SO2_IDLEX		0.278831625	0		3866064.188					2228699.14			283769.3296 283769.3296	0.272453931
Annual	SO2_RUNEX		0.002884375	0.002142184		3866064.188					2228699.14			283769.3296	0.002836884
Annual	SO2_STREX		0.000571767	0.002112101		3866064.188					2228699.14			283769.3296	0.000558689
Annual	TOG_DIURN	1	0.298674885	0	0.022407439	3866064.188	30352.05656	56582.80628	150964604.6	1219039.023	2228699.14	18232131.5	143014.557	283769.3296	0.061952377
Annual	TOG_HTSK	1	0.118316517	0	0.004888026	3866064.188	30352.05656	56582.80628	150964604.6	1219039.023	2228699.14	18232131.5	143014.557	283769.3296	0.115684611
Annual	TOG_IDLEX	1	0	0	0	3866064.188	30352.05656	56582.80628	150964604.6	1219039.023	2228699.14	18232131.5	143014.557	283769.3296	0
Annual	TOG_RESTL	1	0.275826153			3866064.188					2228699.14			283769.3296	0.057172991
Annual	TOG_RUNEX		0.024239818			3866064.188					2228699.14			283769.3296	0.023950634
Annual	TOG_RUNLS		0.236248824			3866064.188					2228699.14			283769.3296	0.230845124
Annual Summer	TOG_STREX CH4 IDLEX	1	0.305282238			3866064.188 3866064.188					2228699.14			283769.3296 283769.3296	0.298299541 0
Summer	CH4_IDLLX CH4_RUNEX		_	0.001302578		3866064.188					2228699.14			283769.3296	0.004278669
Summer	CH4_STREX		0.053850089			3866064.188								283769.3296	0.052618381
Summer	_ CO_IDLEX	1	0	_		3866064.188					2228699.14			283769.3296	0
Summer	CO_RUNEX	1	0.961809917	0.33180297	0	3866064.188	30352.05656	56582.80628	150964604.6	1219039.023	2228699.14	18232131.5	143014.557	283769.3296	0.942953989
Summer	CO_STREX	1	1.947079204	0	0	3866064.188	30352.05656	56582.80628	150964604.6	1219039.023	2228699.14	18232131.5	143014.557	283769.3296	1.902543816
Summer	CO2_NBIO_IDLEX	1	0	_		3866064.188					2228699.14			283769.3296	0
Summer	CO2_NBIO_RUNEX	1		226.5999481		3866064.188					2228699.14			283769.3296	299.3528774
Summer	CO2_NBIO_STREX NOX_IDLEX	1	57.14383324 0	_		3866064.188 3866064.188					2228699.14 2228699.14			283769.3296 283769.3296	55.83678689 0
Summer Summer	NOX_IDLEX NOX_RUNEX	1	•	0.108429411		3866064.188					2228699.14			283769.3296	0.047186501
Summer	NOX_STREX	1	0.198532285			3866064.188								283769.3296	0.193991272
Summer	PM10_IDLEX	1	0			3866064.188					2228699.14			283769.3296	0
Summer	PM10_PMBW		0.036750011	0.036750011	0.036750011	3866064.188	30352.05656	56582.80628	150964604.6	1219039.023	2228699.14	18232131.5	143014.557	283769.3296	0.036750011
Summer	PM10_PMTW		0.008000002	0.008000002	0.008000002	3866064.188	30352.05656	56582.80628	150964604.6	1219039.023	2228699.14	18232131.5	143014.557	283769.3296	0.008000002
Summer	PM10_RUNEX	1	0.001980649	0.01400937		3866064.188					2228699.14			283769.3296	0.002047025
Summer	PM10_STREX	1	0.002121857	0		3866064.188					2228699.14			283769.3296	0.002073324
Summer	PM25_IDLEX	1	0.015750005	0.015750005		3866064.188					2228699.14			283769.3296	0 015750005
Summer	PM25_PMBW			0.015750005 0.002000001							2228699.14 2228699.14			283769.3296 283769.3296	0.015750005 0.002000001
Summer Summer	PM25_PMTW PM25_RUNEX	1		0.002000001		3866064.188								283769.3296	0.00200001
	PM25_STREX		0.001951162			3866064.188									0.001906533
Summer	ROG_DIURN		0.459564237			3866064.188									0.0953444
Summer	ROG_HTSK		0.122298925	0	0.004888026	3866064.188	30352.05656	56582.80628	150964604.6	1219039.023	2228699.14	18232131.5	143014.557	283769.3296	0.119575929
Summer	ROG_IDLEX		0	0	0	3866064.188	30352.05656	56582.80628	150964604.6	1219039.023	2228699.14	18232131.5	143014.557	283769.3296	0
Summer	ROG_RESTL		0.384495835	0	0.015694905	3866064.188	30352.05656	56582.80628	150964604.6	1219039.023	2228699.14	18232131.5	143014.557	283769.3296	0.079713832
Summer	ROG_RUNEX			0.028043737		3866064.188								283769.3296	0.017438689
Summer	ROG_RUNLS		0.222918229			3866064.188								283769.3296	0.217819438
Summer	ROG_STREX		0.248714261			3866064.188								283769.3296	0.24302544
Summer	SO2_IDLEX SO2_RUNEX		0 0 003011886	0.002142184		3866064.188 3866064.188						18232131.5 18232131.5		283769.3296	0 0.002961548
Summer Summer	SO2_RUNEX SO2_STREX		0.003011886			3866064.188								283769.3296	0.002961548
Summer	TOG_DIURN	1	0.459564237			3866064.188								283769.3296	0.0953444
Summer	TOG_HTSK		0.122298925			3866064.188								283769.3296	0.119575929
Summer	TOG_IDLEX	1	0	_		3866064.188								283769.3296	0
Summer	TOG_RESTL	1	0.384495835	0	0.015694905	3866064.188	30352.05656	56582.80628	150964604.6	1219039.023	2228699.14	18232131.5	143014.557	283769.3296	0.079713832
Summer	TOG_RUNEX		0.025675634			3866064.188						18232131.5	143014.557	283769.3296	0.025354391
Summer	TOG_RUNLS		0.222918229			3866064.188								283769.3296	0.217819438
Summer	TOG_STREX	1	0.272308208	0	0	3866064.188	30352.05656	56582.80628	150964604.6	1219039.023	2228699.14	18232131.5	143014.557	283/69.3296	0.266079724

Winter	CH4_IDLEX		0	0	0	3866064.188	30352.05656	56582.80628	150964604.6	1219039.023	2228699.14	18232131.5	143014.557	283769.3296	0
Winter	CH4_RUNEX		0.004008817	0.001302578	0	3866064.188	30352.05656	56582.80628	150964604.6	1219039.023	2228699.14	18232131.5	143014.557	283769.3296	0.003929591
Winter	CH4_STREX		0.061263122	0	0	3866064.188	30352.05656	56582.80628	150964604.6	1219039.023	2228699.14	18232131.5	143014.557	283769.3296	0.059861855
Winter	CO_IDLEX	1	0	0	0	3866064.188	30352.05656	56582.80628	150964604.6	1219039.023	2228699.14	18232131.5	143014.557	283769.3296	0
Winter	CO_RUNEX	1	0.847149487	0.33180297	0	3866064.188	30352.05656	56582.80628	150964604.6	1219039.023	2228699.14	18232131.5	143014.557	283769.3296	0.830853712
Winter	CO_STREX	1	2.361891734	0	0	3866064.188	30352.05656	56582.80628	150964604.6	1219039.023	2228699.14	18232131.5	143014.557	283769.3296	2.307868372
Winter	CO2_NBIO_IDLEX	1	0	0	0	3866064.188	30352.05656	56582.80628	150964604.6	1219039.023	2228699.14	18232131.5	143014.557	283769.3296	0
Winter	CO2_NBIO_RUNEX	1	286.7117747	226.5999481	0	3866064.188	30352.05656	56582.80628	150964604.6	1219039.023	2228699.14	18232131.5	143014.557	283769.3296	282.0989767
Winter	CO2_NBIO_STREX	1	57.92516373	0	0	3866064.188	30352.05656	56582.80628	150964604.6	1219039.023	2228699.14	18232131.5	143014.557	283769.3296	56.60024607
Winter	NOX_IDLEX	1	0	0	0	3866064.188	30352.05656	56582.80628	150964604.6	1219039.023	2228699.14	18232131.5	143014.557	283769.3296	0
Winter	NOX_RUNEX	1	0.052360577	0.112556072	0	3866064.188	30352.05656	56582.80628	150964604.6	1219039.023	2228699.14	18232131.5	143014.557	283769.3296	0.05208006
Winter	NOX_STREX	1	0.217963105	0	0	3866064.188	30352.05656	56582.80628	150964604.6	1219039.023	2228699.14	18232131.5	143014.557	283769.3296	0.212977652
Winter	PM10_IDLEX	1	0	0	0	3866064.188	30352.05656	56582.80628	150964604.6	1219039.023	2228699.14	18232131.5	143014.557	283769.3296	0
Winter	PM10_PMBW		0.036750011	0.036750011	0.036750011	3866064.188	30352.05656	56582.80628	150964604.6	1219039.023	2228699.14	18232131.5	143014.557	283769.3296	0.036750011
Winter	PM10_PMTW		0.008000002	0.008000002	0.008000002	3866064.188	30352.05656	56582.80628	150964604.6	1219039.023	2228699.14	18232131.5	143014.557	283769.3296	0.008000002
Winter	PM10_RUNEX	1	0.001980649	0.01400937	0	3866064.188	30352.05656	56582.80628	150964604.6	1219039.023	2228699.14	18232131.5	143014.557	283769.3296	0.002047025
Winter	PM10_STREX	1	0.002121857	0	0	3866064.188	30352.05656	56582.80628	150964604.6	1219039.023	2228699.14	18232131.5	143014.557	283769.3296	0.002073324
Winter	PM25_IDLEX	1	0	0	0	3866064.188	30352.05656	56582.80628	150964604.6	1219039.023	2228699.14	18232131.5	143014.557	283769.3296	0
Winter	PM25_PMBW		0.015750005	0.015750005	0.015750005	3866064.188	30352.05656	56582.80628	150964604.6	1219039.023	2228699.14	18232131.5	143014.557	283769.3296	0.015750005
Winter	PM25_PMTW		0.002000001	0.002000001	0.002000001	3866064.188	30352.05656	56582.80628	150964604.6	1219039.023	2228699.14	18232131.5	143014.557	283769.3296	0.002000001
Winter	PM25_RUNEX	1	0.001821198	0.013403331	0	3866064.188	30352.05656	56582.80628	150964604.6	1219039.023	2228699.14	18232131.5	143014.557	283769.3296	0.001886349
Winter	PM25_STREX	1	0.001951162	0	0	3866064.188	30352.05656	56582.80628	150964604.6	1219039.023	2228699.14	18232131.5	143014.557	283769.3296	0.001906533
Winter	ROG_DIURN		0.293484241	0	0.016129757	3866064.188	30352.05656	56582.80628	150964604.6	1219039.023	2228699.14	18232131.5	143014.557	283769.3296	0.060857856
Winter	ROG_HTSK		0.128696367	0	0.004888026	3866064.188	30352.05656	56582.80628	150964604.6	1219039.023	2228699.14	18232131.5	143014.557	283769.3296	0.125827044
Winter	ROG_IDLEX		0	0	0	3866064.188	30352.05656	56582.80628	150964604.6	1219039.023	2228699.14	18232131.5	143014.557	283769.3296	0
Winter	ROG_RESTL		0.26347167	0	0.004571725	3866064.188	30352.05656	56582.80628	150964604.6	1219039.023	2228699.14	18232131.5	143014.557	283769.3296	0.054604303
Winter	ROG_RUNEX		0.016295655	0.028043737	0	3866064.188	30352.05656	56582.80628	150964604.6	1219039.023	2228699.14	18232131.5	143014.557	283769.3296	0.016153201
Winter	ROG_RUNLS		0.268073663	0	0	3866064.188	30352.05656	56582.80628	150964604.6	1219039.023	2228699.14	18232131.5	143014.557	283769.3296	0.261942036
Winter	ROG_STREX		0.285604853	0	0	3866064.188	30352.05656	56582.80628	150964604.6	1219039.023	2228699.14	18232131.5	143014.557	283769.3296	0.279072235
Winter	SO2_IDLEX		0	0	0	3866064.188	30352.05656	56582.80628	150964604.6	1219039.023	2228699.14	18232131.5	143014.557	283769.3296	0
Winter	SO2_RUNEX		0.002837245	0.002142184	0	3866064.188	30352.05656	56582.80628	150964604.6	1219039.023	2228699.14	18232131.5	143014.557	283769.3296	0.002790807
Winter	SO2_STREX		0.000573216	0	0	3866064.188	30352.05656	56582.80628	150964604.6	1219039.023	2228699.14	18232131.5	143014.557	283769.3296	0.000560105
Winter	TOG_DIURN	1	0.293484241	0	0.016129757	3866064.188	30352.05656	56582.80628	150964604.6	1219039.023	2228699.14	18232131.5	143014.557	283769.3296	0.060857856
Winter	TOG_HTSK	1	0.128696367	0	0.004888026	3866064.188	30352.05656	56582.80628	150964604.6	1219039.023	2228699.14	18232131.5	143014.557	283769.3296	0.125827044
Winter	TOG_IDLEX	1	0	0	0	3866064.188	30352.05656	56582.80628	150964604.6	1219039.023	2228699.14	18232131.5	143014.557	283769.3296	0
Winter	TOG_RESTL	1	0.26347167	0	0.004571725	3866064.188	30352.05656	56582.80628	150964604.6	1219039.023	2228699.14	18232131.5	143014.557	283769.3296	0.054604303
Winter	TOG_RUNEX	1	0.023757523	0.03192593	0	3866064.188	30352.05656	56582.80628	150964604.6	1219039.023	2228699.14	18232131.5	143014.557	283769.3296	0.023479107
Winter	TOG_RUNLS	1	0.268073663	0	0	3866064.188	30352.05656	56582.80628	150964604.6	1219039.023	2228699.14	18232131.5	143014.557	283769.3296	0.261942036
Winter	TOG_STREX	1	0.31269792	0	0	3866064.188	30352.05656	56582.80628	150964604.6	1219039.023	2228699.14	18232131.5	143014.557	283769.3296	0.30554561

# **LDT1 CalEEMod Emission Rate Worksheet**

						Vehicle Class:	LDT1								
Season	Pollutant	Adjustment Factor		Emission Rate		LDT4 C	Population	LDT4 FL	LDT4 C	VMT	LDT4 FL	LDT4 C	Trips	LDT4 El	CalEEMod Emission
A	CITA IDIEV		Gas	DSL	ELEC	LDT1 Gas	LDT1 DSL	LDT1 Elec	LDT1 Gas	LDT1 DSL	LDT1 Elec	LDT1 Gas	LDT1 DSL	LDT1 Elec	Rate
Annual	CH4_IDLEX		0	_			312.1675222		16293150.81						0
Annual	CH4_RUNEX			0.009689377			312.1675222								0.010222896
Annual	CH4_STREX		0.085938298								62379.66099				0.085532328
Annual	CO_IDLEX	1	0	0							62379.66099				0
Annual	CO_RUNEX	1	1.845168433	1.21524069	0	428854.4701	312.1675222	1684.341741	16293150.81	7826.007863	62379.66099				1.837833091
Annual	CO_STREX	1	2.457928305	0	0	428854.4701	312.1675222	1684.341741	16293150.81	7826.007863	62379.66099	1973069.07	1117.567937	8247.398071	2.446317116
Annual	CO2_NBIO_IDLEX	1	0	0	0	428854.4701	312.1675222	1684.341741	16293150.81	7826.007863	62379.66099	1973069.07	1117.567937	8247.398071	0
Annual	CO2_NBIO_RUNEX	1	337.5406966	476.5827881	0	428854.4701	312.1675222	1684.341741	16293150.81	7826.007863	62379.66099	1973069.07	1117.567937	8247.398071	336.3204378
Annual	CO2_NBIO_STREX	1	67.32549383	0	0	428854.4701	312.1675222	1684.341741	16293150.81	7826.007863	62379.66099	1973069.07	1117.567937	8247.398071	67.00744998
Annual	NOX_IDLEX	1	0	0	0	428854.4701	312.1675222	1684.341741	16293150.81	7826.007863	62379.66099	1973069.07	1117.567937	8247.398071	0
Annual	NOX_RUNEX	1	0.160020862	1.147457483	0	428854.4701	312.1675222	1684.341741	16293150.81	7826.007863	62379.66099	1973069.07	1117.567937	8247.398071	0.159883093
Annual	NOX_STREX	1	0.305944554	0	0	428854.4701	312.1675222	1684.341741	16293150.81	7826.007863	62379.66099	1973069.07	1117.567937	8247.398071	0.30449928
Annual	PM10_IDLEX	1	0	0	0	428854.4701	312.1675222	1684.341741	16293150.81	7826.007863	62379.66099	1973069.07	1117.567937	8247.398071	0
Annual	PM10_PMBW		0.036750011	0.036750011							62379.66099				0.036750011
Annual	PM10 PMTW										62379.66099				0.008000002
Annual	PM10_RUNEX	1	0.003183512								62379.66099				0.003244965
Annual	PM10_STREX	1	0.003105312	0.137031130							62379.66099				0.003244303
	<del>-</del>	1	_	0											
Annual	PM25_IDLEX	1	0	0.045750005							62379.66099				0
Annual	PM25_PMBW										62379.66099				0.015750005
Annual	PM25_PMTW						312.1675222								0.002000001
Annual	PM25_RUNEX	1	0.002927431								62379.66099				0.002986734
Annual	PM25_STREX	1	0.002846776								62379.66099				0.002833328
Annual	ROG_DIURN		0.711635995	0	0.022407439	428854.4701	312.1675222	1684.341741	16293150.81	7826.007863	62379.66099	1973069.07	1117.567937	8247.398071	0.153965284
Annual	ROG_HTSK		0.238910929	0	0.004888026	428854.4701	312.1675222	1684.341741	16293150.81	7826.007863	62379.66099	1973069.07	1117.567937	8247.398071	0.237802656
Annual	ROG_IDLEX		0	0	0	428854.4701	312.1675222	1684.341741	16293150.81	7826.007863	62379.66099	1973069.07	1117.567937	8247.398071	0
Annual	ROG_RESTL		0.582948541	0	0.007500233	428854.4701	312.1675222	1684.341741	16293150.81	7826.007863	62379.66099	1973069.07	1117.567937	8247.398071	0.126114017
Annual	ROG_RUNEX		0.04633787	0.208606593	0	428854.4701	312.1675222	1684.341741	16293150.81	7826.007863	62379.66099	1973069.07	1117.567937	8247.398071	0.046238831
Annual	ROG_RUNLS		0.828576656	0	0	428854.4701	312.1675222	1684.341741	16293150.81	7826.007863	62379.66099	1973069.07	1117.567937	8247.398071	0.824662482
Annual	ROG STREX		0.44391968	0	0	428854.4701	312.1675222	1684.341741	16293150.81	7826.007863	62379.66099	1973069.07	1117.567937	8247.398071	0.441822615
Annual	SO2_IDLEX		0	0							62379.66099				0
Annual	SO2_RUNEX		•	0.004505421							62379.66099				0.003328063
Annual	SO2_STREX		0.00066624	0.00-303-21							62379.66099				0.000663093
	<del></del>	1		0							62379.66099				
Annual	TOG_DIURN	1	0.711635995												0.153965284
Annual	TOG_HTSK	1	0.238910929	_							62379.66099				0.237802656
Annual	TOG_IDLEX	1	0	0							62379.66099				0
Annual	TOG_RESTL	1	0.582948541								62379.66099				0.126114017
Annual	TOG_RUNEX	1	0.067535184	0.237484737	0	428854.4701	312.1675222	1684.341741	16293150.81	7826.007863	62379.66099	1973069.07	1117.567937	8247.398071	0.067359011
Annual	TOG_RUNLS	1	0.828576656	0	0	428854.4701	312.1675222	1684.341741	16293150.81	7826.007863	62379.66099	1973069.07	1117.567937	8247.398071	0.824662482
Annual	TOG_STREX	1	0.486031437	0	0	428854.4701	312.1675222	1684.341741	16293150.81	7826.007863	62379.66099	1973069.07	1117.567937	8247.398071	0.483735438
Summer	CH4_IDLEX		0	0	0	428854.4701	312.1675222	1684.341741	16293150.81	7826.007863	62379.66099	1973069.07	1117.567937	8247.398071	0
Summer	CH4_RUNEX		0.01084695	0.009689377	0	428854.4701	312.1675222	1684.341741	16293150.81	7826.007863	62379.66099	1973069.07	1117.567937	8247.398071	0.010805046
Summer	CH4_STREX		0.076777627	0	0	428854.4701	312.1675222	1684.341741	16293150.81	7826.007863	62379.66099	1973069.07	1117.567937	8247.398071	0.076414932
Summer	CO_IDLEX	1	0	0	0	428854.4701	312.1675222	1684.341741	16293150.81	7826.007863	62379.66099	1973069.07	1117.567937	8247.398071	0
Summer	CO_RUNEX	1	1.996943038	1.21524069							62379.66099				1.98895652
Summer	CO_STREX	1	2.087434656								62379.66099				2.07757367
Summer	CO2_NBIO_IDLEX	- 1	0	0							62379.66099				0
Summer	CO2_NBIO_RUNEX	1	350.4497675	ū							62379.66099				349.1741233
Summer	CO2_NBIO_STREX	1	66.57088893	470.3027001 N							62379.66099				66.25640981
_		1	00.57088553	0							62379.66099				00.23040381
Summer	NOX_IDLEX	1	•	ŭ											•
Summer	NOX_RUNEX	1		1.084508355							62379.66099				0.139588076
Summer	NOX_STREX	1	0.28334662	0							62379.66099				0.282008098
Summer	PM10_IDLEX	1	0	0							62379.66099				0
Summer	PM10_PMBW										62379.66099				0.036750011
Summer	PM10_PMTW										62379.66099				0.008000002
Summer	PM10_RUNEX	1	0.003183512								62379.66099				0.003244965
Summer	PM10_STREX	1	0.003095733	0	0	428854.4701	312.1675222	1684.341741	16293150.81	7826.007863	62379.66099	1973069.07	1117.567937	8247.398071	0.003081109
Summer	PM25_IDLEX	1	0	0							62379.66099				0
Summer	PM25_PMBW		0.015750005	0.015750005	0.015750005	428854.4701	312.1675222	1684.341741	16293150.81	7826.007863	62379.66099	1973069.07	1117.567937	8247.398071	0.015750005
Summer	PM25_PMTW		0.002000001	0.002000001	0.002000001	428854.4701	312.1675222	1684.341741	16293150.81	7826.007863	62379.66099	1973069.07	1117.567937	8247.398071	0.002000001
Summer	PM25_RUNEX	1	0.002927431	0.150257232	0	428854.4701	312.1675222	1684.341741	16293150.81	7826.007863	62379.66099	1973069.07	1117.567937	8247.398071	0.002986734
Summer	PM25_STREX	1	0.002846776	0	0	428854.4701	312.1675222	1684.341741	16293150.81	7826.007863	62379.66099	1973069.07	1117.567937	8247.398071	0.002833328
Summer	ROG_DIURN		1.095072281	0	0.040970996	428854.4701	312.1675222	1684.341741	16293150.81	7826.007863	62379.66099	1973069.07	1117.567937	8247.398071	0.236928767
Summer	ROG_HTSK		0.249064075	0	0.004888026	428854.4701	312.1675222	1684.341741	16293150.81	7826.007863	62379.66099	1973069.07	1117.567937	8247.398071	0.247907838
	ROG_IDLEX		0	_							62379.66099				0
	ROG_RESTL		0.818151208	_							62379.66099				0.177001722
	ROG_RUNEX			0.208606593							62379.66099				0.048660361
	ROG_RUNLS		0.765535867								62379.66099				0.761919495
	<del>-</del>										62379.66099				
	ROG_STREX		0.394062119	_											0.39220058
	SO2_IDLEX		0.003467095	_							62379.66099				0 00345536
	SO2_RUNEX			0.004505421							62379.66099				0.00345526
	SO2_STREX		0.000658773								62379.66099				0.000655661
	TOG_DIURN		1.095072281								62379.66099				0.236928767
	TOG_HTSK	1	0.249064075	0							62379.66099				0.247907838
Summer	TOG_IDLEX	1	0	0	0	428854.4701	312.1675222	1684.341741	16293150.81	7826.007863	62379.66099	1973069.07	1117.567937	8247.398071	0
Summer	TOG_RESTL	1	0.818151208	0	0.015694905	428854.4701	312.1675222	1684.341741	16293150.81	7826.007863	62379.66099	1973069.07	1117.567937	8247.398071	0.177001722
Summer	TOG_RUNEX	1	0.071084172	0.237484737	0	428854.4701	312.1675222	1684.341741	16293150.81	7826.007863	62379.66099	1973069.07	1117.567937	8247.398071	0.070892771
Summer	TOG_RUNLS	1	0.765535867	0	0	428854.4701	312.1675222	1684.341741	16293150.81	7826.007863	62379.66099	1973069.07	1117.567937	8247.398071	0.761919495
	TOG_STREX	1	0.431444687	0	0	428854.4701	312.1675222	1684.341741	16293150.81	7826.007863	62379.66099	1973069.07	1117.567937	8247.398071	0.429406554
	_														

Vehicle Class: LDT1

Winter	CH4_IDLEX		0	0	0	428854.4701	312.1675222	1684.341741	16293150.81	7826.007863	62379.66099	1973069.07	1117.567937	8247.398071	0
Winter	CH4_RUNEX	0	0.010073619	0.009689377	0	428854.4701	312.1675222	1684.341741	16293150.81	7826.007863	62379.66099	1973069.07	1117.567937	8247.398071	0.010035033
Winter	CH4_STREX		0.08801533	0	0	428854.4701	312.1675222	1684.341741	16293150.81	7826.007863	62379.66099	1973069.07	1117.567937	8247.398071	0.087599547
Winter	CO_IDLEX	1	0	0	0	428854.4701	312.1675222	1684.341741	16293150.81	7826.007863	62379.66099	1973069.07	1117.567937	8247.398071	0
Winter	CO_RUNEX	1 1	L.788697046	1.21524069	0	428854.4701	312.1675222	1684.341741	16293150.81	7826.007863	62379.66099	1973069.07	1117.567937	8247.398071	1.781603991
Winter	CO_STREX	1 2	2.543776661	0	0	428854.4701	312.1675222	1684.341741	16293150.81	7826.007863	62379.66099	1973069.07	1117.567937	8247.398071	2.531759928
Winter	CO2_NBIO_IDLEX	1	0	0	0	428854.4701	312.1675222	1684.341741	16293150.81	7826.007863	62379.66099	1973069.07	1117.567937	8247.398071	0
Winter	CO2_NBIO_RUNEX	1 3	332.7686889	476.5827881	0	428854.4701	312.1675222	1684.341741	16293150.81	7826.007863	62379.66099	1973069.07	1117.567937	8247.398071	331.568904
Winter	CO2_NBIO_STREX	1 6	7.49904885	0	0	428854.4701	312.1675222	1684.341741	16293150.81	7826.007863	62379.66099	1973069.07	1117.567937	8247.398071	67.18018513
Winter	NOX_IDLEX	1	0	0	0	428854.4701	312.1675222	1684.341741	16293150.81	7826.007863	62379.66099	1973069.07	1117.567937	8247.398071	0
Winter	NOX_RUNEX	1 0	0.155516581	1.125744191	0	428854.4701	312.1675222	1684.341741	16293150.81	7826.007863	62379.66099	1973069.07	1117.567937	8247.398071	0.155387753
Winter	NOX_STREX	1 0	0.311005665	0	0	428854.4701	312.1675222	1684.341741	16293150.81	7826.007863	62379.66099	1973069.07	1117.567937	8247.398071	0.309536482
Winter	PM10_IDLEX	1	0	0	0	428854.4701	312.1675222	1684.341741	16293150.81	7826.007863	62379.66099	1973069.07	1117.567937	8247.398071	0
Winter	PM10_PMBW	0	0.036750011	0.036750011	0.036750011	428854.4701	312.1675222	1684.341741	16293150.81	7826.007863	62379.66099	1973069.07	1117.567937	8247.398071	0.036750011
Winter	PM10_PMTW	0	0.008000002	0.008000002	0.008000002	428854.4701	312.1675222	1684.341741	16293150.81	7826.007863	62379.66099	1973069.07	1117.567937	8247.398071	0.008000002
Winter	PM10_RUNEX	1 0	0.003183512	0.157051198	0	428854.4701	312.1675222	1684.341741	16293150.81	7826.007863	62379.66099	1973069.07	1117.567937	8247.398071	0.003244965
Winter	PM10_STREX	1 0	0.003095733	0	0	428854.4701	312.1675222	1684.341741	16293150.81	7826.007863	62379.66099	1973069.07	1117.567937	8247.398071	0.003081109
Winter	PM25_IDLEX	1	0	0	0	428854.4701	312.1675222	1684.341741	16293150.81	7826.007863	62379.66099	1973069.07	1117.567937	8247.398071	0
Winter	PM25_PMBW	0	0.015750005	0.015750005	0.015750005	428854.4701	312.1675222	1684.341741	16293150.81	7826.007863	62379.66099	1973069.07	1117.567937	8247.398071	0.015750005
Winter	PM25_PMTW	0	0.002000001	0.002000001	0.002000001	428854.4701	312.1675222	1684.341741	16293150.81	7826.007863	62379.66099	1973069.07	1117.567937	8247.398071	0.002000001
Winter	PM25_RUNEX	1 0	0.002927431	0.150257232	0	428854.4701	312.1675222	1684.341741	16293150.81	7826.007863	62379.66099	1973069.07	1117.567937	8247.398071	0.002986734
Winter	PM25_STREX	1 0	0.002846776	0	0	428854.4701	312.1675222	1684.341741	16293150.81	7826.007863	62379.66099	1973069.07	1117.567937	8247.398071	0.002833328
Winter	ROG_DIURN	0	0.717576276	0	0.016129757	428854.4701	312.1675222	1684.341741	16293150.81	7826.007863	62379.66099	1973069.07	1117.567937	8247.398071	0.155244995
Winter	ROG_HTSK	0	0.270373251	0	0.004888026	428854.4701	312.1675222	1684.341741	16293150.81	7826.007863	62379.66099	1973069.07	1117.567937	8247.398071	0.26911635
Winter	ROG_IDLEX		0	0	0	428854.4701	312.1675222	1684.341741	16293150.81	7826.007863	62379.66099	1973069.07	1117.567937	8247.398071	0
Winter	ROG_RESTL	0	0.557458161	0	0.004571725	428854.4701	312.1675222	1684.341741	16293150.81	7826.007863	62379.66099	1973069.07	1117.567937	8247.398071	0.120597266
Winter	ROG_RUNEX	0	0.045509126	0.208606593	0	428854.4701	312.1675222	1684.341741	16293150.81	7826.007863	62379.66099	1973069.07	1117.567937	8247.398071	0.045413642
Winter	ROG_RUNLS	0	0.980441949	0	0	428854.4701	312.1675222	1684.341741	16293150.81	7826.007863	62379.66099	1973069.07	1117.567937	8247.398071	0.975810367
Winter	ROG_STREX	0	0.455085883	0	0	428854.4701	312.1675222	1684.341741	16293150.81	7826.007863	62379.66099	1973069.07	1117.567937	8247.398071	0.452936069
Winter	SO2_IDLEX		0	0	0	428854.4701	312.1675222	1684.341741	16293150.81	7826.007863	62379.66099	1973069.07	1117.567937	8247.398071	0
Winter	SO2_RUNEX	0	0.003293016	0.004505421	0	428854.4701	312.1675222	1684.341741	16293150.81	7826.007863	62379.66099	1973069.07	1117.567937	8247.398071	0.003281042
Winter	SO2_STREX	0	0.000667958	0	0	428854.4701	312.1675222	1684.341741	16293150.81	7826.007863	62379.66099	1973069.07	1117.567937	8247.398071	0.000664802
Winter	TOG_DIURN	1 0	).717576276	0	0.016129757	428854.4701	312.1675222	1684.341741	16293150.81	7826.007863	62379.66099	1973069.07	1117.567937	8247.398071	0.155244995
Winter	TOG_HTSK	1 0	0.270373251	0	0.004888026	428854.4701	312.1675222	1684.341741	16293150.81	7826.007863	62379.66099	1973069.07	1117.567937	8247.398071	0.26911635
Winter	TOG_IDLEX	1	0	0	0	428854.4701	312.1675222	1684.341741	16293150.81	7826.007863	62379.66099	1973069.07	1117.567937	8247.398071	0
Winter	TOG_RESTL	1 0	).557458161	0	0.004571725	428854.4701	312.1675222	1684.341741	16293150.81	7826.007863	62379.66099	1973069.07	1117.567937	8247.398071	0.120597266
Winter	TOG_RUNEX	1 0	0.066326661	0.237484737	0	428854.4701	312.1675222	1684.341741	16293150.81	7826.007863	62379.66099	1973069.07	1117.567937	8247.398071	0.066155672
Winter	TOG_RUNLS	1 0	).980441949	0	0	428854.4701	312.1675222	1684.341741	16293150.81	7826.007863	62379.66099	1973069.07	1117.567937	8247.398071	0.975810367
Winter	TOG_STREX	1	0.49825681	0	0	428854.4701	312.1675222	1684.341741	16293150.81	7826.007863	62379.66099	1973069.07	1117.567937	8247.398071	0.495903061

# **LDT2 CalEEMod Emission Rate Worksheet**

						Vehicle Class:	LDT2								
Season	Pollutant	Adjustment Factor		Emission Rates			Population			VMT			Trips		CalEEMod Emission
			Gas	DSL	ELEC	LDT2 Gas	LDT2 DSL	LDT2 Elec	LDT2 Gas	LDT2 DSL	LDT2 Elec	LDT2 Gas	LDT2 DSL	LDT2 Elec	Rate
Annual	CH4_IDLEX		0	0	0	1322602.473	7131.093038	8029.10038	51063337.64	318825.7868	273177.1123	6195500.594	35395.58403	40766.95908	0
Annual	CH4_RUNEX		0.006393965	0.001135669	0	1322602.473	7131.093038	8029.10038	51063337.64	318825.7868	273177.1123	6195500.594	35395.58403	40766.95908	0.006327695
Annual	CH4_STREX		0.079966553	0	0	1322602.473	7131.093038	8029.10038	51063337.64	318825.7868	273177.1123	6195500.594	35395.58403	40766.95908	0.078995446
Annual	CO_IDLEX	1	0	0	0	1322602.473	7131.093038	8029.10038	51063337.64	318825.7868	273177.1123	6195500.594	35395.58403	40766.95908	0
Annual	CO RUNEX	1	1.247911663	0.186933238	0	1322602.473	7131.093038	8029.10038	51063337.64	318825.7868	273177.1123	6195500.594	35395.58403	40766.95908	1.23476359
Annual	CO STREX	1	2.896450729	0	0	1322602.473	7131.093038	8029.10038	51063337.64	318825.7868	273177.1123	6195500.594	35395.58403	40766.95908	2.861276478
Annual	CO2_NBIO_IDLEX	1	0	0		1322602.473				318825.7868					0
Annual	CO2_NBIO_RUNEX	1	· ·	309.5651916		1322602.473				318825.7868					367.5279298
		1	74.61448541	0 309.3031910											
Annual	CO2_NBIO_STREX	1		0		1322602.473				318825.7868					73.70837345
Annual	NOX_IDLEX	1	0	0		1322602.473				318825.7868					0
Annual	NOX_RUNEX	1		0.055942019						318825.7868					0.114351305
Annual	NOX_STREX	1	0.349243926	0						318825.7868					0.345002737
Annual	PM10_IDLEX	1	0	0		1322602.473				318825.7868					0
Annual	PM10_PMBW		0.036750011	0.036750011	0.036750011	1322602.473	7131.093038	8029.10038	51063337.64	318825.7868	273177.1123	6195500.594	35395.58403	40766.95908	0.036750011
Annual	PM10_PMTW		0.008000002	0.008000002	0.008000002	1322602.473	7131.093038	8029.10038	51063337.64	318825.7868	273177.1123	6195500.594	35395.58403	40766.95908	0.008000002
Annual	PM10_RUNEX	1	0.002115505	0.007569909	0	1322602.473	7131.093038	8029.10038	51063337.64	318825.7868	273177.1123	6195500.594	35395.58403	40766.95908	0.002137983
Annual	PM10_STREX	1	0.002124858	0	0	1322602.473	7131.093038	8029.10038	51063337.64	318825.7868	273177.1123	6195500.594	35395.58403	40766.95908	0.002099054
Annual	PM25_IDLEX	1	0	0	0	1322602.473	7131.093038	8029.10038	51063337.64	318825.7868	273177.1123	6195500.594	35395.58403	40766.95908	0
Annual	PM25_PMBW		0.015750005	0.015750005	0.015750005	1322602.473	7131.093038	8029.10038	51063337.64	318825.7868	273177.1123	6195500.594	35395.58403	40766.95908	0.015750005
Annual	PM25_PMTW				0.002000001					318825.7868					0.002000001
Annual	PM25_RUNEX	1	0.001945245			1322602.473				318825.7868					0.001967653
Annual	PM25_STREX	1	0.001953865	0.007242430						318825.7868					0.001930137
	<del>-</del>	_	0.384299577	0						318825.7868					0.081071874
Annual	ROG_DIURN														
Annual	ROG_HTSK		0.141765792	0						318825.7868					0.140075974
Annual	ROG_IDLEX		0	0		1322602.473				318825.7868					0
Annual	ROG_RESTL		0.380545109		0.007500233	1322602.473	7131.093038	8029.10038	51063337.64	318825.7868	273177.1123	6195500.594	35395.58403	40766.95908	0.080261027
Annual	ROG_RUNEX		0.026980231	0.024450284	0	1322602.473	7131.093038	8029.10038	51063337.64	318825.7868	273177.1123	6195500.594	35395.58403	40766.95908	0.026821932
Annual	ROG_RUNLS		0.450183255	0	0	1322602.473	7131.093038	8029.10038	51063337.64	318825.7868	273177.1123	6195500.594	35395.58403	40766.95908	0.444716268
Annual	ROG_STREX		0.383184486	0	0	1322602.473	7131.093038	8029.10038	51063337.64	318825.7868	273177.1123	6195500.594	35395.58403	40766.95908	0.378531127
Annual	SO2_IDLEX		0	0	0	1322602.473	7131.093038	8029.10038	51063337.64	318825.7868	273177.1123	6195500.594	35395.58403	40766.95908	0
Annual	SO2_RUNEX		0.003660025	0.002926504	0	1322602.473	7131.093038	8029.10038	51063337.64	318825.7868	273177.1123	6195500.594	35395.58403	40766.95908	0.003636142
Annual	SO2_STREX		0.000738371	0	0	1322602.473	7131.093038	8029.10038	51063337.64	318825.7868	273177.1123	6195500.594	35395.58403	40766.95908	0.000729404
Annual	TOG_DIURN	1	0.384299577	0						318825.7868					0.081071874
Annual	TOG_HTSK	_ 1	0.141765792							318825.7868					0.140075974
Annual	TOG_IDLEX	1	0.111703732	0						318825.7868					0
	TOG_RESTL	1	0.380545109	ŭ						318825.7868					0.080261027
Annual	_	1													
Annual	TOG_RUNEX	1	0.039335649	_						318825.7868					0.03905664
Annual	TOG_RUNLS		0.450183255	0						318825.7868					0.444716268
Annual	TOG_STREX	1	0.419536808	0						318825.7868					0.414441988
Summer	CH4_IDLEX		0	0	0	1322602.473	7131.093038	8029.10038	51063337.64	318825.7868	273177.1123	6195500.594	35395.58403	40766.95908	0
Summer	CH4_RUNEX		0.006795989	0.001135669	0	1322602.473	7131.093038	8029.10038	51063337.64	318825.7868	273177.1123	6195500.594	35395.58403	40766.95908	0.006725112
Summer	CH4_STREX		0.071838602	0	0	1322602.473	7131.093038	8029.10038	51063337.64	318825.7868	273177.1123	6195500.594	35395.58403	40766.95908	0.0709662
Summer	CO_IDLEX	1	0	0	0	1322602.473	7131.093038	8029.10038	51063337.64	318825.7868	273177.1123	6195500.594	35395.58403	40766.95908	0
Summer	CO_RUNEX	1	1.36058798	0.186933238	0	1322602.473	7131.093038	8029.10038	51063337.64	318825.7868	273177.1123	6195500.594	35395.58403	40766.95908	1.346148565
Summer	CO_STREX	1	2.467481875	0	0	1322602.473	7131.093038	8029.10038	51063337.64	318825.7868	273177.1123	6195500.594	35395.58403	40766.95908	2.437516985
Summer	CO2_NBIO_IDLEX	1	0	0	0	1322602.473	7131.093038	8029.10038	51063337.64	318825.7868	273177.1123	6195500.594	35395.58403	40766.95908	0
Summer	CO2_NBIO_RUNEX	_ 1	382.9205327	309.5651916						318825.7868					380.4427115
Summer	CO2_NBIO_STREX	_ 1	73.79532401	0						318825.7868					72.89915988
Summer	NOX_IDLEX	1	0	0						318825.7868					0
Summer	NOX_IDEEX	1	0.101026832	ŭ						318825.7868					0.100195303
_	_	1		0.032800703											
Summer	NOX_STREX	1	0.323378935	0						318825.7868					0.319451848
Summer	PM10_IDLEX	1	0	0						318825.7868					0
Summer	PM10_PMBW									318825.7868					0.036750011
Summer	PM10_PMTW									318825.7868					0.008000002
Summer	PM10_RUNEX	1	0.002115505	0.007569909						318825.7868					0.002137983
Summer	PM10_STREX	1	0.002124858	0	0	1322602.473	7131.093038	8029.10038	51063337.64	318825.7868	273177.1123	6195500.594	35395.58403	40766.95908	0.002099054
Summer	PM25_IDLEX	1	0	0						318825.7868					0
Summer	PM25_PMBW		0.015750005	0.015750005	0.015750005	1322602.473	7131.093038	8029.10038	51063337.64	318825.7868	273177.1123	6195500.594	35395.58403	40766.95908	0.015750005
Summer	PM25_PMTW		0.002000001	0.002000001	0.002000001	1322602.473	7131.093038	8029.10038	51063337.64	318825.7868	273177.1123	6195500.594	35395.58403	40766.95908	0.002000001
Summer	PM25_RUNEX	1	0.001945245	0.007242438	0	1322602.473	7131.093038	8029.10038	51063337.64	318825.7868	273177.1123	6195500.594	35395.58403	40766.95908	0.001967653
Summer	PM25_STREX	1	0.001953865	0	0	1322602.473	7131.093038	8029.10038	51063337.64	318825.7868	273177.1123	6195500.594	35395.58403	40766.95908	0.001930137
	ROG_DIURN		0.591352499							318825.7868					0.124760087
	ROG_HTSK		0.146549153							318825.7868					0.144801246
	ROG_IDLEX		0							318825.7868					0
	ROG_RESTL		0.527738807	_						318825.7868					0.111312526
	ROG_RUNEX			0.024450284						318825.7868					0.028338492
	<del>-</del>														
	ROG_RUNLS		0.418229672	_						318825.7868					0.413150726
	ROG_STREX		0.341708797	0						318825.7868					0.337559115
	SO2_IDLEX		0	_						318825.7868					0
	SO2_RUNEX			0.002926504						318825.7868					0.003763944
	SO2_STREX		0.000730265							318825.7868					0.000721396
Summer	TOG_DIURN	1	0.591352499							318825.7868					0.124760087
Summer	TOG_HTSK	1	0.146549153	0	0.004888026	1322602.473	7131.093038	8029.10038	51063337.64	318825.7868	273177.1123	6195500.594	35395.58403	40766.95908	0.144801246
Summer	TOG_IDLEX	1	0	0	0	1322602.473	7131.093038	8029.10038	51063337.64	318825.7868	273177.1123	6195500.594	35395.58403	40766.95908	0
Summer	TOG_RESTL	1	0.527738807	0	0.015694905	1322602.473	7131.093038	8029.10038	51063337.64	318825.7868	273177.1123	6195500.594	35395.58403	40766.95908	0.111312526
Summer	TOG_RUNEX	1	0.041574394	0.027835023	0	1322602.473	7131.093038	8029.10038	51063337.64	318825.7868	273177.1123	6195500.594	35395.58403	40766.95908	0.041269728
	TOG_RUNLS	1	0.418229672	0						318825.7868					0.413150726
	TOG_STREX		0.374126567	0						318825.7868					0.369583206
	_	_								3.3	3				<del>-</del>

Vehicle Class: LDT2

Winter	CH4_IDLEX		0	0	0	1322602.473	7131.093038	8029.10038	51063337.64	318825.7868	273177.1123	6195500.594	35395.58403	40766.95908	0
Winter	CH4_RUNEX		0.006266364	0.001135669	0	1322602.473	7131.093038	8029.10038	51063337.64	318825.7868	273177.1123	6195500.594	35395.58403	40766.95908	0.006201557
Winter	CH4_STREX		0.081810268	0	0	1322602.473	7131.093038	8029.10038	51063337.64	318825.7868	273177.1123	6195500.594	35395.58403	40766.95908	0.080816771
Winter	CO_IDLEX	1	0	0	0	1322602.473	7131.093038	8029.10038	51063337.64	318825.7868	273177.1123	6195500.594	35395.58403	40766.95908	0
Winter	CO_RUNEX	1	1.206378606	0.186933238	0	1322602.473	7131.093038	8029.10038	51063337.64	318825.7868	273177.1123	6195500.594	35395.58403	40766.95908	1.193706528
Winter	CO_STREX	1	2.996555776	0	0	1322602.473	7131.093038	8029.10038	51063337.64	318825.7868	273177.1123	6195500.594	35395.58403	40766.95908	2.960165858
Winter	CO2_NBIO_IDLEX	1	0	0	0	1322602.473	7131.093038	8029.10038	51063337.64	318825.7868	273177.1123	6195500.594	35395.58403	40766.95908	0
Winter	CO2_NBIO_RUNEX	1	365.0272513	309.5651916	0	1322602.473	7131.093038	8029.10038	51063337.64	318825.7868	273177.1123	6195500.594	35395.58403	40766.95908	362.7544984
Winter	CO2_NBIO_STREX	1	74.80447407	0	0	1322602.473	7131.093038	8029.10038	51063337.64	318825.7868	273177.1123	6195500.594	35395.58403	40766.95908	73.89605491
Winter	NOX_IDLEX	1	0	0	0	1322602.473	7131.093038	8029.10038	51063337.64	318825.7868	273177.1123	6195500.594	35395.58403	40766.95908	0
Winter	NOX_RUNEX	1	0.111932388	0.054881042	0	1322602.473	7131.093038	8029.10038	51063337.64	318825.7868	273177.1123	6195500.594	35395.58403	40766.95908	0.110988307
Winter	NOX_STREX	1	0.355009355	0	0	1322602.473	7131.093038	8029.10038	51063337.64	318825.7868	273177.1123	6195500.594	35395.58403	40766.95908	0.350698152
Winter	PM10_IDLEX	1	0	0	0	1322602.473	7131.093038	8029.10038	51063337.64	318825.7868	273177.1123	6195500.594	35395.58403	40766.95908	0
Winter	PM10_PMBW		0.036750011	0.036750011	0.036750011	1322602.473	7131.093038	8029.10038	51063337.64	318825.7868	273177.1123	6195500.594	35395.58403	40766.95908	0.036750011
Winter	PM10_PMTW		0.008000002	0.008000002	0.008000002	1322602.473	7131.093038	8029.10038	51063337.64	318825.7868	273177.1123	6195500.594	35395.58403	40766.95908	0.008000002
Winter	PM10_RUNEX	1	0.002115505	0.007569909	0	1322602.473	7131.093038	8029.10038	51063337.64	318825.7868	273177.1123	6195500.594	35395.58403	40766.95908	0.002137983
Winter	PM10_STREX	1	0.002124858	0	0	1322602.473	7131.093038	8029.10038	51063337.64	318825.7868	273177.1123	6195500.594	35395.58403	40766.95908	0.002099054
Winter	PM25_IDLEX	1	0	0	0	1322602.473	7131.093038	8029.10038	51063337.64	318825.7868	273177.1123	6195500.594	35395.58403	40766.95908	0
Winter	PM25_PMBW		0.015750005	0.015750005	0.015750005	1322602.473	7131.093038	8029.10038	51063337.64	318825.7868	273177.1123	6195500.594	35395.58403	40766.95908	0.015750005
Winter	PM25_PMTW		0.002000001	0.002000001	0.002000001	1322602.473	7131.093038	8029.10038	51063337.64	318825.7868	273177.1123	6195500.594	35395.58403	40766.95908	0.002000001
Winter	PM25_RUNEX	1	0.001945245	0.007242438	0	1322602.473	7131.093038	8029.10038	51063337.64	318825.7868	273177.1123	6195500.594	35395.58403	40766.95908	0.001967653
Winter	PM25_STREX	1	0.001953865	0	0	1322602.473	7131.093038	8029.10038	51063337.64	318825.7868	273177.1123	6195500.594	35395.58403	40766.95908	0.001930137
Winter	ROG_DIURN		0.371064678	0	0.016129757	1322602.473	7131.093038	8029.10038	51063337.64	318825.7868	273177.1123	6195500.594	35395.58403	40766.95908	0.078272789
Winter	ROG_HTSK		0.153626404	0	0.004888026	1322602.473	7131.093038	8029.10038	51063337.64	318825.7868	273177.1123	6195500.594	35395.58403	40766.95908	0.151792551
Winter	ROG_IDLEX		0	0	0	1322602.473	7131.093038	8029.10038	51063337.64	318825.7868	273177.1123	6195500.594	35395.58403	40766.95908	0
Winter	ROG_RESTL		0.363149237	0	0.004571725	1322602.473	7131.093038	8029.10038	51063337.64	318825.7868	273177.1123	6195500.594	35395.58403	40766.95908	0.076588741
Winter	ROG_RUNEX		0.026465532	0.024450284	0	1322602.473	7131.093038	8029.10038	51063337.64	318825.7868	273177.1123	6195500.594	35395.58403	40766.95908	0.026313132
Winter	ROG_RUNLS		0.527090783	0	0	1322602.473	7131.093038	8029.10038	51063337.64	318825.7868	273177.1123	6195500.594	35395.58403	40766.95908	0.520689837
Winter	ROG_STREX		0.392514001	0	0	1322602.473	7131.093038	8029.10038	51063337.64	318825.7868	273177.1123	6195500.594	35395.58403	40766.95908	0.387747344
Winter	SO2_IDLEX		0	0	0	1322602.473	7131.093038	8029.10038	51063337.64	318825.7868	273177.1123	6195500.594	35395.58403	40766.95908	0
Winter	SO2_RUNEX		0.003612241	0.002926504	0	1322602.473	7131.093038	8029.10038	51063337.64	318825.7868	273177.1123	6195500.594	35395.58403	40766.95908	0.003588905
Winter	SO2_STREX		0.000740251	0	0	1322602.473	7131.093038	8029.10038	51063337.64	318825.7868	273177.1123	6195500.594	35395.58403	40766.95908	0.000731261
Winter	TOG_DIURN	1	0.371064678	0	0.016129757	1322602.473	7131.093038	8029.10038	51063337.64	318825.7868	273177.1123	6195500.594	35395.58403	40766.95908	0.078272789
Winter	TOG_HTSK	1	0.153626404	0	0.004888026	1322602.473	7131.093038	8029.10038	51063337.64	318825.7868	273177.1123	6195500.594	35395.58403	40766.95908	0.151792551
Winter	TOG_IDLEX	1	0	0	0	1322602.473	7131.093038	8029.10038	51063337.64	318825.7868	273177.1123	6195500.594	35395.58403	40766.95908	0
Winter	TOG_RESTL	1	0.363149237	0	0.004571725	1322602.473	7131.093038	8029.10038	51063337.64	318825.7868	273177.1123	6195500.594	35395.58403	40766.95908	0.076588741
Winter	TOG_RUNEX	1	0.038584922	0.027835023	0	1322602.473	7131.093038	8029.10038	51063337.64	318825.7868	273177.1123	6195500.594	35395.58403	40766.95908	0.038314517
Winter	TOG_RUNLS	1	0.527090783	0	0	1322602.473	7131.093038	8029.10038	51063337.64	318825.7868	273177.1123	6195500.594	35395.58403	40766.95908	0.520689837
Winter	TOG_STREX	1	0.42975136	0	0	1322602.473	7131.093038	8029.10038	51063337.64	318825.7868	273177.1123	6195500.594	35395.58403	40766.95908	0.4245325
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# **MDV CalEEMod Emission Rate Worksheet**

	MDV CalEEMod E	mission Rate Wo	rksheet												
Season	Pollutant	Adjustment Factor		Emission Rates		Vehicle Class:	MDV Population			VMT			Trips		CalEEMod Emission
Jeason	Foliutalit	Aujustinent Factor	Gas	DSL	ELEC	MDV Gas	MDV DSL	MDV Elec	MDV Gas	MDV DSL	MDV Elec	MDV Gas	MDV DSL	MDV Elec	Rate
Annual	CH4_IDLEX		0	0		900366.1975			32167365.31					13052.63635	0
Annual	CH4_RUNEX		0.009425153	0.000882706	C	900366.1975	15733.02459	2547.8702	32167365.31	651825.9359	89339.97409	4164561.993	77845.5286	13052.63635	0.009230364
Annual	CH4_STREX		0.098855254	0	C	900366.1975	15733.02459	2547.8702	32167365.31	651825.9359	89339.97409	4164561.993	77845.5286	13052.63635	0.09674367
Annual	CO_IDLEX	1	0	0	C	900366.1975	15733.02459	2547.8702	32167365.31	651825.9359	89339.97409	4164561.993	77845.5286	13052.63635	0
Annual	CO_RUNEX	1	1.666410741	0.294349223	C	900366.1975	15733.02459	2547.8702	32167365.31	651825.9359	89339.97409	4164561.993	77845.5286	13052.63635	1.634710074
Annual	CO_STREX	1	3.558392122	0		900366.1975									3.482383582
Annual	CO2_NBIO_IDLEX	1	0	0		900366.1975									0
Annual	CO2_NBIO_RUNEX		451.3948125	401.1402375		900366.1975									449.1739648
Annual	CO2_NBIO_STREX	1	91.62361011	0		900366.1975									89.66649673
Annual	NOX_IDLEX NOX_RUNEX	1	0.161346275	0.062514724		900366.1975 900366.1975									0 0.158970483
Annual Annual	NOX_STREX		0.432492209	0.003314724		900366.1975									0.423254019
Annual	PM10 IDLEX	1	0.432432203	0		900366.1975									0.423234013
Annual	PM10_PMBW	-	0.036750011	•		1 900366.1975									0.036750011
Annual	PM10_PMTW		0.008000002	0.008000002	0.008000002	900366.1975	15733.02459	2547.8702	32167365.31	651825.9359	89339.97409	4164561.993	77845.5286	13052.63635	0.008000002
Annual	PM10_RUNEX	1	0.002303292	0.006837808	C	900366.1975	15733.02459	2547.8702	32167365.31	651825.9359	89339.97409	4164561.993	77845.5286	13052.63635	0.002386855
Annual	PM10_STREX	1	0.002397292	0	C	900366.1975	15733.02459	2547.8702	32167365.31	651825.9359	89339.97409	4164561.993	77845.5286	13052.63635	0.002346085
Annual	PM25_IDLEX	1	0	0	C	900366.1975	15733.02459	2547.8702	32167365.31	651825.9359	89339.97409	4164561.993	77845.5286	13052.63635	0
Annual	PM25_PMBW					900366.1975									0.015750005
Annual	PM25_PMTW					1 900366.1975									0.002000001
Annual	PM25_RUNEX		0.002120522	0.006542007		900366.1975									0.002202342
Annual	PM25_STREX	1	0.002206833	0		900366.1975									0.002159694
Annual	ROG_DIURN ROG_HTSK		0.44042364 0.161388363	0		9 900366.1975 9 900366.1975									0.093197829 0.157956042
Annual Annual	ROG_IDLEX		0.101388303	0		900366.1975									0.137936042
Annual	ROG_RESTL		0.454092851	0		900366.1975									0.096081022
Annual	ROG_RUNEX		0.045684261			900366.1975									0.045031779
Annual	ROG_RUNLS		0.482297302	0		900366.1975									0.471995258
Annual	ROG_STREX		0.503521699	0		900366.1975									0.492766293
Annual	SO2_IDLEX		0	0	0	900366.1975	15733.02459	2547.8702	32167365.31	651825.9359	89339.97409	4164561.993	77845.5286	13052.63635	0
Annual	SO2_RUNEX		0.004466918	0.003792218	C	900366.1975	15733.02459	2547.8702	32167365.31	651825.9359	89339.97409	4164561.993	77845.5286	13052.63635	0.004441427
Annual	SO2_STREX		0.00090669	0		900366.1975								13052.63635	0.000887323
Annual	TOG_DIURN	1	0.44042364	0		9 900366.1975									0.093197829
Annual	TOG_HTSK	1	0.161388363	0		900366.1975									0.157956042
Annual	TOG_IDLEX	1	0 454003951	0		900366.1975									0 006081033
Annual Annual	TOG_RESTL TOG_RUNEX		0.454092851 0.063071067	0 0 021634943		900366.1975 900366.1975									0.096081022 0.062079108
Annual	TOG_RUNLS		0.482297302	0.021034343		900366.1975									0.471995258
Annual	TOG_STREX		0.551209444	0		900366.1975									0.539435412
Summer	CH4_IDLEX		0	0		900366.1975									0
Summer	CH4_RUNEX		0.009884284	0.000882706	(	900366.1975	15733.02459	2547.8702	32167365.31	651825.9359	89339.97409	4164561.993	77845.5286	13052.63635	0.009679154
Summer	CH4_STREX		0.088726326	0	(	900366.1975	15733.02459	2547.8702	32167365.31	651825.9359	89339.97409	4164561.993	77845.5286	13052.63635	0.0868311
Summer	CO_IDLEX	1	0	0	C	900366.1975	15733.02459	2547.8702	32167365.31	651825.9359	89339.97409	4164561.993	77845.5286	13052.63635	0
Summer	CO_RUNEX		1.784573214	0.294349223		900366.1975									1.750211292
Summer	CO_STREX	1	3.033676277	0		900366.1975									2.968875856
Summer	CO2_NBIO_IDLEX	1	0	0		900366.1975									0
Summer	CO2_NBIO_RUNEX		465.3023736	401.1402375		900366.1975 900366.1975									462.7682998
Summer Summer	CO2_NBIO_STREX NOX_IDLEX	1	90.60729451	0		900366.1975									88.67188999 0
Summer	NOX_RUNEX	1	0.141266325	ū		900366.1975									0.139273634
Summer	NOX_STREX	1	0.400504143	0		900366.1975									0.39194923
Summer	PM10_IDLEX	1	0	0	C	900366.1975	15733.02459	2547.8702	32167365.31	651825.9359	89339.97409	4164561.993	77845.5286	13052.63635	0
Summer	PM10_PMBW		0.036750011	0.036750011	0.036750011	900366.1975	15733.02459	2547.8702	32167365.31	651825.9359	89339.97409	4164561.993	77845.5286	13052.63635	0.036750011
Summer	PM10_PMTW					900366.1975							77845.5286	13052.63635	0.008000002
Summer	PM10_RUNEX		0.002303292	0.006837808		900366.1975									0.002386855
Summer	PM10_STREX	1	0.002397292	0		900366.1975								13052.63635	0.002346085
Summer	PM25_IDLEX	1	0	0		900366.1975									0
Summer	PM25_PMBW PM25_PMTW			0.015750005		5 900366.1975 L 900366.1975									0.015750005 0.002000001
Summer	PM25_RUNEX	1		0.002000001		900366.1975									0.00200001
	PM25_STREX		0.002120322	0.000342007		900366.1975									0.002252542
Summer	ROG_DIURN	-	0.677983842	0		900366.1975									0.143471705
	ROG_HTSK		0.166189214	0		900366.1975									0.162654345
Summer	ROG_IDLEX		0	0	C	900366.1975	15733.02459	2547.8702	32167365.31	651825.9359	89339.97409	4164561.993	77845.5286	13052.63635	0
Summer	ROG_RESTL		0.630273812	0	0.015694905	900366.1975	15733.02459	2547.8702	32167365.31	651825.9359	89339.97409	4164561.993	77845.5286	13052.63635	0.133362128
Summer	ROG_RUNEX		0.047093352	0.019004134	C	900366.1975	15733.02459	2547.8702	32167365.31	651825.9359	89339.97409	4164561.993	77845.5286	13052.63635	0.046409134
	ROG_RUNLS		0.449965062	0		900366.1975									0.440353645
	ROG_STREX		0.448507759	0		900366.1975									0.438927472
	SO2_IDLEX		0 004604544	0 002702219		900366.1975									0
	SO2_RUNEX		0.004604544	0.003/92218		900366.1975									0.004575954
	SO2_STREX TOG_DIURN	1	0.000896633 0.677983842	0		900366.1975 900366.1975									0.00087748 0.143471705
	TOG_HTSK		0.166189214	0		900366.1975									0.162654345
Summer	TOG_ITISK TOG_IDLEX	1	0.100183214	0		900366.1975									0.102034343
	TOG_RESTL	1	0.630273812	0		5 900366.1975									0.133362128
	TOG_RUNEX		0.065327714			900366.1975									0.064284931
Summer	TOG_RUNLS	1	0.449965062	0	C	900366.1975	15733.02459	2547.8702	32167365.31	651825.9359	89339.97409	4164561.993	77845.5286	13052.63635	0.440353645
Summer	TOG_STREX	1	0.490987739	0	C	900366.1975	15733.02459	2547.8702	32167365.31	651825.9359	89339.97409	4164561.993	77845.5286	13052.63635	0.480500063

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Winter	CH4_IDLEX	0.000370436							651825.9359					0
Winter	CH4_RUNEX		0.000882706						651825.9359		4164561.993			0.009078828
Winter	CH4_STREX	0.101150653							651825.9359					0.098990038
Winter	CO_IDLEX	1 (							651825.9359		4164561.993			0
Winter	CO_RUNEX		0.294349223						651825.9359		4164561.993			1.58920814
Winter	CO_STREX	1 3.680766499							651825.9359					3.602143998
Winter	CO2_NBIO_IDLEX	1 (							651825.9359					0
Winter	CO2_NBIO_RUNEX		401.1402375						651825.9359					444.1443765
Winter	CO2_NBIO_STREX	1 91.85904205							651825.9359		4164561.993			89.89689975
Winter	NOX_IDLEX	1 (							651825.9359					0
Winter	NOX_RUNEX		0.062310502						651825.9359		4164561.993			0.15436765
Winter	NOX_STREX	1 0.439632914	0						651825.9359					0.430242196
Winter	PM10_IDLEX	1 (							651825.9359					0
Winter	PM10_PMBW		0.036750011	0.036750011 9										0.036750011
Winter	PM10_PMTW			0.008000002 9	900366.1975	15733.02459	2547.8702	32167365.31	651825.9359	89339.97409	4164561.993	77845.5286	13052.63635	0.008000002
Winter	=	1 0.002303292							651825.9359		4164561.993			0.002386855
Winter	PM10_STREX	1 0.002397292	2 0						651825.9359					0.002346085
Winter	PM25_IDLEX	1 (	0	0 9	900366.1975	15733.02459	2547.8702	32167365.31	651825.9359	89339.97409	4164561.993	77845.5286	13052.63635	0
Winter	PM25_PMBW		0.015750005	0.015750005 9										0.015750005
Winter	PM25_PMTW	0.002000001	0.002000001	0.002000001 9	900366.1975	15733.02459	2547.8702	32167365.31	651825.9359	89339.97409	4164561.993	77845.5286	13052.63635	0.002000001
Winter	PM25_RUNEX	1 0.002120522	0.006542007	0 9	900366.1975	15733.02459	2547.8702	32167365.31	651825.9359	89339.97409	4164561.993	77845.5286	13052.63635	0.002202342
Winter	PM25_STREX	1 0.002206833	0	0 9	900366.1975	15733.02459	2547.8702	32167365.31	651825.9359	89339.97409	4164561.993	77845.5286	13052.63635	0.002159694
Winter	ROG_DIURN	0.422465845	0	0.016129757 9	900366.1975	15733.02459	2547.8702	32167365.31	651825.9359	89339.97409	4164561.993	77845.5286	13052.63635	0.089394578
Winter	ROG_HTSK	0.173332436	0	0.004888026 9	900366.1975	15733.02459	2547.8702	32167365.31	651825.9359	89339.97409	4164561.993	77845.5286	13052.63635	0.169644986
Winter	ROG_IDLEX	(	0	0 9	900366.1975	15733.02459	2547.8702	32167365.31	651825.9359	89339.97409	4164561.993	77845.5286	13052.63635	0
Winter	ROG_RESTL	0.434027114	0	0.004571725 9	900366.1975	15733.02459	2547.8702	32167365.31	651825.9359	89339.97409	4164561.993	77845.5286	13052.63635	0.09183378
Winter	ROG_RUNEX	0.045114744	0.019004134	0 9	900366.1975	15733.02459	2547.8702	32167365.31	651825.9359	89339.97409	4164561.993	77845.5286	13052.63635	0.044475088
Winter	ROG_RUNLS	0.560420738	0	0 9	900366.1975	15733.02459	2547.8702	32167365.31	651825.9359	89339.97409	4164561.993	77845.5286	13052.63635	0.548449949
Winter	ROG_STREX	0.51587698	0	0 9	900366.1975	15733.02459	2547.8702	32167365.31	651825.9359	89339.97409	4164561.993	77845.5286	13052.63635	0.504857661
Winter	SO2_IDLEX	(	0	0 9	900366.1975	15733.02459	2547.8702	32167365.31	651825.9359	89339.97409	4164561.993	77845.5286	13052.63635	0
Winter	SO2_RUNEX	0.004415999	0.003792218	0 9	900366.1975	15733.02459	2547.8702	32167365.31	651825.9359	89339.97409	4164561.993	77845.5286	13052.63635	0.004391655
Winter	SO2_STREX	0.00090902	2 0	0 9	900366.1975	15733.02459	2547.8702	32167365.31	651825.9359	89339.97409	4164561.993	77845.5286	13052.63635	0.000889603
Winter	TOG_DIURN	1 0.422465845	0	0.016129757 9	900366.1975	15733.02459	2547.8702	32167365.31	651825.9359	89339.97409	4164561.993	77845.5286	13052.63635	0.089394578
Winter	TOG_HTSK	1 0.173332436	0	0.004888026 9	900366.1975	15733.02459	2547.8702	32167365.31	651825.9359	89339.97409	4164561.993	77845.5286	13052.63635	0.169644986
Winter	TOG_IDLEX	1 (	0	0 9	900366.1975	15733.02459	2547.8702	32167365.31	651825.9359	89339.97409	4164561.993	77845.5286	13052.63635	0
Winter	TOG_RESTL	1 0.434027114	0	0.004571725 9	900366.1975	15733.02459	2547.8702	32167365.31	651825.9359	89339.97409	4164561.993	77845.5286	13052.63635	0.09183378
Winter	TOG_RUNEX	1 0.062200672	0.021634943	0 9	900366.1975	15733.02459	2547.8702	32167365.31	651825.9359	89339.97409	4164561.993	77845.5286	13052.63635	0.061228317
Winter	TOG_RUNLS	1 0.560420738	0	0 9	900366.1975	15733.02459	2547.8702	32167365.31	651825.9359	89339.97409	4164561.993	77845.5286	13052.63635	0.548449949
Winter	TOG_STREX	1 0.56473445	0	0 9	900366.1975	15733.02459	2547.8702	32167365.31	651825.9359	89339.97409	4164561.993	77845.5286	13052.63635	0.552671519

# LDH1 CalEEMod Emission Rate Worksheet

March   Marc	6	LDH1 CalEEMod	Vehicle Class:				\/a 4 <b>-</b>			<b>-</b>		Outernal in the state of		
Marcian   Marc	Season	Pollutant		nission Rates	FLFC LHDT1 Gas	Population	LHDT1 Flec	I HDT1 Gas	VMT	I HDT1 Flec	I HDT1 Gas	Trips		CalEEMod Emission
March   Marc	Annual	CH4 IDLEX												
No.   No.   No.   Tests		_												
Call	Annual	_					0	3921730.857	2399173.004	0	1579678.117	685911.0666	0	
Marcial   15,5   Marcial   15,6   Marc	Annual	CO_IDLEX	3.74161954	0.909745076	0 106029.2685	54529.3851	0	3921730.857	2399173.004	0	1579678.117	685911.0666	0	0.19700351
Amenia   C.S., No. C.   May   Language   L	Annual	CO_RUNEX	1.128102274	0.399227471	0 106029.2685	54529.3851	0	3921730.857	2399173.004	0	1579678.117	685911.0666	0	0.851449316
COL   NOT   NOT	Annual	CO_STREX	1.8263067	0	0 106029.2685		0	3921730.857		0	1579678.117		0	1.27338917
American   Color   C														
Month   Mont														
Nove														
Month   Mont		_												
Name		_												
Marcis   M		_												
Marcis   Month   Mon		_												
Marcial   Med.   Display   Med.   Disp		_					0			0	1579678.117	685911.0666	0	
Part	Annual	PM10_RUNEX	0.001437107	0.015936872	0 106029.2685	54529.3851	0	3921730.857	2399173.004	0	1579678.117	685911.0666	0	0.006940662
Month   Mont	Annual	PM10_STREX	0.000478462	0	0 106029.2685	54529.3851	0	3921730.857	2399173.004	0	1579678.117	685911.0666	0	0.000333607
Martina	Annual	PM25_IDLEX	0	0.026842375	0 106029.2685	54529.3851	0	3921730.857	2399173.004	0			0	0.000646056
Month   Mon	Annual	_					0			0			0	
Montang   Mont		_												
Amala   ROS_DURN		_					_							
More		_		•										
Amusa    DOC   DICKT    0.07973975   0.0   100073-2655   5423-2851   0.0   32177-2657   2019712.004   0.1   17970-117 (82911.0066   0.0   0.00179699		_												
Montable   Montable		_												
Amenia   ROS_BINES   0.04717847   0.077789072   0.100007-2685   5423-2861   0.1 392170.0587   7.289917.0004   0.1 1757678.117   58911.0666   0.042082757   0.04208275   0.04208275   0.100007-2685   5423-2861   0.1 392170.0587   7.289917.0004   0.1 1757678.117   58911.0666   0.04208275   0.		_												
Money   Mone		_		0.075783022			0			0			0	
Name   No.	Annual	_	0.920885445	0	0 106029.2685	54529.3851	0	3921730.857	2399173.004	0	1579678.117	685911.0666	0	0.642085775
Name	Annual	ROG_STREX	0.139153536	0	0 106029.2685	54529.3851	0	3921730.857	2399173.004	0	1579678.117	685911.0666	0	0.097024561
Amala   OZ_STREX   O.00139067   O   0.000129285   542-93851   O   391780.877   289917.004   O   175967.817   68911.0066   O   0.000129738   Anala   OZ_STREX   OZ_S	Annual	SO2_IDLEX	0.001212261	0.001268309	0 106029.2685	54529.3851	0	3921730.857	2399173.004	0	1579678.117	685911.0666	0	8.726E-05
Annual   ORC, DIURN	Annual	SO2_RUNEX		0.004525183			0			0			0	0.006800729
Armalol         OGE_HISK         0.154246996         0         0.099292865         5429.3851         0         3921780.867         289917.004         0         1.759678.117         68911 0.066         0         0.098409441           Annual         OGE, REIN         0.032813976         0         1.05029.2865         5429.3851         0         3921780.867         239917.004         0         1.75967.8117         68911 0.066         0         0.00178688           Annual         TOGE, RUNK         0.92882545         0         1.05029.2865         5429.3851         0         3921730.857         2399173.004         0         1.759678117         68911 0.066         0         0.04220578           Annual         TOGE, RUNK         0.02882545         0         1.05029.2865         5429.3851         0         3921730.857         2399173.004         0         1.759678.117         68911 0.066         0         0.04220578           Summer         OHLICK         0.128228877         0.000992.2865         5429.3851         0         3921730.857         2399173.004         0         1.759678.117         68911 0.066         0         0.042430578           Summer         OHLICK         0.128228877         0         1.05027.2865         5429.3851         0		_		_										
Mary		_											•	
Annual   TOC_REST   O.974813976   O. 100922688   54529.3811   O. 3912170.857   239171.004   O. 157978.117   689911.0666   O. 0.07520268   Annual   TOC_RUNIS   O.96842964   O.882495   O. 10.00937685   54579.3851   O. 3912170.857   239171.004   O. 157978.117   688911.0666   O. 0.07520268   Annual   TOC_RUNIS   O.950885495   O. 0.100937685   54579.3851   O. 3912170.857   239173.004   O. 157978.117   688911.0666   O. 0.06242075   O. 0.06242075		_											-	
Paralle   TOG_RINKE   TOG_RINKE   TOG_RINKE   TOG_ROSPASS   TOG_ROSPAS		_											-	
Martial   Mart		_					_						-	
Name		_		_									_	
Summer   CH_BUNEK   CO.90881473   0.003191977   0.1 0000724085   45/29.3851   0.1 3921730857   2399173.004   0.1 579787.117   689911.00666   0.0 0.007419867   0.0 0.00741967   0.0 0.007419867   0.0 0.007419867   0.0 0.007419867   0.0 0.007419867   0.0 0.007419867   0.0 0.007419867   0.0 0.00741986	Annual	_		0			0			0			0	
Summer   Column   C	Summer	CH4_IDLEX	0.128226877	0.005098128	0 106029.2685	54529.3851	0	3921730.857	2399173.004	0	1579678.117	685911.0666	0	0.006123705
Summer   CO_DELK   3,74161954   0,909745076   0   0.00922865   54529.3851   0   3921730.857   2399173.004   0   1.579678.117   685911.0666   0   0.685645398   0   3921730.857   2399173.004   0   1.579678.117   685911.0666   0   0.685645398   0   3921730.857   2399173.004   0   1.579678.117   685911.0666   0   0.685645398   0   3921730.857   2399173.004   0   1.579678.117   685911.0666   0   0.685645398   0   0.000820.000	Summer	CH4_RUNEX	0.009804873	0.003519977	0 106029.2685	54529.3851	0	3921730.857	2399173.004	0	1579678.117	685911.0666	0	0.007419367
Numer   CO   NUMEX   1.150693691   0.39927471   0   0.00093.685   5459.3851   0   3921730.857   239917.004   0   1579678.117   68591.0666   0   0.265665494	Summer	CH4_STREX	0.026881473	0	0 106029.2685	54529.3851	0	3921730.857	2399173.004	0	1579678.117	685911.0666	0	0.01874306
Summer   CO_NRIO_NIO_NIO_NIO_NIO_NIO_NIO_NIO_NIO_NIO_N		_					_			_			-	
Summer   CQ_NBIG_DIDEX   122.5024704   134.1615423   0   106003-2685   54529.3851   0   3912730.857   2399173.004   0   1579678.117   689911.0666   0   6.9537666   0   5.95		_		_						_			-	
Summer   CQ_NBIO_SIRDK   R979496138   478.6732076   0 106092.685   5459.3851   0 391730.087   239173.004   0 1579678.117   68911.0666   0 1.33002002		_					_			_			-	
Summer   Mod, Dist   Distance													_	
Summer Nox   Nox	_						_						-	
Summer   NOX   RUNEX   0.27073171   1.656137634   0   0.0020.2685   54.59.3851   0   392173.0857   2399173.004   0   1579678.117   685911.0666   0   0.36206188   Summer   PM10   DIEX   0.00640022   0.076440022   0.076440022   0.06029.2685   54.59.3851   0   392173.0857   2399173.004   0   1579678.117   685911.0666   0   0.006675268   Summer   PM10   PM10   NOM800000   0.01000000   0.1000000   0.1000000   0.1000000   0.1000000   0.1000000   0.1000000   0.1000000   0.1000000   0.1000000   0.1000000   0.1000000   0.1000000   0.1000000   0.1000000   0.1000000   0.10000000   0.10000000   0.1000000   0.10000000   0.10000000   0.10000000   0.10000000   0.10000000   0.10000000   0.10000000   0.10000000   0.10000000   0.10000000   0.10000000   0.10000000   0.100000000   0.100000000   0.100000000   0.100000000   0.100000000   0.1000000000   0.1000000000   0.1000000000   0.1000000000   0.1000000000   0.1000000000   0.10000000000													-	
Summer   NOK   SPEKK   0.519274366   0   0.106029.2685   5459.3851   0   3921730.857   2399173.004   0   1579678.117   685911.0666   0   0.00655268   0.0065526		_					0			0			0	
Summer         PM10_PMBW         0.076440022         0.076440022         0.076440022         0.076440022         0.076440022         0.076440022         0.076440022         0.076440022         0.076440022         0.00800000         0.010000000         0.010000000         0.00951825          Summer PM10_PMTW         0.00800000         0.010000000         0.006946662         0.009446662         0.009446662               Summer PM10_STREK             0.000478462             0             0.106029_2685             54529_3851             0             3921730.857             2399173.004             0             1579678.117             685911.0666             0             0.000346662               Summer PM25_DILEK             0.00047862             0             0.106029_2685              54529_3851             0             3921730.857             2399173.004             0             1579678.117             685911.0666             0             0.003276009               Summer PM25_PMBW             0.032760009             0.03266005             54529_3851             0             3921730.857             2399173.004             0             1579678.117             685911.0666             0             0.003276009               Summer PM25_PMBW             0.003276009             0.0060292685             54529.3851	Summer	_	0.519274366	0	0 106029.2685	54529.3851	0	3921730.857	2399173.004	0	1579678.117	685911.0666	0	0.362063148
Summer   Milo   PMITO   Molo   0.00800000   0.102000001   0.105092685   54529.3851   0. 3921730.857   2399173.004   0. 1579678.117   685911.0666   0. 0.006940662   0. 0. 0.006940662   0. 0.00	Summer	PM10_IDLEX	0	0.028056068	0 106029.2685	54529.3851	0	3921730.857	2399173.004	0	1579678.117	685911.0666	0	0.000675268
Summer   Milo_TRINEX   0.001437107   0.015936872   0.106029.2685   54529.3851   0.106129.2685   54529	Summer	PM10_PMBW	0.076440022	0.076440022	0 106029.2685	54529.3851	0	3921730.857	2399173.004	0	1579678.117	685911.0666	0	0.076440022
Summer         PMIO_STREX         0.000478462         0         0.106029.2685         54529.3851         0         3921730.857         2399173.004         0         1579678.117         685911.0666         0         0.000333607           Summer         PMZ5_IDIEX         0         0.023760009         0.1032760009         0.1032760009         0.1032760009         0.100234685         54529.3851         0         3921730.857         2399173.004         0         1579678.117         685911.0666         0         0.0032760009           Summer         PMZ5_PMTW         0.00200001         0.00300001         0         160029.2685         54529.3851         0         3921730.857         2399173.004         0         1579678.117         685911.0666         0         0.0032776009           Summer         PMZ5_RMEW         0.001321954         0.015029.2685         54529.3851         0         3921730.857         2399173.004         0         1579678.117         685911.0666         0         0.003271602           Summer         ROG_BURN         0.03338827         0         0         160029.2685         54529.3851         0         3921730.857         2399173.004         0         1579678.117         685911.0666         0         0.003371602           Summer		_					_			_			_	
Summer   PMZ5_DLEX   0.026842375   0.106029.685   54529.3851   0.3921730.857   2399173.004   0.1579678.117   685911.0666   0.0006460565   0.0003760009   0.00000000   0.106029.685   54529.3851   0.3921730.857   2399173.004   0.1579678.117   685911.0666   0.0003760009   0.0000000000000000000000000000000	_	_					_			_			•	
Summer         PM25_PMBW         0.032760009         0.032760009         0.106029.2685         54529.3851         0         392173.0857         2399173.004         0         1579678.117         685911.0666         0         0.032760009           Summer         PM25_PMTW         0.002000001         0.003000001         0         106029.2685         54529.3851         0         3921730.857         2399173.004         0         1579678.117         685911.0666         0         0.0023795629           Summer         PM25_STREX         0.00040542         0         0         106029.2685         54529.3851         0         3921730.857         2399173.004         0         1579678.117         685911.0666         0         0.000307167           Summer         ROG_DIURN         0.093838827         0         0         106029.2685         54529.3851         0         3921730.857         2399173.004         0         1579678.117         685911.0666         0         0.004391644           Summer         ROG_DIURN         0.458549991         0.109757905         0         166029.2685         54529.3851         0         3921730.857         2399173.004         0         1579678.117         685911.0666         0         0.024101832           Summer         ROG_R	_	_											-	
Summer         PM25_PMTW         0.00200001         0.03000001         0.106029.2685         54529.3851         0         3921730.857         2399173.004         0         1579678.117         685911.0666         0         0.002379562           Summer         PM25_STREX         0.001321954         0.01524745         0         106029.2685         54529.3851         0         3921730.857         2399173.004         0         1579678.117         685911.0666         0         0.006307167           Summer         ROG_DIURN         0.093838827         0         0         106029.2685         54529.3851         0         3921730.857         2399173.004         0         1579678.117         685911.0666         0         0.004391644           Summer         ROG_DIURN         0.093838827         0         0         106029.2685         54529.3851         0         3921730.857         2399173.004         0         1579678.117         685911.0666         0         0.094391844           Summer         ROG_IDLEX         0.485849991         0.109759755         0.106029.2685         54529.3851         0         3921730.857         2399173.004         0         1579678.117         685911.0666         0         0.024168504           Summer         ROG_RINEX <t< td=""><td></td><td>_</td><td></td><td></td><td></td><td></td><td>_</td><td></td><td></td><td>_</td><td></td><td></td><td>_</td><td></td></t<>		_					_			_			_	
Summer         PM25_RUNEX         0.001321954         0.01524745         0.106029.2685         54529.3851         0         3921730.857         2399173.004         0         1579678.117         685911.0666         0         0.006607539           Summer         PM25_STREX         0.000440542         0         0         106029.2685         54529.3851         0         3921730.857         2399173.004         0         1579678.117         685911.0666         0         0.000430164           Summer         ROG_DURN         0.093838827         0         0         106029.2685         54529.3851         0         3921730.857         2399173.004         0         1579678.117         685911.0666         0         0.004391644           Summer         ROG_DURX         0.13757145         0         0         106029.2685         54529.3851         0         3921730.857         2399173.004         0         1579678.117         685911.0666         0         0.0244101832           Summer         ROG_RUNEX         0.052745963         0         0         106029.2685         54529.3851         0         3921730.857         2399173.004         0         1579678.117         685911.0666         0         0.02486804           Summer         ROG_RUNEX         0		_					0			-			_	
Summer         PM2S_STREX         0.000440542         0         0.106029.2685         54529.3851         0         3921730.857         2399173.004         0         1579678.117         685911.0666         0         0.000307167           Summer         ROG_DIURN         0.0938388827         0         0.106029.2685         54529.3851         0         3921730.857         2399173.004         0         1579678.117         685911.0666         0         0.004391644           Summer         ROG_DIURN         0.13757145         0         0         106029.2685         54529.3851         0         3921730.857         2399173.004         0         1579678.117         685911.0666         0         0.09241684           Summer         ROG_BUNEX         0.458549991         0.10975975         0.106029.2685         54529.3851         0         3921730.857         2399173.004         0         1579678.117         685911.0666         0         0.024101832           Summer         ROG_RUNEX         0.048520017         0.075783022         0         106029.2685         54529.3851         0         3921730.857         2399173.004         0         1579678.117         685911.0666         0         0.0524685           Summer         ROG_SUNEX         0.134010813         <							0			_				
Summer         ROG_DIURN         0.093838827         0         0.106029.2685         54529.3851         0         3921730.857         2399173.004         0         1579678.117         685911.0666         0         0.004391644           Summer         ROG_DILEX         0.458549991         0.109759705         0.106029.2685         54529.3851         0         3921730.857         2399173.004         0         1579678.117         685911.0666         0         0.095921454           Summer         ROG_DILEX         0.458549991         0.109759705         0         106029.2685         54529.3851         0         3921730.857         2399173.004         0         1579678.117         685911.0666         0         0.024101832           Summer         ROG_RESTL         0.052745963         0         106029.2685         54529.3851         0         3921730.857         2399173.004         0         1579678.117         685911.0666         0         0.0528868009           Summer         ROG_RUNLS         0.891299718         0         0         106029.2685         54529.3851         0         3921730.857         2399173.004         0         1579678.117         685911.0666         0         0.024145718           Summer         SOC_BULEX         0.13410813		_					_			_			0	
Summer         ROG_IDLEX         0.458549991         0.109759705         0 106029.2685         54529.3851         0         3921730.857         2399173.004         0         1579678.117         685911.0666         0         0.024101832           Summer         ROG_RESTL         0.052745963         0         0 106029.2685         54529.3851         0         3921730.857         2399173.004         0         1579678.117         685911.0666         0         0.02488504           Summer         ROG_RUNLS         0.081299718         0         0 106029.2685         54529.3851         0         3921730.857         2399173.004         0         1579678.117         685911.0666         0         0.058868009           Summer         ROG_SUNLS         0.891299718         0         0 106029.2685         54529.3851         0         3921730.857         2399173.004         0         1579678.117         685911.0666         0         0.621457178           Summer         ROG_STREX         0.013120216         0.001268309         0         106029.2685         54529.3851         0         3921730.857         2399173.004         0         1579678.117         685911.0666         0         0.03843807           Summer         SOZ_RUNEX         0.008193233         0.004268503 </td <td></td> <td>_</td> <td></td> <td>0</td> <td></td> <td></td> <td>0</td> <td></td> <td></td> <td>0</td> <td></td> <td></td> <td>0</td> <td></td>		_		0			0			0			0	
Summer         ROG_RESTL         0.052745963         0         0.106029.2685         54529.3851         0         3921730.857         2399173.004         0         1579678.117         685911.0666         0         0.002468504           Summer         ROG_RUNEX         0.048520017         0.075783022         0.106029.2685         54529.3851         0         3921730.857         2399173.004         0         1579678.117         685911.0666         0         0.058868009           Summer         ROG_RUNLS         0.891299718         0         0.106029.2685         54529.3851         0         3921730.857         2399173.004         0         1579678.117         685911.0666         0         0.03438807           Summer         ROG_STREX         0.134010813         0         0.106029.2685         54529.3851         0         3921730.857         2399173.004         0         1579678.117         685911.0666         0         0.093438807           Summer         SO2_IDLEX         0.001212261         0.001268309         0         106029.2685         54529.3851         0         3921730.857         2399173.004         0         1579678.117         685911.0666         0         0.00480982           Summer         TOG_DIURN         0.093838827         0	Summer	ROG_HTSK	0.13757145	0	0 106029.2685	54529.3851	0	3921730.857	2399173.004	0	1579678.117	685911.0666	0	0.095921454
Summer         ROG_RUNEX         0.048520017         0.075783022         0 106029.2685         54529.3851         0         392173.0857         2399173.004         0         1579678.117         685911.0666         0         0.058868009           Summer         ROG_RUNLS         0.891299718         0         0 106029.2685         54529.3851         0         3921730.857         2399173.004         0         1579678.117         685911.0666         0         0.621457178           Summer         ROG_STREX         0.134010813         0         0 106029.2685         54529.3851         0         3921730.857         2399173.004         0         1579678.117         685911.0666         0         0.093438807           Summer         SOZ_IDLEX         0.001212261         0.001268309         0 106029.2685         54529.3851         0         3921730.857         2399173.004         0         1579678.117         685911.0666         0         0.093438807           Summer         SOZ_RUNEX         0.008193233         0.004525183         0 106029.2685         54529.3851         0         3921730.857         2399173.004         0         1579678.117         685911.0666         0         0.00680982           Summer         TOG_DIURN         0.093838827         0	Summer	ROG_IDLEX	0.458549991	0.109759705	0 106029.2685	54529.3851	0	3921730.857	2399173.004	0	1579678.117	685911.0666	0	0.024101832
Summer         ROG_RUNLS         0.891299718         0         0 106029.2685         54529.3851         0         3921730.857         2399173.004         0         1579678.117         685911.0666         0         0.621457178           Summer         ROG_STREX         0.134010813         0         0         106029.2685         54529.3851         0         3921730.857         2399173.004         0         1579678.117         685911.0666         0         0.093438807           Summer         SO2_IDLEX         0.001212261         0.001268309         0         106029.2685         54529.3851         0         3921730.857         2399173.004         0         1579678.117         685911.0666         0         0.006800982           Summer         SO2_RUNEX         0.00819323         0.004525183         0         106029.2685         54529.3851         0         3921730.857         2399173.004         0         1579678.117         685911.0666         0         0.006800982           Summer         TOG_DIURN         0.093838827         0         0         106029.2685         54529.3851         0         3921730.857         2399173.004         0         1579678.117         685911.0666         0         0.004391644           Summer         TOG_IUEX	Summer	_					0			0			0	
Summer         ROG_STREX         0.134010813         0         0.166029.2685         54529.3851         0         3921730.857         2399173.004         0         1579678.117         685911.0666         0         0.093438807           Summer         SO2_IDLEX         0.001212261         0.001268309         0         106029.2685         54529.3851         0         3921730.857         2399173.004         0         1579678.117         685911.0666         0         0.006800982           Summer         SO2_RUNEX         0.000189189         0         0         106029.2685         54529.3851         0         3921730.857         2399173.004         0         1579678.117         685911.0666         0         0.006800982           Summer         SO2_STREX         0.000189189         0         0         106029.2685         54529.3851         0         3921730.857         2399173.004         0         1579678.117         685911.0666         0         0.000131911           Summer         TOG_IURN         0.093838827         0         0         106029.2685         54529.3851         0         3921730.857         2399173.004         0         1579678.117         685911.0666         0         0.004391644           Summer         TOG_IURX         0				0.075783022			0			0			0	
Summer         SOZ_IDLEX         0.001212261         0.001268309         0 106029.2685         54529.3851         0 3921730.857         2399173.004         0 1579678.117         685911.0666         0 0.006800982           Summer         SOZ_RUNEX         0.008193233         0.004525183         0 106029.2685         54529.3851         0 3921730.857         2399173.004         0 1579678.117         685911.0666         0 0.006800982           Summer         SOZ_STREX         0.000189189         0 0 106029.2685         54529.3851         0 3921730.857         2399173.004         0 1579678.117         685911.0666         0 0.004391644           Summer         TOG_DIURN         0.093838827         0 0 106029.2685         54529.3851         0 3921730.857         2399173.004         0 1579678.117         685911.0666         0 0.004391644           Summer         TOG_HTSK         0.13757145         0 0 106029.2685         54529.3851         0 3921730.857         2399173.004         0 1579678.117         685911.0666         0 0.095921454           Summer         TOG_RESTL         0.668868416         0.124954127         0 106029.2685         54529.3851         0 3921730.857         2399173.004         0 1579678.117         685911.0666         0 0.034310413           Summer         TOG_RESTL         0.052745963 <t< td=""><td></td><td>_</td><td></td><td>_</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>-</td><td></td></t<>		_		_									-	
Summer         SOZ_RUNEX         0.008193233         0.004525183         0.106029.2685         54529.3851         0         3921730.857         2399173.004         0         1579678.117         685911.0666         0         0.006800982           Summer         SOZ_STREX         0.000189189         0         0.106029.2685         54529.3851         0         3921730.857         2399173.004         0         1579678.117         685911.0666         0         0.004391644           Summer         TOG_DIURN         0.093838827         0         0.106029.2685         54529.3851         0         3921730.857         2399173.004         0         1579678.117         685911.0666         0         0.004391644           Summer         TOG_HTSK         0.13757145         0         0.106029.2685         54529.3851         0         3921730.857         2399173.004         0         1579678.117         685911.0666         0         0.094391644           Summer         TOG_IDLEX         0.668868416         0.124954127         0.106029.2685         54529.3851         0         3921730.857         2399173.004         0         1579678.117         685911.0666         0         0.034310413           Summer         TOG_RUNEX         0.052745963         0         0.106029.26		_								_			_	
Summer         SO2_STREX         0.000189189         0         0.106029.2685         54529.3851         0         3921730.857         2399173.004         0         1579678.117         685911.0666         0         0.000131911           Summer         TOG_DIURN         0.093838827         0         0.106029.2685         54529.3851         0         3921730.857         2399173.004         0         1579678.117         685911.0666         0         0.004391644           Summer         TOG_HTSK         0.13757145         0         0.106029.2685         54529.3851         0         3921730.857         2399173.004         0         1579678.117         685911.0666         0         0.095921454           Summer         TOG_IDLEX         0.668868416         0.124954127         0.106029.2685         54529.3851         0         3921730.857         2399173.004         0         1579678.117         685911.0666         0         0.034310413           Summer         TOG_RESTL         0.052745963         0         0.106029.2685         54529.3851         0         3921730.857         2399173.004         0         1579678.117         685911.0666         0         0.076315999           Summer         TOG_RUNEX         0.070224096         0.086273932         0.106029.26		_											_	
Summer         TOG_DIURN         0.093838827         0         0 106029.2685         54529.3851         0         3921730.857         2399173.004         0         1579678.117         685911.0666         0         0.004391644           Summer         TOG_HTSK         0.13757145         0         0 106029.2685         54529.3851         0         3921730.857         2399173.004         0         1579678.117         685911.0666         0         0.095921454           Summer         TOG_IDLEX         0.668868416         0.124954127         0 106029.2685         54529.3851         0         3921730.857         2399173.004         0         1579678.117         685911.0666         0         0.034310413           Summer         TOG_RESTL         0.052745963         0         0 106029.2685         54529.3851         0         3921730.857         2399173.004         0         1579678.117         685911.0666         0         0.002468504           Summer         TOG_RUNEX         0.070224096         0.086273932         0 106029.2685         54529.3851         0         3921730.857         2399173.004         0         1579678.117         685911.0666         0         0.076315999           Summer         TOG_RUNLS         0.891299718         0         0 106029.26		_					_			_				
Summer         TOG_HTSK         0.13757145         0         0 106029.2685         54529.3851         0         3921730.857         2399173.004         0         1579678.117         685911.0666         0         0.095921454           Summer         TOG_IDLEX         0.668868416         0.124954127         0 106029.2685         54529.3851         0         3921730.857         2399173.004         0         1579678.117         685911.0666         0         0.034310413           Summer         TOG_RESTL         0.052745963         0         0 106029.2685         54529.3851         0         3921730.857         2399173.004         0         1579678.117         685911.0666         0         0.002468504           Summer         TOG_RUNEX         0.070224096         0.086273932         0 106029.2685         54529.3851         0         3921730.857         2399173.004         0         1579678.117         685911.0666         0         0.076315999           Summer         TOG_RUNLS         0.891299718         0         0 106029.2685         54529.3851         0         3921730.857         2399173.004         0         1579678.117         685911.0666         0         0.621457178		_		_			_						_	
Summer         TOG_IDLEX         0.668868416         0.124954127         0 106029.2685         54529.3851         0 3921730.857         2399173.004         0 1579678.117         685911.0666         0 0.034310413           Summer         TOG_RESTL         0.052745963         0 0 106029.2685         54529.3851         0 3921730.857         2399173.004         0 1579678.117         685911.0666         0 0.002468504           Summer         TOG_RUNEX         0.070224096         0.086273932         0 106029.2685         54529.3851         0 3921730.857         2399173.004         0 1579678.117         685911.0666         0 0.076315999           Summer         TOG_RUNLS         0.891299718         0 0 106029.2685         54529.3851         0 3921730.857         2399173.004         0 1579678.117         685911.0666         0 0.0621457178		_		_						_			_	
Summer       TOG_RESTL       0.052745963       0       0       106029.2685       54529.3851       0       3921730.857       2399173.004       0       1579678.117       685911.0666       0       0.002468504         Summer       TOG_RUNEX       0.070224096       0.086273932       0       106029.2685       54529.3851       0       3921730.857       2399173.004       0       1579678.117       685911.0666       0       0.076315999         Summer       TOG_RUNLS       0.891299718       0       0       106029.2685       54529.3851       0       3921730.857       2399173.004       0       1579678.117       685911.0666       0       0.621457178		_											_	
Summer TOG_RUNLS 0.891299718 0 0 106029.2685 54529.3851 0 3921730.857 2399173.004 0 1579678.117 685911.0666 0 <b>0.621457178</b>		_					0			0	1579678.117	685911.0666	0	
-	Summer	TOG_RUNEX	0.070224096	0.086273932	0 106029.2685	54529.3851	0	3921730.857	2399173.004	0	1579678.117	685911.0666	0	0.076315999
Summer TOG_STREX 0.146701203 0 0 106029.2685 54529.3851 0 3921730.857 2399173.004 0 1579678.117 685911.0666 0 <b>0.102287158</b>		_		_			0			0			_	
	Summer	TOG_STREX	0.146701203	0	0 106029.2685	54529.3851	0	3921730.857	2399173.004	0	1579678.117	685911.0666	0	0.102287158

Winter         CH4_IDLEX         0.127893133         0.005095128         0         106029_2685         54529_3851         0         3921730.857         2399173.004           Winter         CH4_STREX         0.028042921         0         0.106029_2685         54529_3851         0         3921730.857         2399173.004           Winter         CQ_IDLEX         3.74161959         0.909745076         0         106029_2685         54529_3851         0         3921730.857         2399173.004           Winter         CQ_BUREX         1.121875915         0.99927471         0         106029_2685         54529_3851         0         3921730.857         2399173.004           Winter         CQ_SING_IDLEX         1.225,024704         134.1615423         0         106029_2685         54529_3851         0         3921730.857         2399173.004           Winter         CQ_SING_INIEX         827.887166         478.6732026         0         106029_2685         54529_3851         0         3921730.857         2399173.004           Winter         NOX_JOLEX         0.04040542         2.145609522         0         106029_2685         54529_3851         0         3921730.857         2399173.004           Winter         PMO_DIDLEX         0.025155071 <th< th=""><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th></th<>															
Winter         CHA_STREX         0.028042921         0         0 106029_2685         54529_3851         0         3921730.857         2399173.004           Winter         CO_BUNEX         1.721679515         0.99927471         0         106029_2685         54529_3851         0         3921730.857         2399173.004           Winter         CO_STREX         1.84089849         0         0         106029_2685         54529_3851         0         3921730.857         2399173.004           Winter         CO_SIBIO_RINEX         12.2502470         134.1615423         0         106029_2685         54529_3851         0         3921730.857         2399173.004           Winter         CO_SIBIO_RINEX         327.8971669         478.673206         0         106029_2685         54529_3851         0         3921730.857         2399173.004           Winter         NOX_GILEX         0.040046542         2.14560522         0         106029_2685         54529_3851         0         3921730.857         2399173.004           Winter         NOX_STREX         0.54110738         0         106029_2685         54529_3851         0         3921730.857         2399173.004           Winter         PM10_DELX         0         0.0260688         0         1060	Winter	_IDLEX	0.127893133	0.005098128	0	106029.2685	54529.3851	0	3921730.857	2399173.004	0	1579678.117	685911.0666	0	0.006108086
Winter         CO_IDLEX         3.74161954         0.909745076         0.106029.2685         54529.3851         0         3921730.857         2399173.004           Winter         CO_STREX         1.840889899         0         0.106029.2685         54529.3851         0         3921730.857         2399173.004           Winter         COZ_NBIO_IDLEX         1.22.5024704         134.1615423         0         106029.2685         54529.3851         0         3921730.857         2399173.004           Winter         COZ_NBIO_IDLEX         122.5024704         134.1615423         0         106029.2685         54529.3851         0         3921730.857         2399173.004           Winter         COZ_NBIO_STREX         19.29121395         0         0         106029.2685         54529.3851         0         3921730.857         2399173.004           Winter         NOX_IDLEX         0.040046542         2.145609522         0         106029.2685         54529.3851         0         3921730.857         2399173.004           Winter         NOX_STREX         0.547120738         0         0         106029.2685         54529.3851         0         3921730.857         2399173.004           Winter         PMIO_PMIW         0         0.022440022         0	Winter	_RUNEX	0.009509673	0.003519977	0	106029.2685	54529.3851	0	3921730.857	2399173.004	0	1579678.117	685911.0666	0	0.007236213
Winter         CO_RUNEX         1.121875915         0.399277471         0.106029.2685         54529.3851         0         3921730.857         2399173.004           Winter         CO_STREX         1.280898949         0         0.106029.2685         54529.3851         0         3921730.857         2399173.004           Winter         CO_NBIO_RUNEX         827.8971669         478.6732026         0.106029.2685         54529.3851         0         3921730.857         2399173.004           Winter         CO_NBIO_STREX         19.29121395         0         0.106029.2685         54529.3851         0         3921730.857         2399173.004           Winter         MOX_RUNEX         0.04066542         2.145609522         0.106029.2685         54529.3851         0         3921730.857         2399173.004           Winter         MOX_RUNEX         0.521552071         1.683799348         0         106029.2685         54529.3851         0         3921730.857         2399173.004           Winter         MOX_STREX         0.54710738         0         0.106029.2685         54529.3851         0         3921730.857         2399173.004           Winter         PM10_PMBW         0.076440022         0.076440022         0.106029.2685         54529.3851         0         <	Winter	_STREX	0.028042921	0	0	106029.2685	54529.3851	0	3921730.857	2399173.004	0	1579678.117	685911.0666	0	0.019552878
Winter         CO_STREX         1.840898949         0         0 106029.2685         54529.3851         0         3921730.857         2399173.004           Winter         CO_NBIO_IDLEX         122.5024704         134.1615423         0 106029.2685         54529.3851         0         3921730.857         2399173.004           Winter         CO_NBIO_STREX         19.29121395         0         0 106029.2685         54529.3851         0         3921730.857         2399173.004           Winter         NOX_IDILEX         0.040046542         2.145609522         0 106029.2685         54529.3851         0         3921730.857         2399173.004           Winter         NOX_SUREX         0.251552071         1.683799348         0 106029.2685         54529.3851         0         3921730.857         2399173.004           Winter         NOX_STREX         0.547120738         0         0 106029.2685         54529.3851         0         3921730.857         2399173.004           Winter         PM10_PMBW         0.076440022         0.076440022         0 106029.2685         54529.3851         0         3921730.857         2399173.004           Winter         PM10_PMBW         0.0076440022         0.076440022         0 106029.2685         54529.3851         0         3921730.8	Winter	IDLEX	3.74161954	0.909745076	0	106029.2685	54529.3851	0	3921730.857	2399173.004	0	1579678.117	685911.0666	0	0.19700351
Winter         COZ_NBIO_IDLEX         122.5024704         134.1615423         0         106029.2685         54529.3851         0         3921730.857         2399173.004           Winter         COZ_NBIO_RUNEX         827.8971669         478.6732026         0         106029.2685         54529.3851         0         3921730.857         2399173.004           Winter         NOX_IDLEX         0.040046542         2.145609522         0         106029.2685         54529.3851         0         3921730.857         2399173.004           Winter         NOX_RUNEX         0.251552071         1.683799348         0         106029.2685         54529.3851         0         3921730.857         2399173.004           Winter         PM10_IDLEX         0         0.028056068         0         106029.2685         54529.3851         0         3921730.857         2399173.004           Winter         PM10_IDLEX         0         0.028056068         0         106029.2685         54529.3851         0         3921730.857         2399173.004           Winter         PM10_PMBW         0.076440022         0         106029.2685         54529.3851         0         3921730.857         2399173.004           Winter         PM10_RUNEX         0.000478462         0	Winter	RUNEX	1.121875915	0.399227471	0	106029.2685	54529.3851	0	3921730.857	2399173.004	0	1579678.117	685911.0666	0	0.847586244
Winter         CO2_NBIO_RUNEX         827.8971669         478.6732026         0         106029.2685         54529.3851         0         3921730.857         2399173.004           Winter         CO2_NBIO_STREX         19.29121395         0         0         106029.2685         54529.3851         0         3921730.857         2399173.004           Winter         NOX_RUNEX         0.251552071         1.683799348         0         106029.2685         54529.3851         0         3921730.857         2399173.004           Winter         NOX_STREX         0.547120738         0         0         106029.2685         54529.3851         0         3921730.857         2399173.004           Winter         PM10_IDLEX         0         0.028056068         0         106029.2685         54529.3851         0         3921730.857         2399173.004           Winter         PM10_PMBW         0.076440022         0.076440022         0.106029.2685         54529.3851         0         3921730.857         2399173.004           Winter         PM10_PMTW         0.00800002         0.01200003         0.166029.2685         54529.3851         0         3921730.857         2399173.004           Winter         PM10_STREX         0.000475462         0         106029.2685	Winter	STREX	1.840898949	0	0	106029.2685	54529.3851	0	3921730.857	2399173.004	0	1579678.117	685911.0666	0	1.28356359
Winter         COZ_NBIO_STREX         19.29121395         0         0         106029.2685         54529.3851         0         3921730.857         2399173.004           Winter         NOX_IDLEX         0.040046542         2.145609522         0         106029.2685         54529.3851         0         3921730.857         2399173.004           Winter         NOX_STREX         0.547120738         0         106029.2685         54529.3851         0         3921730.857         2399173.004           Winter         PM10_IDLEX         0         0.028056068         0         106029.2685         54529.3851         0         3921730.857         2399173.004           Winter         PM10_PMBW         0.076440022         0.076440022         0.106029.2685         54529.3851         0         3921730.857         2399173.004           Winter         PM10_PMBW         0.008000000         0.01200003         0.106029.2685         54529.3851         0         3921730.857         2399173.004           Winter         PM10_STREX         0.001437107         0.01593687         0         106029.2685         54529.3851         0         3921730.857         2399173.004           Winter         PM10_STREX         0.00449542         0         0.106029.2685         5452	Winter	_NBIO_IDLEX	122.5024704	134.1615423	0	106029.2685	54529.3851	0	3921730.857	2399173.004	0	1579678.117	685911.0666	0	8.962169257
Winter         NOX_IDLEX         0.040046542         2.145609522         0.160029.2685         54529.3851         0         3921730.857         2399173.004           Winter         NOX_RIREX         0.251552071         1.683799348         0.106029.2685         54529.3851         0         3921730.857         2399173.004           Winter         PM10_IDLEX         0         0.028056068         0.106029.2685         54529.3851         0         3921730.857         2399173.004           Winter         PM10_PMBW         0.076440022         0.076440022         0.106029.2685         54529.3851         0         3921730.857         2399173.004           Winter         PM10_PMTW         0.00800002         0.012000003         0.106029.2685         54529.3851         0         3921730.857         2399173.004           Winter         PM10_PMTW         0.00478462         0         0.106029.2685         54529.3851         0         3921730.857         2399173.004           Winter         PM25_PMBW         0.032760009         0.106029.2685         54529.3851         0         3921730.857         2399173.004           Winter         PM25_PMBW         0.032760009         0.106029.2685         54529.3851         0         3921730.857         2399173.004	Winter	_NBIO_RUNEX	827.8971669	478.6732026	0	106029.2685	54529.3851	0	3921730.857	2399173.004	0	1579678.117	685911.0666	0	695.345126
Winter         NOX_RUNEX         0.251552071         1.683799348         0         106029.2685         54529.3851         0         3921730.857         2399173.004           Winter         NOX_STREX         0.547120738         0         0         106029.2685         54529.3851         0         3921730.857         2399173.004           Winter         PM10_IDLEX         0         0.028056068         0         106029.2685         54529.3851         0         3921730.857         2399173.004           Winter         PM10_PMTW         0.00800002         0.01200003         0         106029.2685         54529.3851         0         3921730.857         2399173.004           Winter         PM10_RUNEX         0.00478462         0         0         106029.2685         54529.3851         0         3921730.857         2399173.004           Winter         PM10_STREX         0.00478462         0         0         106029.2685         54529.3851         0         3921730.857         2399173.004           Winter         PM25_IDLEX         0         0.02684375         0         106029.2685         54529.3851         0         3921730.857         2399173.004           Winter         PM25_PMBW         0.03276009         0         106029.26	Winter	_NBIO_STREX	19.29121395	0	0	106029.2685	54529.3851	0	3921730.857	2399173.004	0	1579678.117	685911.0666	0	13.45076537
Winter         NOX_STREX         0.547120738         0         0 106029.2685         54529.3851         0         3921730.857         2399173.004           Winter         PM10_IDLEX         0         0.028056068         0 106029.2685         54529.3851         0         3921730.857         2399173.004           Winter         PM10_PMBW         0.076440022         0.076440022         0.106029.2685         54529.3851         0         3921730.857         2399173.004           Winter         PM10_RUNEX         0.001437107         0.015936872         0         106029.2685         54529.3851         0         3921730.857         2399173.004           Winter         PM10_STREX         0.000478462         0         0         106029.2685         54529.3851         0         3921730.857         2399173.004           Winter         PM25_IDLEX         0         0.026842375         0         106029.2685         54529.3851         0         3921730.857         2399173.004           Winter         PM25_PMBW         0.032760009         0.106029.2685         54529.3851         0         3921730.857         2399173.004           Winter         PM25_PMTW         0.00230001         0.016029.2685         54529.3851         0         3921730.857         239	Winter	_IDLEX	0.040046542	2.145609522	0	106029.2685	54529.3851	0	3921730.857	2399173.004	0	1579678.117	685911.0666	0	0.053515825
Winter         PM10_IDLEX         0 0.028056068         0 106029.2685         54529.3851         0 3921730.857         2399173.004           Winter         PM10_PMBW         0.076440022         0.06029.2685         54529.3851         0 3921730.857         2399173.004           Winter         PM10_PMTW         0.008000002         0.01200003         0 106029.2685         54529.3851         0 3921730.857         2399173.004           Winter         PM10_STREX         0.001437107         0.015936872         0 106029.2685         54529.3851         0 3921730.857         2399173.004           Winter         PM25_IDLEX         0 0.026842375         0 106029.2685         54529.3851         0 3921730.857         2399173.004           Winter         PM25_PMBW         0.032760009         0.032760009         0 106029.2685         54529.3851         0 3921730.857         2399173.004           Winter         PM25_PMTW         0.00200001         0.0032760009         0 106029.2685         54529.3851         0 3921730.857         2399173.004           Winter         PM25_PMTW         0.00200001         0.01524745         0 106029.2685         54529.3851         0 3921730.857         2399173.004           Winter         PM25_STREX         0.000440542         0 106029.2685         54529.3851	Winter	C_RUNEX	0.251552071	1.683799348	0	106029.2685	54529.3851	0	3921730.857	2399173.004	0	1579678.117	685911.0666	0	0.79517828
Winter         PM10_PMBW         0.076440022         0.076440022         0.106029.2685         54529.3851         0         3921730.857         2399173.004           Winter         PM10_PMTW         0.008000002         0.012000003         0.106029.2685         54529.3851         0         3921730.857         2399173.004           Winter         PM10_STREX         0.001437107         0.015936872         0.106029.2685         54529.3851         0         3921730.857         2399173.004           Winter         PM10_STREX         0.000478462         0         0.106029.2685         54529.3851         0         3921730.857         2399173.004           Winter         PM25_PMBW         0.032760009         0.032760009         0.106029.2685         54529.3851         0         3921730.857         2399173.004           Winter         PM25_PMBW         0.002300001         0.00300001         0.106029.2685         54529.3851         0         3921730.857         2399173.004           Winter         PM25_STREX         0.000440542         0         0.106029.2685         54529.3851         0         3921730.857         2399173.004           Winter         ROG_DIURN         0.067736334         0         0.106029.2685         54529.3851         0         3921730.857	Winter	C_STREX	0.547120738	0	0	106029.2685	54529.3851	0	3921730.857	2399173.004	0	1579678.117	685911.0666	0	0.381478983
Winter         PM10_PMTW         0.008000002         0.012000003         0 106029.2685         54529.3851         0         3921730.857         2399173.004           Winter         PM10_RUNEX         0.001437107         0.015936872         0 106029.2685         54529.3851         0         3921730.857         2399173.004           Winter         PM10_STREX         0.000478462         0         0 106029.2685         54529.3851         0         3921730.857         2399173.004           Winter         PM25_IDLEX         0         0.0226842375         0 106029.2685         54529.3851         0         3921730.857         2399173.004           Winter         PM25_PMBW         0.032760009         0.03276009         0 106029.2685         54529.3851         0         3921730.857         2399173.004           Winter         PM25_RMW         0.00200001         0.0300001         0 106029.2685         54529.3851         0         3921730.857         2399173.004           Winter         PM25_STREX         0.001321954         0.01524745         0 106029.2685         54529.3851         0         3921730.857         2399173.004           Winter         ROG_DIURN         0.067736334         0         0 106029.2685         54529.3851         0         3921730.857	Winter	.0_IDLEX	0	0.028056068	0	106029.2685	54529.3851	0	3921730.857	2399173.004	0	1579678.117	685911.0666	0	0.000675268
Winter         PM10_RUNEX         0.001437107         0.015936872         0.106029.2685         54529.3851         0         3921730.857         2399173.004           Winter         PM10_STREX         0.000478462         0         0.106029.2685         54529.3851         0         3921730.857         2399173.004           Winter         PM25_PMBW         0.032760009         0.032760009         0.106029.2685         54529.3851         0         3921730.857         2399173.004           Winter         PM25_PMTW         0.002000001         0.003000001         0.106029.2685         54529.3851         0         3921730.857         2399173.004           Winter         PM25_RUNEX         0.001321954         0.01524745         0.106029.2685         54529.3851         0         3921730.857         2399173.004           Winter         PM25_STREX         0.000440542         0         0.106029.2685         54529.3851         0         3921730.857         2399173.004           Winter         ROG_BIURN         0.067736334         0         0.106029.2685         54529.3851         0         3921730.857         2399173.004           Winter         ROG_HISK         0.156019392         0         0.106029.2685         54529.3851         0         3921730.857         <	Winter	LO_PMBW	0.076440022	0.076440022	0	106029.2685	54529.3851	0	3921730.857	2399173.004	0	1579678.117	685911.0666	0	0.076440022
Winter         PM10_STREX         0.000478462         0         0.106029.2685         54529.3851         0         3921730.857         2399173.004           Winter         PM25_IDLEX         0         0.026842375         0         106029.2685         54529.3851         0         3921730.857         2399173.004           Winter         PM25_PMBW         0.032760009         0.032760009         0         106029.2685         54529.3851         0         3921730.857         2399173.004           Winter         PM25_PMTW         0.00200001         0.0300001         0         106029.2685         54529.3851         0         3921730.857         2399173.004           Winter         PM25_RUNEX         0.001321954         0.01524745         0         106029.2685         54529.3851         0         3921730.857         2399173.004           Winter         PM25_STREX         0.004404542         0         0         106029.2685         54529.3851         0         3921730.857         2399173.004           Winter         ROG_HTSK         0.156019392         0         0         106029.2685         54529.3851         0         3921730.857         2399173.004           Winter         ROG_RESTL         0.037457078         0         0	Winter	LO_PMTW	0.008000002	0.012000003	0	106029.2685	54529.3851	0	3921730.857	2399173.004	0	1579678.117	685911.0666	0	0.00951825
Winter         PM25_DLEX         0 .026842375         0 .106029.2685         54529.3851         0 .3921730.857         2399173.004           Winter         PM25_PMBW         0.032760009         0.032760009         0 .106029.2685         54529.3851         0 .3921730.857         2399173.004           Winter         PM25_PMTW         0.002000001         0.003000001         0 .106029.2685         54529.3851         0 .3921730.857         2399173.004           Winter         PM25_ENINEX         0.001321954         0.01524745         0 .106029.2685         54529.3851         0 .3921730.857         2399173.004           Winter         PM25_STREX         0.000440542         0 .016029.2685         54529.3851         0 .3921730.857         2399173.004           Winter         ROG_HTSK         0.156019392         0 .016029.2685         54529.3851         0 .3921730.857         2399173.004           Winter         ROG_IDLEX         0.458549991         0.109759705         0 .106029.2685         54529.3851         0 .3921730.857         2399173.004           Winter         ROG_RESTL         0.037457078         0 .016029.2685         54529.3851         0 .3921730.857         2399173.004           Winter         ROG_SUNEX         0.04693273         0 .016029.2685         54529.3851         0 .392	Winter	LO_RUNEX	0.001437107	0.015936872	0	106029.2685	54529.3851	0	3921730.857	2399173.004	0	1579678.117	685911.0666	0	0.006940662
Winter         PM25_DLEX         0.026842375         0.106029.2685         54529.3851         0.3921730.857         2399173.004           Winter         PM25_PMBW         0.032760009         0.032760009         0.106029.2685         54529.3851         0.3921730.857         2399173.004           Winter         PM25_PMTW         0.00200001         0.00300001         0.106029.2685         54529.3851         0.3921730.857         2399173.004           Winter         PM25_RUNEX         0.001321954         0.01524745         0.106029.2685         54529.3851         0.3921730.857         2399173.004           Winter         PM25_STREX         0.004040542         0.0160029.2685         54529.3851         0.3921730.857         2399173.004           Winter         ROG_BIURN         0.067736334         0.0160029.2685         54529.3851         0.3921730.857         2399173.004           Winter         ROG_IDLEX         0.458549991         0.109759705         0.106029.2685         54529.3851         0.3921730.857         2399173.004           Winter         ROG_RESTL         0.037457078         0.0160029.2685         54529.3851         0.3921730.857         2399173.004           Winter         ROG_RUNLS         0.997565132         0.075783022         0.106029.2685         54529.3851	Winter	O_STREX	0.000478462	0	0	106029.2685	54529.3851	0	3921730.857	2399173.004	0	1579678.117	685911.0666	0	0.000333607
Winter         PM25_PMTW         0.002000001         0.003000001         0 106029.2685         54529.3851         0 3921730.857         2399173.004           Winter         PM25_RUNEX         0.001321954         0.01524745         0 106029.2685         54529.3851         0 3921730.857         2399173.004           Winter         PM25_STREX         0.000440542         0 0 106029.2685         54529.3851         0 3921730.857         2399173.004           Winter         ROG_DIURN         0.067736334         0 0 106029.2685         54529.3851         0 3921730.857         2399173.004           Winter         ROG_HTSK         0.156019392         0 0 106029.2685         54529.3851         0 3921730.857         2399173.004           Winter         ROG_IDLEX         0.458549991         0.109759705         0 106029.2685         54529.3851         0 3921730.857         2399173.004           Winter         ROG_RESTL         0.037457078         0 0 106029.2685         54529.3851         0 3921730.857         2399173.004           Winter         ROG_RUNEX         0.04698372         0.075783022         0 106029.2685         54529.3851         0 3921730.857         2399173.004           Winter         ROG_RUNEX         0.097565132         0 0 106029.2685         54529.3851         0 3921730.857 </td <td>Winter</td> <td>5_IDLEX</td> <td>0</td> <td>0.026842375</td> <td>0</td> <td>106029.2685</td> <td>54529.3851</td> <td>0</td> <td>3921730.857</td> <td>2399173.004</td> <td>0</td> <td>1579678.117</td> <td>685911.0666</td> <td>0</td> <td>0.000646056</td>	Winter	5_IDLEX	0	0.026842375	0	106029.2685	54529.3851	0	3921730.857	2399173.004	0	1579678.117	685911.0666	0	0.000646056
Winter         PM25_PMTW         0.002000001         0.003000001         0 106029.2685         54529.3851         0         3921730.857         2399173.004           Winter         PM25_RUNEX         0.001321954         0.01524745         0 106029.2685         54529.3851         0         3921730.857         2399173.004           Winter         PM25_STREX         0.000440542         0         0 106029.2685         54529.3851         0         3921730.857         2399173.004           Winter         ROG_DIURN         0.067736334         0         0 106029.2685         54529.3851         0         3921730.857         2399173.004           Winter         ROG_HTSK         0.156019392         0         0 106029.2685         54529.3851         0         3921730.857         2399173.004           Winter         ROG_ROLEX         0.458549991         0.109759705         0 106029.2685         54529.3851         0         3921730.857         2399173.004           Winter         ROG_RESTL         0.037457078         0         0 106029.2685         54529.3851         0         3921730.857         2399173.004           Winter         ROG_RUNEX         0.04698372         0.075783022         0 106029.2685         54529.3851         0         3921730.857	Winter	25_PMBW	0.032760009	0.032760009	0	106029.2685	54529.3851	0	3921730.857	2399173.004	0	1579678.117	685911.0666	0	0.032760009
Winter         PM25_STREX         0.000440542         0         0         106029.2685         54529.3851         0         3921730.857         2399173.004           Winter         ROG_DIURN         0.067736334         0         0         106029.2685         54529.3851         0         3921730.857         2399173.004           Winter         ROG_HTSK         0.156019392         0         0         106029.2685         54529.3851         0         3921730.857         2399173.004           Winter         ROG_IDLEX         0.458549991         0.109759705         0         106029.2685         54529.3851         0         3921730.857         2399173.004           Winter         ROG_RESTL         0.037457078         0         0         106029.2685         54529.3851         0         3921730.857         2399173.004           Winter         ROG_RUNLS         0.04698372         0.075783022         0         106029.2685         54529.3851         0         3921730.857         2399173.004           Winter         ROG_SUNLS         0.997565132         0         0         106029.2685         54529.3851         0         3921730.857         2399173.004           Winter         ROG_STREX         0.140256537         0         0	Winter	_	0.002000001	0.003000001	0	106029.2685	54529.3851	0	3921730.857	2399173.004	0	1579678.117	685911.0666	0	0.002379562
Winter         PM25_STREX         0.000440542         0         0 106029.2685         54529.3851         0         3921730.857         2399173.004           Winter         ROG_DIURN         0.067736334         0         0 106029.2685         54529.3851         0         3921730.857         2399173.004           Winter         ROG_HTSK         0.156019392         0         0 106029.2685         54529.3851         0         3921730.857         2399173.004           Winter         ROG_BLEX         0.458549991         0.109759705         0 106029.2685         54529.3851         0         3921730.857         2399173.004           Winter         ROG_RESTL         0.037457078         0         0 106029.2685         54529.3851         0         3921730.857         2399173.004           Winter         ROG_RUNLS         0.04698372         0.075783022         0 106029.2685         54529.3851         0         3921730.857         2399173.004           Winter         ROG_SUNLS         0.997565132         0         0 106029.2685         54529.3851         0         3921730.857         2399173.004           Winter         ROG_STREX         0.140256537         0         0 106029.2685         54529.3851         0         3921730.857         2399173.004	Winter	_	0.001321954	0.01524745	0	106029.2685	54529.3851	0	3921730.857	2399173.004	0	1579678.117	685911.0666	0	0.006607539
Winter         ROG_DIURN         0.067736334         0         0 106029.2685         54529.3851         0         3921730.857         2399173.004           Winter         ROG_HTSK         0.156019392         0         0 106029.2685         54529.3851         0         3921730.857         2399173.004           Winter         ROG_IDLEX         0.458549991         0.109759705         0 106029.2685         54529.3851         0         3921730.857         2399173.004           Winter         ROG_RESTL         0.037457078         0         0 106029.2685         54529.3851         0         3921730.857         2399173.004           Winter         ROG_RUNEX         0.04698372         0.075783022         0 106029.2685         54529.3851         0         3921730.857         2399173.004           Winter         ROG_RUNLS         0.997565132         0         0 106029.2685         54529.3851         0         3921730.857         2399173.004           Winter         ROG_STREX         0.140256537         0         0 106029.2685         54529.3851         0         3921730.857         2399173.004           Winter         SO2_RUNEX         0.001212261         0.001268309         0 106029.2685         54529.3851         0         3921730.857         2399173.004	Winter	_	0.000440542	0	0	106029.2685	54529.3851	0	3921730.857	2399173.004	0	1579678.117	685911.0666	0	0.000307167
Winter         ROG_HTSK         0.156019392         0         0 106029.2685         54529.3851         0         3921730.857         2399173.004           Winter         ROG_IDLEX         0.458549991         0.109759705         0 106029.2685         54529.3851         0         3921730.857         2399173.004           Winter         ROG_RESTL         0.037457078         0         0 106029.2685         54529.3851         0         3921730.857         2399173.004           Winter         ROG_RUNEX         0.04698372         0.075783022         0 106029.2685         54529.3851         0         3921730.857         2399173.004           Winter         ROG_RUNEX         0.997565132         0         0 106029.2685         54529.3851         0         3921730.857         2399173.004           Winter         ROG_STREX         0.140256537         0         0 106029.2685         54529.3851         0         3921730.857         2399173.004           Winter         SO2_IDLEX         0.001212261         0.001268309         0 106029.2685         54529.3851         0         3921730.857         2399173.004           Winter         SO2_RUNEX         0.00190902         0         0 106029.2685         54529.3851         0         3921730.857         2399173.004<	Winter	DIURN	0.067736334	0	0	106029.2685	54529.3851	0	3921730.857	2399173.004	0	1579678.117	685911.0666	0	0.003170051
Winter         ROG_RESTL         0.037457078         0         0 106029.2685         54529.3851         0         3921730.857         2399173.004           Winter         ROG_RUNEX         0.04698372         0.075783022         0 106029.2685         54529.3851         0         3921730.857         2399173.004           Winter         ROG_RUNLS         0.997565132         0         0 106029.2685         54529.3851         0         3921730.857         2399173.004           Winter         ROG_STREX         0.140256537         0         0 106029.2685         54529.3851         0         3921730.857         2399173.004           Winter         SO2_IDLEX         0.001212261         0.001268309         0 106029.2685         54529.3851         0         3921730.857         2399173.004           Winter         SO2_RUNEX         0.008192714         0.004525183         0 106029.2685         54529.3851         0         3921730.857         2399173.004           Winter         SO2_STREX         0.000190902         0         0 106029.2685         54529.3851         0         3921730.857         2399173.004           Winter         TOG_DIURN         0.067736334         0         0 106029.2685         54529.3851         0         3921730.857         2399173.00	Winter	_	0.156019392	0	0	106029.2685	54529.3851	0	3921730.857	2399173.004	0	1579678.117	685911.0666	0	0.10878425
Winter         ROG_RUNEX         0.04698372         0.075783022         0 106029.2685         54529.3851         0 3921730.857         2399173.004           Winter         ROG_RUNLS         0.997565132         0 0 106029.2685         54529.3851         0 3921730.857         2399173.004           Winter         ROG_STREX         0.140256537         0 0 106029.2685         54529.3851         0 3921730.857         2399173.004           Winter         SO2_IDLEX         0.001212261         0.001268309         0 106029.2685         54529.3851         0 3921730.857         2399173.004           Winter         SO2_RUNEX         0.008192714         0.004525183         0 106029.2685         54529.3851         0 3921730.857         2399173.004           Winter         SO2_STREX         0.000190902         0 106029.2685         54529.3851         0 3921730.857         2399173.004           Winter         TOG_DIURN         0.067736334         0 106029.2685         54529.3851         0 3921730.857         2399173.004           Winter         TOG_HTSK         0.156019392         0 106029.2685         54529.3851         0 3921730.857         2399173.004           Winter         TOG_IDLEX         0.668868416         0.124954127         0 106029.2685         54529.3851         0 3921730.857	Winter	_ i_IDLEX	0.458549991	0.109759705	0	106029.2685	54529.3851	0	3921730.857	2399173.004	0	1579678.117	685911.0666	0	0.024101832
Winter         ROG_RUNLS         0.997565132         0         0 106029.2685         54529.3851         0         3921730.857         2399173.004           Winter         ROG_STREX         0.140256537         0         0 106029.2685         54529.3851         0         3921730.857         2399173.004           Winter         SO2_IDLEX         0.001212261         0.001268309         0 106029.2685         54529.3851         0         3921730.857         2399173.004           Winter         SO2_RUNEX         0.008192714         0.004525183         0 106029.2685         54529.3851         0         3921730.857         2399173.004           Winter         SO2_STREX         0.000190902         0         0 106029.2685         54529.3851         0         3921730.857         2399173.004           Winter         TOG_DIURN         0.067736334         0         0 106029.2685         54529.3851         0         3921730.857         2399173.004           Winter         TOG_HTSK         0.156019392         0         0 106029.2685         54529.3851         0         3921730.857         2399173.004           Winter         TOG_IDLEX         0.668868416         0.124954127         0 106029.2685         54529.3851         0         3921730.857         2399173.00	Winter	_ i_RESTL	0.037457078	0	0	106029.2685	54529.3851	0	3921730.857	2399173.004	0	1579678.117	685911.0666	0	0.001752986
Winter         ROG_STREX         0.140256537         0         0 106029.2685         54529.3851         0         3921730.857         2399173.004           Winter         SO2_IDLEX         0.001212261         0.001268309         0 106029.2685         54529.3851         0 3921730.857         2399173.004           Winter         SO2_RUNEX         0.008192714         0.004525183         0 106029.2685         54529.3851         0 3921730.857         2399173.004           Winter         SO2_STREX         0.000190902         0 0 106029.2685         54529.3851         0 3921730.857         2399173.004           Winter         TOG_DIURN         0.067736334         0 0 106029.2685         54529.3851         0 3921730.857         2399173.004           Winter         TOG_HTSK         0.156019392         0 0 106029.2685         54529.3851         0 3921730.857         2399173.004           Winter         TOG_IDLEX         0.668868416         0.124954127         0 106029.2685         54529.3851         0 3921730.857         2399173.004           Winter         TOG_RUNEX         0.067932308         0.086273932         0 106029.2685         54529.3851         0 3921730.857         2399173.004	Winter	_ i_RUNEX	0.04698372	0.075783022	0	106029.2685	54529.3851	0	3921730.857	2399173.004	0	1579678.117	685911.0666	0	0.057914832
Winter         ROG_STREX         0.140256537         0         0 106029.2685         54529.3851         0         3921730.857         2399173.004           Winter         SO2_IDLEX         0.001212261         0.001268309         0 106029.2685         54529.3851         0 3921730.857         2399173.004           Winter         SO2_RUNEX         0.008192714         0.004525183         0 106029.2685         54529.3851         0 3921730.857         2399173.004           Winter         SO2_STREX         0.000190902         0 0 106029.2685         54529.3851         0 3921730.857         2399173.004           Winter         TOG_DIURN         0.067736334         0 0 106029.2685         54529.3851         0 3921730.857         2399173.004           Winter         TOG_HTSK         0.156019392         0 0 106029.2685         54529.3851         0 3921730.857         2399173.004           Winter         TOG_IDLEX         0.668868416         0.124954127         0 106029.2685         54529.3851         0 3921730.857         2399173.004           Winter         TOG_RUNEX         0.067932308         0.086273932         0 106029.2685         54529.3851         0 3921730.857         2399173.004	Winter	 _RUNLS	0.997565132	0	0	106029.2685	54529.3851	0	3921730.857	2399173.004	0	1579678.117	685911.0666	0	0.695550553
Winter         SO2_RUNEX         0.008192714         0.004525183         0 106029.2685         54529.3851         0 3921730.857         2399173.004           Winter         SO2_STREX         0.000190902         0 0 106029.2685         54529.3851         0 3921730.857         2399173.004           Winter         TOG_DIURN         0.067736334         0 0 106029.2685         54529.3851         0 3921730.857         2399173.004           Winter         TOG_HTSK         0.156019392         0 0 106029.2685         54529.3851         0 3921730.857         2399173.004           Winter         TOG_IDLEX         0.668868416         0.124954127         0 106029.2685         54529.3851         0 3921730.857         2399173.004           Winter         TOG_RESTL         0.037457078         0 0 106029.2685         54529.3851         0 3921730.857         2399173.004           Winter         TOG_RUNEX         0.067932308         0.086273932         0 106029.2685         54529.3851         0 3921730.857         2399173.004	Winter	 i_STREX	0.140256537	0	0	106029.2685	54529.3851	0	3921730.857	2399173.004	0	1579678.117	685911.0666	0	0.097793626
Winter         SO2_STREX         0.000190902         0         0 106029.2685         54529.3851         0         3921730.857         2399173.004           Winter         TOG_DIURN         0.067736334         0         0 106029.2685         54529.3851         0         3921730.857         2399173.004           Winter         TOG_HTSK         0.156019392         0         0 106029.2685         54529.3851         0         3921730.857         2399173.004           Winter         TOG_IDLEX         0.668868416         0.124954127         0 106029.2685         54529.3851         0         3921730.857         2399173.004           Winter         TOG_RESTL         0.037457078         0         0 106029.2685         54529.3851         0         3921730.857         2399173.004           Winter         TOG_RUNEX         0.067932308         0.086273932         0 106029.2685         54529.3851         0         3921730.857         2399173.004	Winter	_IDLEX	0.001212261	0.001268309	0	106029.2685	54529.3851	0	3921730.857	2399173.004	0	1579678.117	685911.0666	0	8.726E-05
Winter         TOG_DIURN         0.067736334         0         0 106029.2685         54529.3851         0         3921730.857         2399173.004           Winter         TOG_HTSK         0.156019392         0         0 106029.2685         54529.3851         0         3921730.857         2399173.004           Winter         TOG_IDLEX         0.668868416         0.124954127         0 106029.2685         54529.3851         0         3921730.857         2399173.004           Winter         TOG_RESTL         0.037457078         0         0 106029.2685         54529.3851         0         3921730.857         2399173.004           Winter         TOG_RUNEX         0.067932308         0.086273932         0 106029.2685         54529.3851         0         3921730.857         2399173.004	Winter	_RUNEX	0.008192714	0.004525183	0	106029.2685	54529.3851	0	3921730.857	2399173.004	0	1579678.117	685911.0666	0	0.00680066
Winter         TOG_DIURN         0.067736334         0         0 106029.2685         54529.3851         0         3921730.857         2399173.004           Winter         TOG_HTSK         0.156019392         0         0 106029.2685         54529.3851         0         3921730.857         2399173.004           Winter         TOG_IDLEX         0.668868416         0.124954127         0 106029.2685         54529.3851         0         3921730.857         2399173.004           Winter         TOG_RESTL         0.037457078         0         0 106029.2685         54529.3851         0         3921730.857         2399173.004           Winter         TOG_RUNEX         0.067932308         0.086273932         0 106029.2685         54529.3851         0         3921730.857         2399173.004	Winter	STREX	0.000190902	0	0	106029.2685	54529.3851	0	3921730.857	2399173.004	0	1579678.117	685911.0666	0	0.000133106
Winter         TOG_IDLEX         0.668868416         0.124954127         0 106029.2685         54529.3851         0 3921730.857         2399173.004           Winter         TOG_RESTL         0.037457078         0 0 106029.2685         54529.3851         0 3921730.857         2399173.004           Winter         TOG_RUNEX         0.067932308         0.086273932         0 106029.2685         54529.3851         0 3921730.857         2399173.004	Winter		0.067736334	0	0	106029.2685	54529.3851	0	3921730.857	2399173.004	0	1579678.117	685911.0666	0	0.003170051
Winter         TOG_RESTL         0.037457078         0         0 106029.2685         54529.3851         0         3921730.857         2399173.004           Winter         TOG_RUNEX         0.067932308         0.086273932         0 106029.2685         54529.3851         0 3921730.857         2399173.004	Winter	HTSK	0.156019392	0	0	106029.2685	54529.3851	0	3921730.857	2399173.004	0	1579678.117	685911.0666	0	0.10878425
Winter TOG_RUNEX 0.067932308 0.086273932 0 106029.2685 54529.3851 0 3921730.857 2399173.004	Winter	_ _IDLEX	0.668868416	0.124954127	0	106029.2685	54529.3851	0	3921730.857	2399173.004	0	1579678.117	685911.0666	0	0.034310413
Winter TOG_RUNEX 0.067932308 0.086273932 0 106029.2685 54529.3851 0 3921730.857 2399173.004		_	0.037457078	0				0	3921730.857	2399173.004	0	1579678.117	685911.0666	0	0.001752986
	Winter	_	0.067932308	0.086273932	0	106029.2685	54529.3851	0	3921730.857	2399173.004	0	1579678.117	685911.0666	0	0.074894086
	Winter	_	0.997565132	0	0	106029.2685	54529.3851	0	3921730.857	2399173.004	0	1579678.117	685911.0666	0	0.695550553
Winter TOG_STREX 0.153537809 0 0 106029.2685 54529.3851 0 3921730.857 2399173.004	Winter	_	0.153537809	0	0	106029.2685	54529.3851	0	3921730.857	2399173.004	0	1579678.117	685911.0666	0	0.10705397

# **LDH2 CalEEMod Emission Rate Worksheet**

	LDH2 CalEEMod I	Emission Rate	e worksneet		Vehicle Class:	LHDT2								
Season	Pollutant	En	nission Rates		veriicie Ciass.	Population			VMT			Trips		CalEEMod Emission
		Gas	DSL	ELEC	LHDT2 Gas	LHDT2 DSL	LHDT2 Elec	LHDT2 Gas	LHDT2 DSL	LHDT2 Elec	LHDT2 Gas	LHDT2 DSL	LHDT2 Elec	
Annual	CH4_IDLEX	0.128206426	0.005098128	C	17468.88659	21989.92112	0	623231.5341	931838.451	0	260260.3816	276605.5444	0	0.004380481
Annual	CH4_RUNEX	0.007446354	0.003446999		17468.88659		0	623231.5341		0	260260.3816		0	0.005049836
Annual	CH4_STREX	0.028356351	0		17468.88659		0	623231.5341			260260.3816		0	0.013746514
Annual	CO_IDLEX		0.909745076		17468.88659		0	623231.5341		0	260260.3816		0	0.159214191
Annual	CO_RUNEX	0.850591253 1.841986278	0.387311257 0		17468.88659 17468.88659		0 0	623231.5341 623231.5341		0 0	260260.3816 260260.3816		0 0	0.572981809 0.892953023
Annual Annual	CO_STREX CO2_NBIO_IDLEX	141.4709522	_		17468.88659		0	623231.5341		0	260260.3816		0	13.42256787
Annual	CO2_NBIO_RUNEX		529.5853068		17468.88659		0	623231.5341		-	260260.3816		0	698.0155001
Annual	CO2_NBIO_STREX	21.88438706	0		17468.88659		0	623231.5341		0	260260.3816		0	10.60905275
Annual	NOX_IDLEX	0.040176857	2.162468939	C	17468.88659	21989.92112	0	623231.5341	931838.451	0	260260.3816	276605.5444	0	0.089881596
Annual	NOX_RUNEX	0.264953995	1.626775683	C	17468.88659	21989.92112	0	623231.5341	931838.451	0	260260.3816	276605.5444	0	1.080993031
Annual	NOX_STREX	0.555052479	0		17468.88659		0	623231.5341		0	260260.3816		0	0.269076809
Annual	PM10_IDLEX	0			17468.88659		0	623231.5341			260260.3816		0	0.001174191
Annual Annual	PM10_PMBW PM10_PMTW	0.008000002	0.089180026		) 17468.88659 ) 17468.88659		0 0	623231.5341 623231.5341		0 0	260260.3816 260260.3816		0 0	0.089180026 0.010396907
Annual	PM10_RUNEX		0.016968826		17468.88659		0	623231.5341		0	260260.3816		0	0.010687595
Annual	PM10_STREX	0.000395	0		17468.88659		0	623231.5341		0	260260.3816		0	0.000191487
Annual	PM25_IDLEX	0	0.027426801	C	17468.88659	21989.92112	0	623231.5341	931838.451	0	260260.3816	276605.5444	0	0.001123396
Annual	PM25_PMBW	0.038220011	0.038220011	C	17468.88659	21989.92112	0	623231.5341	931838.451	0	260260.3816	276605.5444	0	0.038220011
Annual	PM25_PMTW	0.002000001			17468.88659		0	623231.5341		0	260260.3816		0	0.002599227
Annual	PM25_RUNEX		0.016234762		17468.88659		0	623231.5341		0	260260.3816		0	0.010205891
Annual	PM25_STREX	0.000363188	0		17468.88659		0	623231.5341		0	260260.3816		0	0.000176065
Annual Annual	ROG_DIURN ROG_HTSK	0.058498265 0.132631233	0		17468.88659 17468.88659		0 0	623231.5341 623231.5341		0	260260.3816 260260.3816		0 0	0.001903454 0.064296603
Annual	ROG_IDLEX	0.460174837	_		17468.88659		0	623231.5341		0	260260.3816		0	0.019469199
Annual	ROG_RESTL	0.034827001	0		17468.88659		0	623231.5341		_	260260.3816		0	0.001133223
Annual	ROG_RUNEX	0.034087281	0.074211851	C	17468.88659	21989.92112	0	623231.5341	931838.451	0	260260.3816	276605.5444	0	0.058130969
Annual	ROG_RUNLS	0.90315789	0	C	17468.88659	21989.92112	0	623231.5341	931838.451	0	260260.3816	276605.5444	0	0.437830389
Annual	ROG_STREX	0.141083223	0		17468.88659		0	623231.5341		0	260260.3816		0	0.068393935
Annual	SO2_IDLEX		0.002035509		17468.88659		0	623231.5341		0	260260.3816		0	0.000128927
Annual	SO2_RUNEX	0.009399512	0.005006486 0		) 17468.88659 ) 17468.88659		0 0	623231.5341 623231.5341		0	260260.3816 260260.3816		0 0	0.006767096 0.000104985
Annual Annual	SO2_STREX TOG_DIURN	0.000210304	0		17468.88659		0	623231.5341		0	260260.3816		0	0.001903454
Annual	TOG_HTSK	0.132631233	0		17468.88659		0	623231.5341		0	260260.3816		0	0.064296603
Annual	TOG_IDLEX		0.124954127		17468.88659		0	623231.5341	931838.451	0	260260.3816	276605.5444	0	0.026967338
Annual	TOG_RESTL	0.034827001	0	C	17468.88659	21989.92112	0	623231.5341	931838.451	0	260260.3816	276605.5444	0	0.001133223
Annual	TOG_RUNEX		0.084485258		17468.88659		0	623231.5341		0	260260.3816		0	0.070560296
Annual	TOG_RUNLS	0.90315789	0		17468.88659		0	623231.5341		0	260260.3816		0	0.437830389
Annual	TOG_STREX	0.154468371	0		17468.88659		0	623231.5341		0	260260.3816		0	0.07488275
Summer Summer	CH4_IDLEX CH4_RUNEX		0.005098128 0.003446999		) 17468.88659 ) 17468.88659		0 0	623231.5341 623231.5341		0 0	260260.3816 260260.3816		0 0	0.004389936 0.005115834
Summer	CH4_STREX	0.027388026	0.003440333		17468.88659		0	623231.5341		0	260260.3816		0	0.013277092
Summer	CO_IDLEX		0.909745076		17468.88659		0	623231.5341		0	260260.3816		0	0.159214191
Summer	CO_RUNEX		0.387311257		17468.88659		0	623231.5341		0	260260.3816		0	0.580029951
Summer	CO_STREX	1.759938487	0	C	17468.88659	21989.92112	0	623231.5341	931838.451	0	260260.3816	276605.5444	0	0.853178121
Summer	CO2_NBIO_IDLEX		215.315884		17468.88659		0	623231.5341		0	260260.3816		0	13.42256787
Summer	CO2_NBIO_RUNEX		529.5853068		17468.88659		0	623231.5341		0	260260.3816		0	698.0280099
Summer	CO2_NBIO_STREX	21.73698703	0		) 17468.88659 ) 17468.88659		0 0	623231.5341 623231.5341		0	260260.3816 260260.3816		0 0	10.53759657 0.089881596
Summer Summer	NOX_IDLEX NOX_RUNEX		2.162468939 1.54352707		17468.88659		0	623231.5341		0	260260.3816		0	1.018372359
Summer	NOX_STREX	0.531811538	0		17468.88659		0	623231.5341		0	260260.3816		0	0.257810129
Summer	PM10_IDLEX	0			17468.88659		0	623231.5341		0	260260.3816		0	0.001174191
Summer	PM10_PMBW	0.089180026	0.089180026	C	17468.88659	21989.92112	0	623231.5341	931838.451	0	260260.3816	276605.5444	0	0.089180026
Summer	PM10_PMTW	0.008000002	0.012000003	C	17468.88659	21989.92112	0	623231.5341	931838.451	0	260260.3816	276605.5444	0	0.010396907
Summer	PM10_RUNEX		0.016968826		17468.88659		0	623231.5341		0	260260.3816		0	0.010687595
Summer	PM10_STREX	0.000395	0		17468.88659		0	623231.5341		0	260260.3816		0	0.000191487
Summer Summer	PM25_IDLEX		0.027426801 0.038220011		) 17468.88659 ) 17468.88659		0 0	623231.5341 623231.5341		0 0	260260.3816 260260.3816		0 0	0.001123396 0.038220011
	PM25_PMBW PM25_PMTW	0.002000001			17468.88659		0	623231.5341			260260.3816		0	0.002599227
	PM25_RUNEX		0.016234762		17468.88659		0	623231.5341		0	260260.3816		0	0.010205891
Summer	PM25_STREX	0.000363188			17468.88659		0	623231.5341		0	260260.3816		0	0.000176065
Summer	ROG_DIURN	0.086205487	0	C	17468.88659	21989.92112	0	623231.5341	931838.451	0	260260.3816	276605.5444	0	0.002805009
Summer	ROG_HTSK	0.136839868	0		17468.88659		0	623231.5341		0	260260.3816		0	0.066336853
Summer	ROG_IDLEX		0.109759705		17468.88659		0	623231.5341		0	260260.3816		0	0.019469199
Summer	ROG_RESTL	0.048550162	0		17468.88659		0	623231.5341		0	260260.3816		0	0.001579756
Summer	ROG_RUNEX		0.074211851		17468.88659 17468.88659		0	623231.5341 623231.5341		0	260260.3816 260260.3816		0	0.058441244
Summer Summer	ROG_RUNLS ROG_STREX	0.872266587 0.13591482	0		17468.88659		0 0	623231.5341		0 0	260260.3816		0 0	0.422854988 0.065888411
Summer	SO2_IDLEX		0.002035509		17468.88659		0	623231.5341		0	260260.3816		0	0.000128927
Summer	SO2_RUNEX		0.005006486		17468.88659		0	623231.5341			260260.3816		0	0.00676722
Summer	SO2_STREX	0.000215105	0	C	17468.88659	21989.92112	0	623231.5341	931838.451	0	260260.3816	276605.5444	0	0.000104278
Summer	TOG_DIURN	0.086205487	0		17468.88659		0	623231.5341		0	260260.3816		0	0.002805009
Summer	TOG_HTSK	0.136839868	0 134054437		17468.88659		0	623231.5341		0	260260.3816		0	0.066336853
Summer	TOG_IDLEX		0.124954127		17468.88659		0	623231.5341 623231.5341		0	260260.3816		0	0.026967338
Summer Summer	TOG_RESTL TOG_RUNEX	0.048550162 0.050869778	0 0.084485258		17468.88659 17468.88659		0 0	623231.5341		0	260260.3816 260260.3816		0 0	0.001579756 0.071013049
Summer	TOG_RUNLS	0.872266587	0.004483238		17468.88659		0	623231.5341		0	260260.3816		0	0.422854988
	TOG_STREX	0.14880962	0		17468.88659		0	623231.5341		-	260260.3816		0	0.072139517

Winter	CH4_IDLEX	0.128147966	0.005098128			21989.92112	0	623231.5341	931838.451	0	260260.3816	276605.5444	0	0.004378579
Winter	CH4_RUNEX	0.007401888	0.003446999	0	17468.88659	21989.92112	0	623231.5341	931838.451	0	260260.3816	276605.5444	0	0.005032015
Winter	CH4_STREX	0.028565799	0	0	17468.88659	21989.92112	0	623231.5341	931838.451	0	260260.3816	276605.5444	0	0.013848049
Winter	CO_IDLEX	3.747889202	0.909745076	0	17468.88659	21989.92112	0	623231.5341	931838.451	0	260260.3816	276605.5444	0	0.159214191
Winter	CO_RUNEX	0.845849659	0.387311257	0	17468.88659	21989.92112	0	623231.5341	931838.451	0	260260.3816	276605.5444	0	0.571081502
Winter	CO_STREX	1.85687909	0	0	17468.88659	21989.92112	0	623231.5341	931838.451	0	260260.3816	276605.5444	0	0.900172719
Winter	CO2_NBIO_IDLEX	141.4709522	215.315884	0	17468.88659	21989.92112	0	623231.5341	931838.451	0	260260.3816	276605.5444	0	13.42256787
Winter	CO2_NBIO_RUNEX	949.8392069	529.5853068	0	17468.88659	21989.92112	0	623231.5341	931838.451	0	260260.3816	276605.5444	0	698.0121206
Winter	CO2_NBIO_STREX	21.9117258	0	0	17468.88659	21989.92112	0	623231.5341	931838.451	0	260260.3816	276605.5444	0	10.62230595
Winter	NOX_IDLEX	0.040176857	2.162468939	0	17468.88659	21989.92112	0	623231.5341	931838.451	0	260260.3816	276605.5444	0	0.089881596
Winter	NOX_RUNEX	0.258422297	1.59820432	0	17468.88659	21989.92112	0	623231.5341	931838.451	0	260260.3816	276605.5444	0	1.061254592
Winter	NOX_STREX	0.560316977	0	0	17468.88659	21989.92112	0	623231.5341	931838.451	0	260260.3816	276605.5444	0	0.271628917
Winter	PM10_IDLEX	0	0.02866692	0	17468.88659	21989.92112	0	623231.5341	931838.451	0	260260.3816	276605.5444	0	0.001174191
Winter	PM10_PMBW	0.089180026	0.089180026	0	17468.88659	21989.92112	0	623231.5341	931838.451	0	260260.3816	276605.5444	0	0.089180026
Winter	PM10_PMTW	0.008000002	0.012000003	0	17468.88659	21989.92112	0	623231.5341	931838.451	0	260260.3816	276605.5444	0	0.010396907
Winter	PM10_RUNEX	0.001296072	0.016968826	0	17468.88659	21989.92112	0	623231.5341	931838.451	0	260260.3816	276605.5444	0	0.010687595
Winter	PM10_STREX	0.000395	0	0	17468.88659	21989.92112	0	623231.5341	931838.451	0	260260.3816	276605.5444	0	0.000191487
Winter	PM25_IDLEX	0	0.027426801	0	17468.88659	21989.92112	0	623231.5341	931838.451	0	260260.3816	276605.5444	0	0.001123396
Winter	PM25_PMBW	0.038220011	0.038220011	0	17468.88659	21989.92112	0	623231.5341	931838.451	0	260260.3816	276605.5444	0	0.038220011
Winter	PM25_PMTW	0.002000001	0.003000001	0	17468.88659	21989.92112	0	623231.5341	931838.451	0	260260.3816	276605.5444	0	0.002599227
Winter	PM25_RUNEX	0.001191691	0.016234762	0	17468.88659	21989.92112	0	623231.5341	931838.451	0	260260.3816	276605.5444	0	0.010205891
Winter	PM25_STREX	0.000363188	0	0	17468.88659	21989.92112	0	623231.5341	931838.451	0	260260.3816	276605.5444	0	0.000176065
Winter	ROG_DIURN	0.06158321	0	0	17468.88659	21989.92112	0	623231.5341	931838.451	0	260260.3816	276605.5444	0	0.002003834
Winter	ROG_HTSK	0.15211804	0	0	17468.88659	21989.92112	0	623231.5341	931838.451	0	260260.3816	276605.5444	0	0.073743363
Winter	ROG_IDLEX	0.460174837	0.109759705	0	17468.88659	21989.92112	0	623231.5341	931838.451	0	260260.3816	276605.5444	0	0.019469199
Winter	ROG_RESTL	0.034032161	0	0	17468.88659	21989.92112	0	623231.5341	931838.451	0	260260.3816	276605.5444	0	0.00110736
Winter	ROG_RUNEX	0.033874756	0.074211851	0	17468.88659	21989.92112	0	623231.5341	931838.451	0	260260.3816	276605.5444	0	0.058045794
Winter	ROG_RUNLS	0.983296226	0	0	17468.88659	21989.92112	0	623231.5341	931838.451	0	260260.3816	276605.5444	0	0.47667963
Winter	ROG_STREX	0.142195228	0	0	17468.88659	21989.92112	0	623231.5341	931838.451	0	260260.3816	276605.5444	0	0.06893301
Winter	SO2_IDLEX	0.00139997	0.002035509	0	17468.88659	21989.92112	0	623231.5341	931838.451	0	260260.3816	276605.5444	0	0.000128927
Winter	SO2_RUNEX	0.009399429	0.005006486	0	17468.88659	21989.92112	0	623231.5341	931838.451	0	260260.3816	276605.5444	0	0.006767063
Winter	SO2_STREX	0.000216834	0	0	17468.88659	21989.92112	0	623231.5341	931838.451	0	260260.3816	276605.5444	0	0.000105116
Winter	TOG_DIURN	0.06158321	0	0	17468.88659	21989.92112	0	623231.5341	931838.451	0	260260.3816	276605.5444	0	0.002003834
Winter	TOG_HTSK	0.15211804	0	0	17468.88659	21989.92112	0	623231.5341	931838.451	0	260260.3816	276605.5444	0	0.073743363
Winter	TOG_IDLEX	0.671486042	0.124954127	0	17468.88659	21989.92112	0	623231.5341	931838.451	0	260260.3816	276605.5444	0	0.026967338
Winter	TOG_RESTL	0.034032161	0	0	17468.88659	21989.92112	0	623231.5341	931838.451	0	260260.3816	276605.5444	0	0.00110736
Winter	TOG_RUNEX	0.049429965	0.084485258	0	17468.88659	21989.92112	0	623231.5341	931838.451	0	260260.3816	276605.5444	0	0.07043601
Winter	TOG_RUNLS	0.983296226	0	0	17468.88659	21989.92112	0	623231.5341	931838.451	0	260260.3816	276605.5444	0	0.47667963
Winter	TOG_STREX	0.155685877	0	0	17468.88659	21989.92112	0	623231.5341		0	260260.3816	276605.5444	0	0.075472969
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# MHDT CalEEMod Emission Rate Worksheet

	MHDT CalEEMod				Vehicle Class:	MHDT								
Season	Pollutant	Gas En	DSL	ELEC	MHDT Gas	Population MHDT DSL	MHDT Elec	MHDT Gas	VMT MHDT DSL	MHDT Elec	MHDT Gas	Trips MHDT DSL	MHDT Elec	CalEEMod Emission Rate
Annual	CH4_IDLEX		0.006056088				0	788215.4521	3916493.55	0	287639.2617	619326.5352	0	0.004496953
Annual	CH4_RUNEX		0.007374256			63233.99563	0	788215.4521	3916493.55	0	287639.2617	619326.5352	0	0.009471698
Annual	CH4_STREX	0.042942071	0	0	14376.2126	63233.99563	0	788215.4521	3916493.55	0	287639.2617	619326.5352	0	0.013618844
Annual	CO_IDLEX	14.29972318	2.442082535	0	14376.2126	63233.99563	0	788215.4521	3916493.55	0	287639.2617	619326.5352	0	0.396926211
Annual	CO_RUNEX		0.536581357			63233.99563	0	788215.4521	3916493.55	0	287639.2617	619326.5352	0	0.867904437
Annual	CO_STREX	5.134244205	0			63233.99563	0	788215.4521	3916493.55	0	287639.2617	619326.5352	0	1.62829758
Annual	CO2_NBIO_IDLEX		878.3785271			63233.99563	0	788215.4521	3916493.55	0	287639.2617	619326.5352	0	70.04306991
Annual Annual	CO2_NBIO_RUNEX CO2_NBIO_STREX	40.5476092	1009.818234			63233.99563 63233.99563	0 0		3916493.55 3916493.55	0 0	287639.2617 287639.2617	619326.5352 619326.5352	0 0	1130.501219 12.85945337
Annual	NOX_IDLEX		8.912229086			63233.99563	0	788215.4521	3916493.55	0	287639.2617	619326.5352	0	0.622773207
Annual	NOX_RUNEX		3.153146353			63233.99563	0	788215.4521	3916493.55	0	287639.2617	619326.5352	0	2.735571228
Annual	NOX_STREX		1.283228219			63233.99563	0	788215.4521	3916493.55	0	287639.2617	619326.5352	0	0.998385698
Annual	PM10_IDLEX	0	0.032047083	0	14376.2126	63233.99563	0	788215.4521	3916493.55	0	287639.2617	619326.5352	0	0.002234335
Annual	PM10_PMBW	0.130340037	0.130340037	0	14376.2126	63233.99563	0	788215.4521	3916493.55	0	287639.2617	619326.5352	0	0.130340037
Annual	PM10_PMTW	0.012000003	0.012000003	0	14376.2126	63233.99563	0	788215.4521	3916493.55	0	287639.2617	619326.5352	0	0.012000003
Annual	PM10_RUNEX	0.001134561	0.089751181			63233.99563	0	788215.4521	3916493.55	0	287639.2617	619326.5352	0	0.074904569
Annual	PM10_STREX	0.000488503	0			63233.99563	0	788215.4521	3916493.55	0	287639.2617	619326.5352	0	0.000154926
Annual	PM25_IDLEX	0	0.03066074			63233.99563	0	788215.4521	3916493.55	0	287639.2617	619326.5352	0	0.002137678
Annual	PM25_PMBW		0.055860016			63233.99563	0	788215.4521	3916493.55	0	287639.2617	619326.5352	0	0.055860016
Annual Annual	PM25_PMTW PM25_RUNEX	0.003000001	0.003000001 0.085868584			63233.99563 63233.99563	0 0	788215.4521 788215.4521	3916493.55 3916493.55	0 0	287639.2617 287639.2617	619326.5352 619326.5352	0 0	0.003000001 0.071657144
Annual	PM25_STREX	0.001043187	0.083808384			63233.99563	0	788215.4521	3916493.55	0	287639.2617	619326.5352	0	0.000142449
Annual	ROG_DIURN	0.0510395	0			63233.99563	0	788215.4521	3916493.55	0	287639.2617	619326.5352	0	0.000142443
Annual	ROG_HTSK	0.097459989	0			63233.99563	0	788215.4521	3916493.55	0	287639.2617	619326.5352	0	0.030908904
Annual	ROG_IDLEX		0.130385903	0	14376.2126	63233.99563	0	788215.4521	3916493.55	0	287639.2617	619326.5352	0	0.024903039
Annual	ROG_RESTL	0.031464657	0	0	14376.2126	63233.99563	0	788215.4521	3916493.55	0	287639.2617	619326.5352	0	0.000498743
Annual	ROG_RUNEX	0.09827792	0.1587657	0	14376.2126	63233.99563	0	788215.4521	3916493.55	0	287639.2617	619326.5352	0	0.148631725
Annual	ROG_RUNLS	0.528442025	0			63233.99563	0	788215.4521		0	287639.2617	619326.5352	0	0.167592509
Annual	ROG_STREX	0.234785238	0			63233.99563	0	788215.4521		0	287639.2617	619326.5352	0	0.074460859
Annual	SO2_IDLEX		0.008298485			63233.99563	0	788215.4521		0	287639.2617	619326.5352	0	0.000665678
Annual	SO2_RUNEX		0.009540262			63233.99563	0	788215.4521		0	287639.2617	619326.5352	0	0.010810364
Annual	SO2_STREX TOG_DIURN	0.000401251 0.0510395	0			63233.99563 63233.99563	0 0	788215.4521 788215.4521	3916493.55 3916493.55	0 0	287639.2617 287639.2617	619326.5352 619326.5352	0 0	0.000127255 0.000809021
Annual Annual	TOG_HTSK	0.097459989	0			63233.99563	0		3916493.55	0	287639.2617	619326.5352	0	0.030908904
Annual	TOG_IDLEX		0.148434426			63233.99563	0	788215.4521		0	287639.2617	619326.5352	0	0.033422445
Annual	TOG_RESTL	0.031464657	0			63233.99563	0			0	287639.2617	619326.5352	0	0.000498743
Annual	TOG_RUNEX		0.180742664			63233.99563	0			0	287639.2617	619326.5352	0	0.174487523
Annual	TOG_RUNLS	0.528442025	0	0	14376.2126	63233.99563	0	788215.4521	3916493.55	0	287639.2617	619326.5352	0	0.167592509
Annual	TOG_STREX	0.257060283	0	0	14376.2126	63233.99563	0	788215.4521	3916493.55	0	287639.2617	619326.5352	0	0.081525268
Summer	CH4_IDLEX	0.242518887	0.005898108	0	14376.2126	63233.99563	0	788215.4521	3916493.55	0	287639.2617	619326.5352	0	0.004255358
Summer	CH4_RUNEX		0.007374256			63233.99563	0			0	287639.2617	619326.5352	0	0.009551486
Summer	CH4_STREX	0.041363209	0			63233.99563	0			0	287639.2617	619326.5352	0	0.013118116
Summer	CO_IDLEX	10.39823964				63233.99563	0	788215.4521	3916493.55	0	287639.2617	619326.5352	0	0.316038851
Summer Summer	CO_RUNEX CO_STREX	4.876550288	0.536581357 0			63233.99563 63233.99563	0 0	788215.4521 788215.4521		0 0	287639.2617 287639.2617	619326.5352 619326.5352	0 0	0.877261414 1.546571358
Summer	CO2_NBIO_IDLEX		896.2497636			63233.99563	0			0	287639.2617	619326.5352	0	71.6641988
Summer	CO2_NBIO_RUNEX		1009.818234			63233.99563	0			0	287639.2617	619326.5352	0	1130.517778
Summer	CO2_NBIO_STREX	40.10819499	0			63233.99563	0	788215.4521	3916493.55	0	287639.2617	619326.5352	0	12.72009555
Summer	NOX_IDLEX	0.092046913	9.048582091	0	14376.2126	63233.99563	0	788215.4521	3916493.55	0	287639.2617	619326.5352	0	0.632329564
Summer	NOX_RUNEX	0.578188453	2.97854963	0	14376.2126	63233.99563	0	788215.4521	3916493.55	0	287639.2617	619326.5352	0	2.576398983
Summer	NOX_STREX	0.36828502	1.283228219	0	14376.2126	63233.99563	0	788215.4521	3916493.55	0	287639.2617	619326.5352	0	0.993058968
Summer	PM10_IDLEX		0.027048277			63233.99563	0	788215.4521	3916493.55	0	287639.2617	619326.5352	0	0.001885816
Summer	PM10_PMBW		0.130340037			63233.99563	0	788215.4521	3916493.55	0	287639.2617	619326.5352	0	0.130340037
Summer	PM10_PMTW		0.012000003			63233.99563	0			0	287639.2617	619326.5352	0	0.012000003
Summer	PM10_RUNEX	0.001134561	0.089751181 0			63233.99563 63233.99563	0 0	788215.4521 788215.4521	3916493.55 3916493.55	0 0	287639.2617 287639.2617	619326.5352 619326.5352	0 0	0.074904569 0.000154926
Summer Summer	PM10_STREX PM25_IDLEX	0.000488503	0.02587818			63233.99563	0			0	287639.2617	619326.5352	0	0.00134926
Summer			0.055860016			63233.99563	0	788215.4521		0		619326.5352	0	0.055860016
Summer	PM25_PMTW		0.003000001			63233.99563	0	788215.4521		0		619326.5352	0	0.003000001
Summer	PM25_RUNEX		0.085868584			63233.99563	0		3916493.55	0	287639.2617	619326.5352	0	0.071657144
Summer	PM25_STREX	0.00044916	0	0	14376.2126	63233.99563	0	788215.4521	3916493.55	0	287639.2617	619326.5352	0	0.000142449
Summer	ROG_DIURN	0.07614006	0	0	14376.2126	63233.99563	0	788215.4521	3916493.55	0	287639.2617	619326.5352	0	0.001206888
Summer	ROG_HTSK	0.100697203	0			63233.99563	0	788215.4521		0	287639.2617	619326.5352	0	0.031935569
Summer	ROG_IDLEX		0.126984649			63233.99563	0	788215.4521		0	287639.2617	619326.5352	0	0.023717212
Summer	ROG_RESTL	0.044800932	0			63233.99563	0	788215.4521	3916493.55	0	287639.2617	619326.5352	0	0.000710135
Summer	ROG_RUNEX	0.100668594	0.1587657 0			63233.99563	0		3916493.55	0	287639.2617	619326.5352	0	0.149032253
Summer Summer	ROG_RUNLS ROG_STREX	0.509608051 0.225564594	0			63233.99563 63233.99563	0 0			0	287639.2617 287639.2617	619326.5352 619326.5352	0 0	0.161619417 0.071536582
Summer	SO2_IDLEX		0.008467323			63233.99563	0	788215.4521 788215.4521		0	287639.2617	619326.5352	0	0.000681162
Summer	SO2_RUNEX		0.009540262			63233.99563	0	788215.4521	3916493.55	0	287639.2617	619326.5352	0	0.010810527
Summer	SO2_STREX	0.000396903	0			63233.99563	0	788215.4521	3916493.55	0	287639.2617	619326.5352	0	0.000125876
Summer	TOG_DIURN	0.07614006	0			63233.99563	0		3916493.55	0	287639.2617	619326.5352	0	0.001206888
Summer	TOG_HTSK	0.100697203	0	0	14376.2126	63233.99563	0	788215.4521	3916493.55	0	287639.2617	619326.5352	0	0.031935569
Summer	TOG_IDLEX		0.144562356			63233.99563	0			0	287639.2617	619326.5352	0	0.031768156
Summer	TOG_RESTL	0.044800932	0			63233.99563	0		3916493.55	0	287639.2617	619326.5352	0	0.000710135
Summer	TOG_RUNEX		0.180742664			63233.99563	0	788215.4521		0	287639.2617	619326.5352	0	0.175071972
Summer	TOG_RUNLS	0.509608051	0			63233.99563	0	788215.4521		0	287639.2617	619326.5352	0	0.161619417
Summer	TOG_STREX	0.246964838	0	U	143/0.2126	63233.99563	0	788215.4521	3310493.55	0	20/039.201/	619326.5352	0	0.078323553

Winter	CH4_IDLEX	0.277911524	0.00627425	0 14376.2126	63233.99563	0	788215.4521	3916493.55	0	287639.2617	619326.5352	0	0.004842587
Winter	CH4_RUNEX	0.019745817	0.007374256	0 14376.2126	63233.99563	0	788215.4521	3916493.55	0	287639.2617	619326.5352	0	0.009446957
Winter	CH4_STREX	0.043245409	0	0 14376.2126	63233.99563	0	788215.4521	3916493.55	0	287639.2617	619326.5352	0	0.013715046
Winter	CO_IDLEX	19.76180013	2.81931471	0 14376.2126	63233.99563	0	788215.4521	3916493.55	0	287639.2617	619326.5352	0	0.509805745
Winter	CO_RUNEX	2.498179276	0.536581357	0 14376.2126	63233.99563	0	788215.4521	3916493.55	0	287639.2617	619326.5352	0	0.86522268
Winter	CO_STREX	5.185067379	0	0 14376.2126	63233.99563	0	788215.4521	3916493.55	0	287639.2617	619326.5352	0	1.644415873
Winter	CO2_NBIO_IDLEX	522.1785955	853.6992005	0 14376.2126	63233.99563	0	788215.4521	3916493.55	0	287639.2617	619326.5352	0	67.7972226
Winter	CO2_NBIO_RUNEX	1730.123798	1009.818234	0 14376.2126	63233.99563	0	788215.4521	3916493.55	0	287639.2617	619326.5352	0	1130.496468
Winter	CO2_NBIO_STREX	40.63529545	0	0 14376.2126	63233.99563	0	788215.4521	3916493.55	0	287639.2617	619326.5352	0	12.88726259
Winter	NOX_IDLEX	0.084510532	8.723932079	0 14376.2126	63233.99563	0	788215.4521	3916493.55	0	287639.2617	619326.5352	0	0.609575384
Winter	NOX_RUNEX	0.645041387	3.094118922	0 14376.2126	63233.99563	0	788215.4521	3916493.55	0	287639.2617	619326.5352	0	2.683806455
Winter	NOX_STREX	0.38907548	1.283228219	0 14376.2126	63233.99563	0	788215.4521	3916493.55	0	287639.2617	619326.5352	0	0.999652549
Winter	PM10_IDLEX	0	0.038950196	0 14376.2126	63233.99563	0	788215.4521	3916493.55	0	287639.2617	619326.5352	0	0.002715622
Winter	PM10_PMBW	0.130340037	0.130340037	0 14376.2126	63233.99563	0	788215.4521	3916493.55	0	287639.2617	619326.5352	0	0.130340037
Winter	PM10_PMTW	0.012000003	0.012000003	0 14376.2126	63233.99563	0	788215.4521	3916493.55	0	287639.2617	619326.5352	0	0.012000003
Winter	PM10_RUNEX	0.001134561	0.089751181	0 14376.2126	63233.99563	0	788215.4521	3916493.55	0	287639.2617	619326.5352	0	0.074904569
Winter	PM10_STREX	0.000488503	0	0 14376.2126	63233.99563	0	788215.4521	3916493.55	0	287639.2617	619326.5352	0	0.000154926
Winter	PM25_IDLEX	0	0.037265228	0 14376.2126	63233.99563	0	788215.4521	3916493.55	0	287639.2617	619326.5352	0	0.002598146
Winter	PM25_PMBW	0.055860016	0.055860016	0 14376.2126	63233.99563	0	788215.4521	3916493.55	0	287639.2617	619326.5352	0	0.055860016
Winter	PM25_PMTW	0.003000001	0.003000001	0 14376.2126	63233.99563	0	788215.4521	3916493.55	0	287639.2617	619326.5352	0	0.003000001
Winter	PM25_RUNEX	0.001043187	0.085868584	0 14376.2126	63233.99563	0	788215.4521	3916493.55	0	287639.2617	619326.5352	0	0.071657144
Winter	PM25_STREX	0.00044916	0	0 14376.2126	63233.99563	0	788215.4521	3916493.55	0	287639.2617	619326.5352	0	0.000142449
Winter	ROG_DIURN	0.053952579	0	0 14376.2126	63233.99563	0	788215.4521	3916493.55	0	287639.2617	619326.5352	0	0.000855196
Winter	ROG_HTSK	0.106759112	0	0 14376.2126	63233.99563	0	788215.4521	3916493.55	0	287639.2617	619326.5352	0	0.033858071
Winter	ROG_IDLEX	1.081368635	0.135082874	0 14376.2126	63233.99563	0	788215.4521	3916493.55	0	287639.2617	619326.5352	0	0.026558681
Winter	ROG_RESTL	0.031045244	0	0 14376.2126	63233.99563	0	788215.4521	3916493.55	0	287639.2617	619326.5352	0	0.000492095
Winter	ROG_RUNEX	0.09758511	0.1587657	0 14376.2126	63233.99563	0	788215.4521	3916493.55	0	287639.2617	619326.5352	0	0.148515653
Winter	ROG_RUNLS	0.579517452	0	0 14376.2126	63233.99563	0	788215.4521	3916493.55	0	287639.2617	619326.5352	0	0.183790803
Winter	ROG_STREX	0.236908731	0	0 14376.2126	63233.99563	0	788215.4521	3916493.55	0	287639.2617	619326.5352	0	0.075134314
Winter	SO2_IDLEX	0.005167381	0.008065327	0 14376.2126	63233.99563	0	788215.4521	3916493.55	0	287639.2617	619326.5352	0	0.000644225
Winter	SO2_RUNEX	0.017120978	0.009540262	0 14376.2126	63233.99563	0	788215.4521	3916493.55	0	287639.2617	619326.5352	0	0.010810317
Winter	SO2_STREX	0.000402119	0	0 14376.2126	63233.99563	0	788215.4521	3916493.55	0	287639.2617	619326.5352	0	0.00012753
Winter	TOG_DIURN	0.053952579	0	0 14376.2126	63233.99563	0	788215.4521	3916493.55	0	287639.2617	619326.5352	0	0.000855196
Winter	TOG_HTSK	0.106759112	0	0 14376.2126	63233.99563	0	788215.4521	3916493.55	0	287639.2617	619326.5352	0	0.033858071
Winter	TOG_IDLEX	1.577930573	0.15378157	0 14376.2126	63233.99563	0	788215.4521	3916493.55	0	287639.2617	619326.5352	0	0.035733308
Winter	TOG_RESTL	0.031045244	0	0 14376.2126	63233.99563	0	788215.4521	3916493.55	0	287639.2617	619326.5352	0	0.000492095
Winter	TOG_RUNEX	0.142395963	0.180742664	0 14376.2126	63233.99563	0	788215.4521	3916493.55	0	287639.2617	619326.5352	0	0.174318151
Winter	TOG_RUNLS	0.579517452	0	0 14376.2126	63233.99563	0	788215.4521	3916493.55	0	287639.2617	619326.5352	0	0.183790803
Winter	TOG_STREX	0.259385241	0	0 14376.2126	63233.99563	0	788215.4521	3916493.55	0	287639.2617	619326.5352	0	0.082262616

# **HHD CalEEMod Emission Rate Worksheet**

	HHD CalEEMod I	inission nate	WOTKSTICCE		Vehicle Class:	HHDT								
Season	Pollutant		Emission Rates			Population			VMT			Trips		_CalEEMod Emission
Annual	CH4 IDLEY	Gas	DSL 0.216242126	NG 1.340988662	HHDT Gas 62.1035426	HHDT DSL 54755.3189	HHDT NG 2258.192998	HHDT Gas 5663.567071	HHDT DSL 6529922.256	HHDT NG 91900.3616	HHDT Gas 1242.56768	HHDT DSL 541704.5131	HHDT NG	Rate 0.026957934
Annual Annual	CH4_IDLEX CH4_RUNEX	0.134406103		5.512571368		54755.3189	2258.192998		6529922.256		1242.56768		8806.952693 8806.952693	0.026957934
Annual	CH4_STREX	0.000240298	0.000323233	0		54755.3189	2258.192998	5663.567071			1242.56768		8806.952693	5.41159E-07
Annual	CO_IDLEX		56.06322682	19.6824452	62.1035426	54755.3189	2258.192998	5663.567071	6529922.256		1242.56768		8806.952693	5.64419367
Annual	CO_RUNEX	40.50766616	0.5783759	12.93643111	62.1035426	54755.3189	2258.192998	5663.567071	6529922.256	91900.3616	1242.56768	541704.5131	8806.952693	0.783861347
Annual	CO_STREX	4.991435895	0	0		54755.3189	2258.192998		6529922.256		1242.56768		8806.952693	0.011240873
Annual	CO2_NBIO_IDLEX			4234.348365		54755.3189	2258.192998		6529922.256		1242.56768		8806.952693	1146.115029
Annual	CO2_NBIO_RUNEX		1529.139116	3517.974184		54755.3189	2258.192998		6529922.256		1242.56768		8806.952693	1557.295076
Annual Annual	CO2_NBIO_STREX NOX_IDLEX	50.54286661 0	0 63 9047913	25.50665922	62.1035426 62.1035426	54755.3189 54755.3189	2258.192998 2258.192998		6529922.256 6529922.256		1242.56768 1242.56768		8806.952693 8806.952693	0.113824148 6.44621692
Annual	NOX_RUNEX	_		4.173564129		54755.3189	2258.192998				1242.56768		8806.952693	4.61891891
Annual	NOX_STREX		1.785573811		62.1035426	54755.3189	2258.192998		6529922.256		1242.56768		8806.952693	1.755021511
Annual	PM10_IDLEX	0	0.129087652	0.060703813	62.1035426	54755.3189	2258.192998	5663.567071	6529922.256	91900.3616	1242.56768	541704.5131	8806.952693	0.013058929
Annual	PM10_PMBW	0.061740018	0.061031123	0.061740018	62.1035426	54755.3189	2258.192998	5663.567071	6529922.256	91900.3616	1242.56768	541704.5131	8806.952693	0.061041559
Annual	PM10_PMTW		0.035586661	0.03600001		54755.3189	2258.192998		6529922.256		1242.56768		8806.952693	0.035579073
Annual	PM10_RUNEX	0.001557153	0.06106726	0.00818054		54755.3189	2258.192998				1242.56768		8806.952693	0.060283049
Annual Annual	PM10_STREX PM25_IDLEX	0.001252116	0 0 123502278	0.058077793		54755.3189 54755.3189	2258.192998 2258.192998		6529922.256 6529922.256		1242.56768 1242.56768		8806.952693 8806.952693	2.8198E-06 0.012494005
Annual	PM25_PMBW			0.026460008		54755.3189	2258.192998		6529922.256		1242.56768		8806.952693	0.026160668
Annual	PM25_PMTW	0.005000001				54755.3189	2258.192998		6529922.256		1242.56768		8806.952693	0.008894768
Annual	PM25_RUNEX	0.0014357	0.058425517	0.007826654	62.1035426	54755.3189	2258.192998	5663.567071	6529922.256	91900.3616	1242.56768	541704.5131	8806.952693	0.057675185
Annual	PM25_STREX	0.001160559	0	0	62.1035426	54755.3189	2258.192998	5663.567071	6529922.256	91900.3616	1242.56768	541704.5131	8806.952693	2.61362E-06
Annual	ROG_DIURN	0.094037236	0	0		54755.3189	2258.192998		6529922.256		1242.56768		8806.952693	1.05845E-05
Annual	ROG_HTSK	0.197790897	0	0		54755.3189	2258.192998		6529922.256		1242.56768		8806.952693	0.000445431
Annual	ROG_IDLEX	0.065766657	4.6578084 0	0.084545422	62.1035426 62.1035426	54755.3189 54755.3189	2258.192998 2258.192998	5663.567071	6529922.256 6529922.256		1242.56768 1242.56768		8806.952693 8806.952693	0.462580586 7.40247E-06
Annual Annual	ROG_RESTL ROG_RUNEX	0.731659896	_	0.450823953		54755.3189			6529922.256		1242.56768		8806.952693	0.153864977
Annual	ROG_RUNLS	1.012630004	0.14310432				2258.192998							0.002280475
Annual	ROG_STREX	0.001268634	0	0	62.1035426	54755.3189			6529922.256		1242.56768		8806.952693	2.857E-06
Annual	SO2_IDLEX	0	0.10746016	0	62.1035426	54755.3189	2258.192998	5663.567071	6529922.256	91900.3616	1242.56768	541704.5131	8806.952693	0.0106642
Annual	SO2_RUNEX		0.014446548	0		54755.3189	2258.192998		6529922.256		1242.56768		8806.952693	0.014252527
Annual	SO2_STREX	0.000500163	0	-		54755.3189	2258.192998		6529922.256		1242.56768		8806.952693	1.12638E-06
Annual	TOG_DIURN	0.094037236	0	0		54755.3189	2258.192998		6529922.256		1242.56768		8806.952693	1.05845E-05
Annual Annual	TOG_HTSK TOG_IDLEX	0.197790897 0	0 5.302560305	0 1 443076079	62.1035426 62.1035426	54755.3189 54755.3189	2258.192998 2258.192998		6529922.256 6529922.256		1242.56768 1242.56768		8806.952693 8806.952693	0.000445431 0.532125018
Annual	TOG_RESTL	0.065766657	0.302300303		62.1035426	54755.3189	2258.192998		6529922.256		1242.56768		8806.952693	7.40247E-06
Annual	TOG_RUNEX	1.053188829	_	6.049901585		54755.3189	2258.192998		6529922.256		1242.56768		8806.952693	0.252126325
Annual	TOG_RUNLS	1.012630004	0	0	62.1035426	54755.3189	2258.192998	5663.567071	6529922.256	91900.3616	1242.56768	541704.5131	8806.952693	0.002280475
Annual	TOG_STREX	0.001388994	0	0	62.1035426	54755.3189	2258.192998	5663.567071	6529922.256	91900.3616	1242.56768	541704.5131	8806.952693	3.12806E-06
Summer	CH4_IDLEX		0.224009242		62.1035426	54755.3189	2258.192998		6529922.256		1242.56768		8806.952693	0.027809841
Summer	CH4_RUNEX			5.512571368		54755.3189	2258.192998				1242.56768		8806.952693	0.083384834
Summer	CH4_STREX	0.000230203	0 54.49830651	10 5016214	62.1035426 62.1035426	54755.3189 54755.3189	2258.192998 2258.192998		6529922.256 6529922.256		1242.56768 1242.56768		8806.952693 8806.952693	5.18424E-07 5.484387709
Summer Summer	CO_IDLEX CO RUNEX	41.3511207		12.93643111		54755.3189	2258.192998		6529922.256		1242.56768		8806.952693	0.784582127
Summer	CO STREX	4.741003598	0.3703733		62.1035426	54755.3189	2258.192998		6529922.256		1242.56768		8806.952693	0.010676891
Summer	CO2_NBIO_IDLEX		11382.82323	4269.455072		54755.3189	2258.192998		6529922.256		1242.56768		8806.952693	1147.089702
Summer	CO2_NBIO_RUNEX	2206.553563	1529.139116	3517.974184	62.1035426	54755.3189	2258.192998	5663.567071	6529922.256	91900.3616	1242.56768	541704.5131	8806.952693	1557.296285
Summer	CO2_NBIO_STREX	50.14574479	0		62.1035426	54755.3189	2258.192998		6529922.256		1242.56768	541704.5131	8806.952693	0.112929817
Summer	NOX_IDLEX	_				54755.3189	2258.192998		6529922.256		1242.56768		8806.952693	6.312287403
Summer	NOX_RUNEX			3.935233828		54755.3189	2258.192998				1242.56768		8806.952693	4.371148591
Summer Summer	NOX_STREX PM10 IDLEX		1.785573811 0.121339213	0.05144879	62.1035426 62.1035426	54755.3189 54755.3189	2258.192998 2258.192998		6529922.256 6529922.256		1242.56768 1242.56768		8806.952693 8806.952693	1.75493382 0.012252105
Summer	PM10_IDLLX		0.061031123			54755.3189	2258.192998		6529922.256		1242.56768		8806.952693	0.061041559
Summer	PM10 PMTW		0.035586661		62.1035426	54755.3189	2258.192998		6529922.256		1242.56768		8806.952693	0.035579073
Summer	PM10_RUNEX	0.001557153	0.06106726	0.00818054	62.1035426	54755.3189	2258.192998	5663.567071	6529922.256	91900.3616	1242.56768	541704.5131	8806.952693	0.060283049
Summer	PM10_STREX	0.001252116	0	0		54755.3189	2258.192998	5663.567071	6529922.256		1242.56768	541704.5131	8806.952693	2.8198E-06
Summer	PM25_IDLEX			0.049223139		54755.3189	2258.192998		6529922.256		1242.56768		8806.952693	0.011722085
Summer	PM25_PMBW			0.026460008		54755.3189	2258.192998		6529922.256		1242.56768		8806.952693	0.026160668
Summer	PM25_PMTW			0.009000003		54755.3189 54755.3189			6529922.256			541704.5131 541704.5131		0.008894768 0.057675185
Summer Summer	PM25_RUNEX PM25_STREX	0.0014357	0.03642551/ n	0.007826654	62.1035426	54755.3189 54755.3189			6529922.256 6529922.256		1242.56768	541704.5131 541704.5131		0.057675185 2.61362E-06
Summer	ROG_DIURN	0.148113766	0	0		54755.3189			6529922.256		1242.56768		8806.952693	1.66712E-05
Summer	ROG_HTSK	0.200860071	0	0		54755.3189			6529922.256		1242.56768		8806.952693	0.000452343
Summer	ROG_IDLEX	0	4.822857552	0.080911209	62.1035426	54755.3189	2258.192998	5663.567071	6529922.256	91900.3616	1242.56768	541704.5131	8806.952693	0.478944965
Summer	ROG_RESTL	0.101181016	0		62.1035426	54755.3189	2258.192998		6529922.256		1242.56768		8806.952693	1.13886E-05
Summer	ROG_RUNEX	0.748807232	_	0.450823953		54755.3189			6529922.256		1242.56768	541704.5131		0.15387963
Summer	ROG_RUNLS	1.001152776	0	_	62.1035426	54755.3189			6529922.256		1242.56768		8806.952693	0.002254628
Summer	ROG_STREX	0.001218811	0 10752027	0		54755.3189 54755.3189	2258.192998		6529922.256		1242.56768		8806.952693	2.7448E-06
Summer Summer	SO2_IDLEX SO2_RUNEX	0.021835636	0.10753927 0.014446548	0		54755.3189 54755.3189	2258.192998 2258.192998		6529922.256 6529922.256		1242.56768 1242.56768		8806.952693 8806.952693	0.010672051 0.014252539
Summer	SO2_RUNEX SO2_STREX	0.001835636	0.014446548	0		54755.3189			6529922.256		1242.56768		8806.952693	0.014252539 1.11753E-06
Summer	TOG_DIURN	0.148113766	0	0		54755.3189			6529922.256		1242.56768		8806.952693	1.66712E-05
Summer	TOG_HTSK	0.200860071	0	0		54755.3189			6529922.256		1242.56768		8806.952693	0.000452343
Summer	TOG_IDLEX			1.461297953		54755.3189	2258.192998		6529922.256		1242.56768		8806.952693	0.550846128
Summer	TOG_RESTL	0.101181016	0		62.1035426	54755.3189			6529922.256		1242.56768	541704.5131	8806.952693	1.13886E-05
Summer	TOG_RUNEX	1.079256756	_	6.049901585		54755.3189			6529922.256		1242.56768	541704.5131		0.252148601
Summer	TOG_RUNLS	1.001152776	0		62.1035426	54755.3189			6529922.256				8806.952693	0.002254628
Summer	TOG_STREX	0.001334445	0	U	62.1035426	54755.3189	2230.192998	2002.20/0/1	6529922.256	9190.0016	1242.30/08	541704.5131	0000.952693	3.00521E-06

Winter	CH4 IDLEX	0	0.20575661	0	62.1035426	54755.3189	2258 102008	5663 567071	6529922.256	91900 3616	1242.56768	541704.5131	8806 952693	0.020419006
Winter	CH4_IDLEX	0.133580415			62.1035426	54755.3189					1242.56768	541704.5131		0.006941381
Winter	CH4_KONEX CH4_STREX	0.000242676	0.000323233		62.1035426	54755.3189			6529922.256		1242.56768	541704.5131		5.46514E-07
Winter	CO IDLEX		58.22430725		62.1035426	54755.3189			6529922.256		1242.56768	541704.5131		5.778100962
Winter	CO_IDLEX CO_RUNEX	40.26260139	0.5783759		62.1035426	54755.3189			6529922.256		1242.56768	541704.5131		0.604268269
Winter	CO_STREX	5.041143901	0.5703733		62.1035426	54755.3189			6529922.256		1242.56768	541704.5131		0.011352817
Winter	CO2_NBIO_IDLEX		11362.88598		62.1035426	54755.3189			6529922.256		1242.56768	541704.5131		1127.637331
Winter	CO2_NBIO_RUNEX	2204.728704			62.1035426	54755.3189			6529922.256		1242.56768	541704.5131		1508.512564
Winter	CO2_NBIO_NONEX	50.62169616	0		62.1035426	54755.3189	2258.192998		6529922.256		1242.56768	541704.5131		0.114001674
Winter	NOX_IDLEX		65.75625546		62.1035426	54755.3189			6529922.256		1242.56768	541704.5131		6.525561244
Winter	NOX RUNEX	4.995733074		_	62.1035426	54755.3189			6529922.256		1242.56768	541704.5131		4.482790982
Winter	NOX_STREX	0.883901508			62.1035426	54755.3189			6529922.256		1242.56768	541704.5131		1.755042357
Winter	PM10_IDLEX		0.139787878		62.1035426	54755.3189			6529922.256		1242.56768	541704.5131		0.013872359
Winter	PM10_PMBW	0.061740018			62.1035426	54755.3189					1242.56768	541704.5131		0.060185438
Winter	PM10_PMTW	0.020000006			62.1035426	54755.3189		5663.567071			1242.56768	541704.5131		0.035079877
Winter	PM10_RUNEX	0.001557153	0.06106726		62.1035426	54755.3189			6529922.256		1242.56768	541704.5131		0.060169613
Winter	PM10_STREX	0.001252116	0		62.1035426	54755.3189			6529922.256		1242.56768	541704.5131		2.8198E-06
Winter	PM25_IDLEX		0.133740716		62.1035426	54755.3189			6529922.256		1242.56768	541704.5131		0.013272247
Winter	PM25_PMBW		0.026156196		62.1035426	54755.3189		5663.567071	6529922.256		1242.56768	541704.5131		0.025793759
Winter	PM25_PMTW	0.005000001			62.1035426	54755.3189			6529922.256		1242.56768	541704.5131		0.008769969
Winter	PM25_RUNEX		0.058425517	0	62.1035426	54755.3189			6529922.256		1242.56768	541704.5131	8806.952693	0.057566656
Winter	PM25_STREX	0.001160559	0		62.1035426	54755.3189			6529922.256		1242.56768	541704.5131		2.61362E-06
Winter	ROG_DIURN	0.099353566	0	0	62.1035426	54755.3189			6529922.256		1242.56768	541704.5131	8806.952693	1.11829E-05
Winter	ROG_HTSK	0.233273059	0	0	62.1035426	54755.3189	2258.192998	5663.567071	6529922.256	91900.3616	1242.56768	541704.5131	8806.952693	0.000525338
Winter	ROG_IDLEX	0	4.429883381	0	62.1035426	54755.3189	2258.192998	5663.567071	6529922.256		1242.56768	541704.5131	8806.952693	0.439615594
Winter	ROG_RESTL	0.066038947	0	0	62.1035426	54755.3189	2258.192998	5663.567071	6529922.256	91900.3616	1242.56768	541704.5131	8806.952693	7.43312E-06
Winter	ROG_RUNEX	0.726621947	0.14918452	0	62.1035426	54755.3189	2258.192998	5663.567071	6529922.256	91900.3616	1242.56768	541704.5131	8806.952693	0.147609299
Winter	ROG_RUNLS	1.071838898	0	0	62.1035426	54755.3189	2258.192998	5663.567071	6529922.256	91900.3616	1242.56768	541704.5131	8806.952693	0.002413815
Winter	ROG_STREX	0.001280108	0	0	62.1035426	54755.3189	2258.192998	5663.567071	6529922.256	91900.3616	1242.56768	541704.5131	8806.952693	2.88284E-06
Winter	SO2_IDLEX	0	0.107350913	0	62.1035426	54755.3189	2258.192998	5663.567071	6529922.256	91900.3616	1242.56768	541704.5131	8806.952693	0.010653358
Winter	SO2_RUNEX	0.021817578	0.014446548	0	62.1035426	54755.3189	2258.192998	5663.567071	6529922.256	91900.3616	1242.56768	541704.5131	8806.952693	0.014252523
Winter	SO2_STREX	0.000500943	0	0	62.1035426	54755.3189	2258.192998	5663.567071	6529922.256	91900.3616	1242.56768	541704.5131	8806.952693	1.12814E-06
Winter	TOG_DIURN	0.099353566	0	0	62.1035426	54755.3189	2258.192998	5663.567071	6529922.256	91900.3616	1242.56768	541704.5131	8806.952693	1.11829E-05
Winter	TOG_HTSK	0.233273059	0	0	62.1035426	54755.3189	2258.192998	5663.567071	6529922.256	91900.3616	1242.56768	541704.5131	8806.952693	0.000525338
Winter	TOG_IDLEX	0	5.04308502	0	62.1035426	54755.3189	2258.192998	5663.567071	6529922.256	91900.3616	1242.56768	541704.5131	8806.952693	0.50046889
Winter	TOG_RESTL	0.066038947	0	0	62.1035426	54755.3189	2258.192998	5663.567071	6529922.256	91900.3616	1242.56768	541704.5131	8806.952693	7.43312E-06
Winter	TOG_RUNEX	1.045558466	0.16983522	0	62.1035426	54755.3189	2258.192998	5663.567071	6529922.256	91900.3616	1242.56768	541704.5131	8806.952693	0.168228548
Winter	TOG_RUNLS	1.071838898	0	0	62.1035426	54755.3189	2258.192998	5663.567071	6529922.256	91900.3616	1242.56768	541704.5131	8806.952693	0.002413815
Winter	TOG_STREX	0.001401557	0	0	62.1035426	54755.3189	2258.192998	5663.567071	6529922.256	91900.3616	1242.56768	541704.5131	8806.952693	3.15635E-06

# **OBUS CalEEMod Emission Rate Worksheet**

	Vehicle Class: OBUS													
Season	Pollutant		nission Rates	NC		Population	ODLIC NC	OBLIC Coa	VMT	ODLIC NC	ODLIC Coa	Trips		CalEEMod Emission
A	CHA IDIEV	Gas	DSL	NG	OBUS Gas	OBUS DSL	OBUS NG	OBUS Gas	OBUS DSL	OBUS NG	OBUS Gas	OBUS DSL	OBUS NG	Rate
Annual	CH4_IDLEX	0.195422159	0.06953137		3994.029176		0	171885.0066		0	79912.53576		0	0.0090435
Annual	CH4_RUNEX	0.015991054	0.00914525		3994.029176		0		223367.5296	0	79912.53576		0	0.012122311
Annual	CH4_STREX	0.031555504	0		3994.029176		0		223367.5296	0	79912.53576		0	0.023064648
Annual	CO_IDLEX		14.42711181		3994.029176		0		223367.5296	0	79912.53576		0	0.605378777
Annual	CO_RUNEX		0.687395148		3994.029176		0		223367.5296	0	79912.53576		0	1.238477058
Annual	CO_STREX	3.470864174	0		3994.029176		0		223367.5296	0	79912.53576		0	2.536934972
Annual	CO2_NBIO_IDLEX		3079.583536	0	3994.029176	2994.516901	0	171885.0066	223367.5296	0	79912.53576	29418.4327	0	98.40281867
Annual	CO2_NBIO_RUNEX		1237.983937		3994.029176		0		223367.5296	0	79912.53576		0	1457.528411
Annual	CO2_NBIO_STREX	27.19304928	0	0	3994.029176	2994.516901	0	171885.0066	223367.5296	0	79912.53576	29418.4327	0	19.87602921
Annual	NOX_IDLEX	0.064838775	25.83869524		3994.029176		0	171885.0066	223367.5296	0	79912.53576	29418.4327	0	0.710076739
Annual	NOX_RUNEX	0.593180598	3.986864672	0	3994.029176	2994.516901	0	171885.0066	223367.5296	0	79912.53576	29418.4327	0	2.511040088
Annual	NOX_STREX	0.330957742	1.405450226	0	3994.029176	2994.516901	0	171885.0066	223367.5296	0	79912.53576	29418.4327	0	0.620078796
Annual	PM10_IDLEX	0	0.122675487	0	3994.029176	2994.516901	0	171885.0066	223367.5296	0	79912.53576	29418.4327	0	0.003360016
Annual	PM10_PMBW	0.130340037	0.130340037	0	3994.029176	2994.516901	0	171885.0066	223367.5296	0	79912.53576	29418.4327	0	0.130340037
Annual	PM10_PMTW	0.012000003	0.012000003	0	3994.029176	2994.516901	0	171885.0066	223367.5296	0	79912.53576	29418.4327	0	0.012000003
Annual	PM10_RUNEX	0.000907997	0.093587767	0	3994.029176	2994.516901	0	171885.0066	223367.5296	0	79912.53576	29418.4327	0	0.053283755
Annual	PM10_STREX	0.000272201	0	0	3994.029176	2994.516901	0	171885.0066	223367.5296	0	79912.53576	29418.4327	0	0.000198958
Annual	PM25_IDLEX	0	0.1173686	0	3994.029176	2994.516901	0	171885.0066	223367.5296	0	79912.53576	29418.4327	0	0.003214663
Annual	PM25_PMBW	0.055860016	0.055860016	0	3994.029176	2994.516901	0	171885.0066	223367.5296	0	79912.53576	29418.4327	0	0.055860016
Annual	PM25_PMTW	0.003000001		0	3994.029176	2994.516901	0	171885.0066	223367.5296	0	79912.53576	29418.4327	0	0.003000001
Annual	PM25_RUNEX		0.089539201		3994.029176		0		223367.5296	0	79912.53576		0	0.050964052
Annual	PM25_STREX	0.000250517	0		3994.029176		0		223367.5296	0	79912.53576		0	0.000183108
Annual	ROG_DIURN	0.051030361	0		3994.029176		0		223367.5296	0	79912.53576		0	0.001864218
Annual	ROG_HTSK	0.030111324	0		3994.029176		0		223367.5296	0	79912.53576		0	0.022009064
Annual	ROG_IDLEX	0.743068193	1.49699133		3994.029176		0		223367.5296	0	79912.53576		0	0.068147223
Annual	<del>-</del>	0.025510608	1.43033133		3994.029176		0		223367.5296	0	79912.53576		0	0.000147223
	ROG_RESTL		_						223367.5296		79912.53576		_	
Annual	ROG_RUNEX	0.077104192			3994.029176		0			0			0	0.144800944
Annual	ROG_RUNLS	0.356967114	0		3994.029176		0		223367.5296	0	79912.53576		0	0.260915527
Annual	ROG_STREX	0.167484489	0 020004270		3994.029176		0		223367.5296	0	79912.53576		0	0.12241829
Annual	SO2_IDLEX		0.029094378		3994.029176		0		223367.5296	0	79912.53576		0	0.000935962
Annual	SO2_RUNEX		0.011695858		3994.029176		0		223367.5296	0	79912.53576		0	0.014109782
Annual	SO2_STREX	0.000269097	0		3994.029176		0		223367.5296	0	79912.53576		0	0.000196689
Annual	TOG_DIURN	0.051030361	0		3994.029176		0		223367.5296	0	79912.53576		0	0.001864218
Annual	TOG_HTSK	0.030111324	0	0	3994.029176	2994.516901	0	171885.0066	223367.5296	0	79912.53576	29418.4327	0	0.022009064
Annual	TOG_IDLEX	1.084135006	1.704210676	0	3994.029176	2994.516901	0	171885.0066	223367.5296	0	79912.53576	29418.4327	0	0.086282548
Annual	TOG_RESTL	0.025510608	0	0	3994.029176	2994.516901	0	171885.0066	223367.5296	0	79912.53576	29418.4327	0	0.000931942
Annual	TOG_RUNEX	0.112336248	0.224149645	0	3994.029176	2994.516901	0	171885.0066	223367.5296	0	79912.53576	29418.4327	0	0.175524918
Annual	TOG_RUNLS	0.356967114	0	0	3994.029176	2994.516901	0	171885.0066	223367.5296	0	79912.53576	29418.4327	0	0.260915527
Annual	TOG_STREX	0.18336013	0	0	3994.029176	2994.516901	0	171885.0066	223367.5296	0	79912.53576	29418.4327	0	0.134022164
Summer	CH4_IDLEX	0.195850703	0.068767927	0	3994.029176	2994.516901	0	171885.0066	223367.5296	0	79912.53576	29418.4327	0	0.009038246
Summer	CH4_RUNEX	0.016349907	0.00914525	0	3994.029176	2994.516901	0	171885.0066	223367.5296	0	79912.53576	29418.4327	0	0.012278367
Summer	CH4_STREX	0.030339779	0	0	3994.029176	2994.516901	0	171885.0066	223367.5296	0	79912.53576	29418.4327	0	0.022176047
Summer	CO IDLEX	5.754694525	13.01810553	0	3994.029176	2994.516901	0	171885.0066	223367.5296	0	79912.53576	29418.4327	0	0.566786847
Summer	_ CO_RUNEX		0.687395148		3994.029176		0		223367.5296	0	79912.53576		0	1.256461237
Summer	CO_STREX	3.282677035	0		3994.029176		0		223367.5296	0	79912.53576		0	2.399384635
Summer	CO2_NBIO_IDLEX		3123.509239		3994.029176		0		223367.5296	0	79912.53576		0	99.60592026
Summer	CO2_NBIO_RUNEX		1237.983937		3994.029176		0		223367.5296	0	79912.53576		0	1457.5602
Summer	CO2_NBIO_STREX	26.8721811	0		3994.029176		0		223367.5296	0	79912.53576		0	19.64149923
Summer	NOX_IDLEX		26.04087766		3994.029176		0		223367.5296	0	79912.53576		0	0.715614408
Summer	NOX_RUNEX		3.769983589		3994.029176		0		223367.5296	0	79912.53576		0	2.356284679
Summer	<del>-</del>		1.405450226		3994.029176		0		223367.5296	0	79912.53576		0	0.609497434
	NOX_STREX									_			_	
Summer	PM10_IDLEX		0.103587495		3994.029176		0		223367.5296	0	79912.53576		0	0.002837206
Summer	PM10_PMBW		0.130340037		3994.029176		0		223367.5296	0	79912.53576		0	0.130340037
Summer	PM10_PMTW		0.012000003		3994.029176		0		223367.5296	0	79912.53576		0	0.012000003
Summer	PM10_RUNEX	0.000907997			3994.029176		0		223367.5296	0	79912.53576		0	0.053283755
Summer	PM10_STREX	0.000272201	0		3994.029176		0		223367.5296	0	79912.53576		0	0.000198958
Summer	PM25_IDLEX		0.099106346		3994.029176		0		223367.5296	0	79912.53576		0	0.00271447
Summer	PM25_PMBW		0.055860016		3994.029176		0		223367.5296	0	79912.53576		0	0.055860016
	PM25_PMTW		0.003000001		3994.029176		0		223367.5296	0	79912.53576		0	0.003000001
	PM25_RUNEX		0.089539201		3994.029176		0		223367.5296	0	79912.53576		0	0.050964052
Summer	PM25_STREX	0.000250517	0		3994.029176		0		223367.5296	0	79912.53576		0	0.000183108
Summer	ROG_DIURN	0.073633715	0	0	3994.029176	2994.516901	0	171885.0066	223367.5296	0	79912.53576	29418.4327	0	0.002689953
Summer	ROG_HTSK	0.030794387	0	0	3994.029176	2994.516901	0	171885.0066	223367.5296	0	79912.53576	29418.4327	0	0.02250833
Summer	ROG_IDLEX	0.743068193	1.480554616	0	3994.029176	2994.516901	0	171885.0066	223367.5296	0	79912.53576	29418.4327	0	0.06769703
Summer	ROG_RESTL	0.035689345	0	0	3994.029176	2994.516901	0	171885.0066	223367.5296	0	79912.53576	29418.4327	0	0.001303787
Summer	ROG_RUNEX	0.078846123	0.196894715	0	3994.029176	2994.516901	0	171885.0066	223367.5296	0	79912.53576	29418.4327	0	0.145558465
Summer	ROG_RUNLS	0.347644523	0	0	3994.029176	2994.516901	0		223367.5296	0	79912.53576		0	0.254101429
Summer	ROG_STREX	0.160757104	0		3994.029176		0		223367.5296	0	79912.53576		0	0.117501089
Summer	SO2_IDLEX		0.029509367		3994.029176		0		223367.5296	0	79912.53576		0	0.000947328
Summer	SO2_RUNEX		0.011695858		3994.029176		0		223367.5296	0	79912.53576		0	0.014110097
Summer	SO2_STREX	0.000265922	0.011033030		3994.029176		0		223367.5296	0	79912.53576		0	0.000194369
Summer	TOG_DIURN	0.073633715	n		3994.029176		0		223367.5296	0	79912.53576		0	0.002689953
Summer	TOG_HTSK	0.030794387	0		3994.029176		0		223367.5296	0	79912.53576		0	0.02250833
Summer	TOG_IDLEX		1.685498729		3994.029176		0		223367.5296	0	79912.53576		0	0.085770038
	<del>-</del>	0.035689345	_		3994.029176				223367.5296		79912.53576			0.001303787
Summer	TOG_RESTL		0 22/1/106/15				0			0			0	
Summer	TOG_RUNEX		0.224149645		3994.029176		0		223367.5296	0	79912.53576		0	0.176635772
Summer	TOG_RUNLS	0.347644523	0		3994.029176		0		223367.5296	0	79912.53576		0	0.254101429
Summer	TOG_STREX	0.175995263	0	U	3994.029176	2994.516901	0	1/1885.0066	223367.5296	0	79912.53576	29418.432/	0	0.128639012

Vehicle Class: OBUS

Winter	CH4_IDLEX	0.195327862	0.070585648	0	3994.029176	2994.516901	0	171885.0066	223367.5296	0	79912.53576 29	418.4327	0	0.009068932
Winter	CH4_RUNEX	0.015888334	0.00914525	0	3994.029176	2994.516901	0	171885.0066	223367.5296	0	79912.53576 29	418.4327	0	0.012077641
Winter	CH4_STREX	0.031849214	0	0	3994.029176	2994.516901	0	171885.0066	223367.5296	0	79912.53576 29	418.4327	0	0.023279328
Winter	CO_IDLEX	5.754694525	16.37288238	0	3994.029176	2994.516901	0	171885.0066	223367.5296	0	79912.53576 29	418.4327	0	0.658672395
Winter	CO_RUNEX	1.942726057	0.687395148	0	3994.029176	2994.516901	0	171885.0066	223367.5296	0	79912.53576 29	418.4327	0	1.23330578
Winter	CO_STREX	3.509916163	0	0	3994.029176	2994.516901	0	171885.0066	223367.5296	0	79912.53576 29	418.4327	0	2.565478974
Winter	CO2_NBIO_IDLEX	384.7269145	3018.924231	0	3994.029176	2994.516901	0	171885.0066	223367.5296	0	79912.53576 29	418.4327	0	96.74139268
Winter	CO2_NBIO_RUNEX	1742.809202	1237.983937	0	3994.029176	2994.516901	0	171885.0066	223367.5296	0	79912.53576 29	418.4327	0	1457.519262
Winter	CO2_NBIO_STREX	27.26037976	0	0	3994.029176	2994.516901	0	171885.0066	223367.5296	0	79912.53576 29	418.4327	0	19.92524262
Winter	NOX_IDLEX	0.064838775	25.55949094	0	3994.029176	2994.516901	0	171885.0066	223367.5296	0	79912.53576 29	418.4327	0	0.702429482
Winter	NOX_RUNEX	0.579084735	3.915142708	0	3994.029176	2994.516901	0	171885.0066	223367.5296	0	79912.53576 29	418.4327	0	2.464378212
Winter	NOX_STREX	0.334438128	1.405450226	0	3994.029176	2994.516901	0	171885.0066	223367.5296	0	79912.53576 29	418.4327	0	0.622622691
Winter	PM10_IDLEX	0	0.149035096	0	3994.029176	2994.516901	0	171885.0066	223367.5296	0	79912.53576 29	418.4327	0	0.004081992
Winter	PM10_PMBW	0.130340037	0.130340037	0	3994.029176	2994.516901	0	171885.0066	223367.5296	0	79912.53576 29	418.4327	0	0.130340037
Winter	PM10_PMTW	0.012000003	0.012000003	0	3994.029176	2994.516901	0	171885.0066	223367.5296	0	79912.53576 29	418.4327	0	0.012000003
Winter	PM10_RUNEX	0.000907997	0.093587767	0	3994.029176	2994.516901	0	171885.0066	223367.5296	0	79912.53576 29	418.4327	0	0.053283755
Winter	PM10_STREX	0.000272201	0	0	3994.029176	2994.516901	0	171885.0066	223367.5296	0	79912.53576 29	418.4327	0	0.000198958
Winter	PM25_IDLEX	0	0.142587903	0	3994.029176	2994.516901	0	171885.0066	223367.5296	0	79912.53576 29	418.4327	0	0.003905407
Winter	PM25_PMBW	0.055860016	0.055860016	0	3994.029176	2994.516901	0	171885.0066	223367.5296	0	79912.53576 29	418.4327	0	0.055860016
Winter	PM25_PMTW	0.003000001	0.003000001	0	3994.029176	2994.516901	0	171885.0066	223367.5296	0	79912.53576 29	418.4327	0	0.003000001
Winter	PM25_RUNEX	0.000834979	0.089539201	0	3994.029176	2994.516901	0	171885.0066	223367.5296	0	79912.53576 29	418.4327	0	0.050964052
Winter	PM25_STREX	0.000250517	0	0	3994.029176	2994.516901	0	171885.0066	223367.5296	0	79912.53576 29	418.4327	0	0.000183108
Winter	ROG_DIURN	0.054038983	0	0	3994.029176	2994.516901	0	171885.0066	223367.5296	0	79912.53576 29	418.4327	0	0.001974128
Winter	ROG_HTSK	0.032233512	0	0	3994.029176	2994.516901	0	171885.0066	223367.5296	0	79912.53576 29	418.4327	0	0.02356022
Winter	ROG_IDLEX	0.743068193	1.519689649	0	3994.029176	2994.516901	0	171885.0066	223367.5296	0	79912.53576 29	418.4327	0	0.068768918
Winter	ROG_RESTL	0.025170467	0	0	3994.029176	2994.516901	0	171885.0066	223367.5296	0	79912.53576 29	418.4327	0	0.000919516
Winter	ROG_RUNEX	0.07659862	0.196894715	0	3994.029176	2994.516901	0	171885.0066	223367.5296	0	79912.53576 29	418.4327	0	0.144581085
Winter	ROG_RUNLS	0.382465314	0	0	3994.029176	2994.516901	0	171885.0066	223367.5296	0	79912.53576 29	418.4327	0	0.279552752
Winter	ROG_STREX	0.169102484	0	0	3994.029176	2994.516901	0	171885.0066	223367.5296	0	79912.53576 29	418.4327	0	0.12360092
Winter	SO2_IDLEX	0.003807185	0.028521299	0	3994.029176	2994.516901	0	171885.0066	223367.5296	0	79912.53576 29	418.4327	0	0.000920266
Winter	SO2_RUNEX	0.01724651	0.011695858	0	3994.029176	2994.516901	0	171885.0066	223367.5296	0	79912.53576 29	418.4327	0	0.014109692
Winter	SO2_STREX	0.000269764	0	0	3994.029176	2994.516901	0	171885.0066	223367.5296	0	79912.53576 29	418.4327	0	0.000197176
Winter	TOG_DIURN	0.054038983	0	0	3994.029176	2994.516901	0	171885.0066	223367.5296	0	79912.53576 29	418.4327	0	0.001974128
Winter	TOG_HTSK	0.032233512	0	0	3994.029176	2994.516901	0	171885.0066	223367.5296	0	79912.53576 29	418.4327	0	0.02356022
Winter	TOG_IDLEX	1.084135006	1.730050984	0	3994.029176	2994.516901	0	171885.0066	223367.5296	0	79912.53576 29	418.4327	0	0.0869903
Winter	TOG_RESTL	0.025170467	0	0	3994.029176	2994.516901	0	171885.0066	223367.5296	0	79912.53576 29	418.4327	0	0.000919516
Winter	TOG_RUNEX	0.111595159	0.224149645	0	3994.029176	2994.516901	0	171885.0066	223367.5296	0	79912.53576 29	418.4327	0	0.175202638
Winter	TOG_RUNLS	0.382465314	0	0	3994.029176	2994.516901	0	171885.0066	223367.5296	0	79912.53576 29	418.4327	0	0.279552752
Winter	TOG_STREX	0.185131464	0	0	3994.029176	2994.516901	0	171885.0066	223367.5296	0	79912.53576 29	418.4327	0	0.135316873

## **UBUS CalEEMod Emission Rate Worksheet**

eason	Pollutant		Emiss	ion Rates	•	ehicle Class:	UBUS Po	pulation			V	MT				Trips	c	CalEEMod Emi
cuson	Tonacanc	Gas	DSL	ELEC	NG	UBUS Gas	UBUS DSL	UBUS ELEC	UBUS NG	UBUS Gas		UBUS ELEC	UBUS NG	UBUS Gas	UBUS DSL	UBUS ELEC	UBUS NG	Rate
nual	CH4 IDLEX	0	0	0		452.5123	14.1944	12			1580.590656				56.7776	48	16305.1305	0
nual	CH4 RUNEX	0.005996	0.072802876	0	6.72716485	452.5123	14.1944	12	4076.282617	32600.03	1580.590656	1070.403311	431536.885	1810.049	56.7776	48	16305.1305	6.219806
nual	CH4_STREX	0.109714	0	0	0	452.5123	14.1944	12	4076.282617	32600.03	1580.590656	1070.403311	431536.885	1810.049	56.7776	48	16305.1305	0.010899
nual	CO IDLEX	0	0	0	0	452.5123	14.1944	12	4076.282617	32600.03	1580.590656	1070.403311	431536.885	1810.049	56.7776	48	16305.1305	0
nual	CO RUNEX	0.356021	0.207356536	0	46.207039	452.5123	14.1944	12	4076.282617	32600.03	1580.590656	1070.403311	431536.885	1810.049	56.7776	48	16305.1305	42.74312
nual	CO STREX	7.171866	0	0	0	452.5123	14.1944	12	4076.282617	32600.03	1580.590656	1070.403311	431536.885	1810.049	56.7776	48	16305.1305	0.712484
nual	CO2_NBIO_IDLEX	0	0	0	0	452.5123	14.1944	12	4076.282617	32600.03	1580.590656	1070.403311	431536.885	1810.049	56.7776	48	16305.1305	0
nual	CO2_NBIO_RUNEX	2061.591	1665.244244	0	1985.414511	452.5123	14.1944	12	4076.282617	32600.03	1580.590656	1070.403311	431536.885	1810.049	56.7776	48	16305.1305	1985.097
nual	CO2_NBIO_STREX	87.99759	0	0	0	452.5123	14.1944	12	4076.282617	32600.03	1580.590656	1070.403311	431536.885	1810.049	56.7776	48	16305.1305	8.742059
nual	NOX_IDLEX	0	0	0		452.5123	14.1944	12	4076.282617	32600.03	1580.590656	1070.403311	431536.885	1810.049	56.7776	48	16305.1305	0
nual	NOX RUNEX	0.281379	2.329438205	0	1.273676336		14.1944	12			1580.590656				56.7776	48	16305.1305	1.205029
nual	NOX_STREX	0.840101	0	0		452.5123	14.1944	12			1580.590656				56.7776	48	16305.1305	0.083459
nual	PM10_IDLEX	0	0	0		452.5123	14.1944	12			1580.590656				56.7776	48	16305.1305	0
nual	PM10 PMBW	0.123562	0.079072893	0.130340079	0.068670129		14.1944	12			1580.590656				56.7776	48	16305.1305	0.072680
nual	PM10 PMTW				0.033483234		14.1944	12	4076.282617		1580.590656				56.7776	48	16305.1305	0.031875
nual	PM10 RUNEX		0.006299396		0.003900944		14.1944	12	4076.282617		1580.590656				56.7776	48	16305.1305	0.003695
nual	PM10_STREX	0.000366	0	0		452.5123	14.1944	12			1580.590656				56.7776	48	16305.1305	3.63938E
nual	PM25_IDLEX	0	0	0		452.5123	14.1944	12			1580.590656				56.7776	48	16305.1305	0
nual	PM25 PMBW	0.052955	0.033888383	0.055860034	0.029430055		14.1944	12	4076.282617		1580.590656				56.7776	48	16305.1305	0.031148
nual	PM25_PMTW				0.008370809		14.1944	12	4076.282617		1580.590656				56.7776	48	16305.1305	0.007968
nual	PM25 RUNEX		0.006026887		0.003732191		14.1944	12			1580.590656				56.7776	48	16305.1305	0.003532
iual	PM25_STREX	0.000337	0	n		452.5123	14.1944	12			1580.590656				56.7776	48	16305.1305	3.34627E
nual	ROG_DIURN	0.000357	0	n		452.5123	14.1944	12			1580.590656				56.7776	48	16305.1305	0.000613
ual	ROG_HTSK	0.076814	0	n		452.5123	14.1944	12	4076.282617		1580.590656				56.7776	48	16305.1305	0.007631
ual	ROG_IDLEX	0.070014	0	n		452.5123	14.1944	12	4076.282617		1580.590656				56.7776	48	16305.1305	0.00703
ual	ROG_RESTL	0.018118	0	n		452.5123	14.1944	12			1580.590656				56.7776	48	16305.1305	0.000449
ual	ROG_RUNEX		0.003027946	0	0.167085413		14.1944	12			1580.590656				56.7776	48	16305.1305	0.15587
ıal	ROG_RUNLS	0.020001	0.000027040	0		452.5123	14.1944	17			1580.590656				56.7776	48	16305.1305	0.13387
al	ROG_STREX	0.47559	0	0		452.5123	14.1944	12			1580.590656				56.7776	48	16305.1305	0.04724
ıal	SO2 IDLEX	0.47333	0	0		452.5123	14.1944	12			1580.590656				56.7776	48	16305.1305	0.04724 N
ıal	SO2_RUNEX	0.020401	0.015742547	0		452.5123	14.1944	12			1580.590656				56.7776	40	16305.1305	0.00147
ıal	SO2_KONEX SO2_STREX	0.020401	0.013742347	0		452.5123	14.1944	12			1580.590656				56.7776	48	16305.1305	8.65098
	_	0.000871	0	0		452.5123	14.1944				1580.590656				56.7776	48 48		0.00061
ıal	TOG_DIURN		0	0				12									16305.1305	
al	TOG_HTSK	0.076814	0	0		452.5123	14.1944	12			1580.590656				56.7776	48	16305.1305	0.00763
ıal	TOG_IDLEX	0 010110	0	0		452.5123	14.1944	12			1580.590656				56.7776	48	16305.1305	0 00044
ual	TOG_RESTL	0.018118	0.076565024	0		452.5123	14.1944	12			1580.590656				56.7776	48	16305.1305	0.00044
ıal	TOG_RUNEX		0.076565831	0	6.94642344		14.1944	12			1580.590656				56.7776	48	16305.1305	6.42413
ual	TOG_RUNLS	0.473291	0	0		452.5123	14.1944	12			1580.590656				56.7776	48	16305.1305	0.04701
ual	TOG_STREX	0.520711	0	0		452.5123	14.1944	12			1580.590656				56.7776	48	16305.1305	0.05172
mer	CH4_IDLEX	0	0	0		452.5123	14.1944	12			1580.590656				56.7776	48	16305.1305	0
mer	CH4_RUNEX		0.072802876	0	6.72716485		14.1944	12			1580.590656				56.7776	48	16305.1305	6.21981
mer	CH4_STREX	0.102002	0	0		452.5123	14.1944	12			1580.590656				56.7776	48	16305.1305	0.01013
mer	CO_IDLEX	0	0	0		452.5123	14.1944	12			1580.590656				56.7776	48	16305.1305	0
mer	CO_RUNEX		0.207356536	0	46.207039		14.1944	12			1580.590656				56.7776	48	16305.1305	42.7436
mer	CO_STREX	6.312688	0	0		452.5123	14.1944	12			1580.590656				56.7776	48	16305.1305	0.62712
mer	CO2_NBIO_IDLEX	0	0	0		452.5123	14.1944	12			1580.590656				56.7776	48	16305.1305	0
ner	CO2_NBIO_RUNEX		1665.244244	0	1985.414511		14.1944	12			1580.590656				56.7776	48	16305.1305	1985.0
ner	CO2_NBIO_STREX	86.51759	0	0	0	452.5123	14.1944	12	4076.282617	32600.03	1580.590656	1070.403311	431536.885	1810.049	56.7776	48	16305.1305	8.5950
ner	NOX_IDLEX	0	0	0	0	452.5123	14.1944	12	4076.282617	32600.03	1580.590656	1070.403311	431536.885	1810.049	56.7776	48	16305.1305	0
ner	NOX_RUNEX	0.24776	2.329438205	0	1.273646765	452.5123	14.1944	12	4076.282617	32600.03	1580.590656	1070.403311	431536.885	1810.049	56.7776	48	16305.1305	1.2026
ner	NOX_STREX	0.8034	0	0	0	452.5123	14.1944	12	4076.282617	32600.03	1580.590656	1070.403311	431536.885	1810.049	56.7776	48	16305.1305	0.07983
ner	PM10_IDLEX	0	0	0	0	452.5123	14.1944	12	4076.282617	32600.03	1580.590656	1070.403311	431536.885	1810.049	56.7776	48	16305.1305	0
ner	PM10_PMBW	0.123562	0.079072893	0.130340079	0.068670129	452.5123	14.1944	12	4076.282617	32600.03	1580.590656	1070.403311	431536.885	1810.049	56.7776	48	16305.1305	0.0726
ner	PM10_PMTW	0.011341	0.029936049	0.012000007	0.033483234	452.5123	14.1944	12	4076.282617	32600.03	1580.590656	1070.403311	431536.885	1810.049	56.7776	48	16305.1305	0.0318
ner	PM10_RUNEX	0.000967	0.006299396	0	0.003900944	452.5123	14.1944	12	4076.282617	32600.03	1580.590656	1070.403311	431536.885	1810.049	56.7776	48	16305.1305	0.0036
ner	PM10_STREX	0.000366	0	0	0	452.5123	14.1944	12	4076.282617	32600.03	1580.590656	1070.403311	431536.885	1810.049	56.7776	48	16305.1305	3.6393
ner	PM25_IDLEX	0	0	0	0	452.5123	14.1944	12	4076.282617	32600.03	1580.590656	1070.403311	431536.885	1810.049	56.7776	48	16305.1305	0
ner	PM25_PMBW	0.052955	0.033888383	0.055860034	0.029430055	452.5123	14.1944	12	4076.282617	32600.03	1580.590656	1070.403311	431536.885	1810.049	56.7776	48	16305.1305	0.0311
ner	PM25_PMTW	0.002835	0.007484012	0.003000002	0.008370809	452.5123	14.1944	12	4076.282617	32600.03	1580.590656	1070.403311	431536.885	1810.049	56.7776	48	16305.1305	0.0079
	PM25_RUNEX		0.006026887		0.003732191		14.1944	12			1580.590656				56.7776	48	16305.1305	0.0035
ner	PM25_STREX	0.000337	0	0		452.5123	14.1944	12			1580.590656				56.7776	48	16305.1305	3.3462
ner	ROG_DIURN	0.033003	0	0		452.5123	14.1944	12			1580.590656				56.7776	48	16305.1305	0.0008
ner	ROG_HTSK	0.079233	0	0		452.5123	14.1944	12			1580.590656				56.7776	48	16305.1305	0.0078
er	ROG_IDLEX	0	0	0		452.5123	14.1944	12			1580.590656				56.7776	48	16305.1305	0
ner	ROG_RESTL	0.024988	0	0		452.5123	14.1944	12			1580.590656				56.7776	48	16305.1305	0.0006
ier	ROG_RUNEX		0.003027946	0	0.167085413		14.1944	12			1580.590656				56.7776	48	16305.1305	0.1559
ner	ROG_RUNLS	0.42983	0	0		452.5123	14.1944	12			1580.590656				56.7776	48	16305.1305	0.0427
ner	ROG_STREX	0.440395	n	n		452.5123	14.1944	12			1580.590656				56.7776	48	16305.1305	0.0437
	SO2 IDLEX	0.4-0555	0	n		452.5123	14.1944	12			1580.590656				56.7776	48	16305.1305	0.0437
ner	SO2_RUNEX	_	0.015742547	0		452.5123	14.1944	12			1580.590656				56.7776	48	16305.1305	0.0014
	<del>-</del>	0.020401	0.013/4234/	0		452.5123	14.1944				1580.590656				56.7776		16305.1305	8.5054
ner	SO2_STREX		0	0				12 12								48 49		
ner	TOG_DIURN	0.033003	0	0		452.5123	14.1944	12			1580.590656				56.7776 56.7776	48 40	16305.1305	0.0008
ner	TOG_HTSK	0.079233	0	0		452.5123	14.1944	12 12			1580.590656				56.7776 56.7776	48 40	16305.1305	0.0078
ner	TOG_IDLEX	0 024099	0	0		452.5123	14.1944	12			1580.590656				56.7776	48	16305.1305	0.0006
ner	TOG_RESTL	0.024988		0		452.5123	14.1944	12			1580.590656				56.7776	48	16305.1305	0.0006
ner	TOG_RUNEX		0.076565831	0	6.94642344		14.1944	12			1580.590656				56.7776	48	16305.1305	6.4241
ner	TOG_RUNLS	0.42983	0	0		452.5123	14.1944	12			1580.590656				56.7776	48	16305.1305	0.0427
ner	TOG_STREX	0.482177	0	0	0	452.5123	14.1944	12	4076.282617	32600.03	1580.590656	1070.403311	431536.885	1810.049	56.7776	48	16305.1305	0.04

Winter	CH4_IDLEX	0	0	0	0	452.5123	14.1944	12	4076.282617	32600.03	1580.590656	1070.403311	431536.885	1810.049	56.7776	48	16305.1305	0
Winter	CH4_RUNEX	0.005961	0.072802876	0	6.72716485	452.5123	14.1944	12	4076.282617	32600.03	1580.590656	1070.403311	431536.885	1810.049	56.7776	48	16305.1305	6.219803687
Winter	CH4_STREX	0.111458	0	0	0	452.5123	14.1944	12	4076.282617	32600.03	1580.590656	1070.403311	431536.885	1810.049	56.7776	48	16305.1305	0.011072692
Winter	CO_IDLEX	0	0	0	0	452.5123	14.1944	12	4076.282617	32600.03	1580.590656	1070.403311	431536.885	1810.049	56.7776	48	16305.1305	0
Winter	CO_RUNEX	0.354266	0.207356536	0	46.207039	452.5123	14.1944	12	4076.282617	32600.03	1580.590656	1070.403311	431536.885	1810.049	56.7776	48	16305.1305	42.74300633
Winter	CO_STREX	7.343089	0	0	0	452.5123	14.1944	12	4076.282617	32600.03	1580.590656	1070.403311	431536.885	1810.049	56.7776	48	16305.1305	0.729494079
Winter	CO2_NBIO_IDLEX	0	0	0	0	452.5123	14.1944	12	4076.282617	32600.03	1580.590656	1070.403311	431536.885	1810.049	56.7776	48	16305.1305	0
Winter	CO2_NBIO_RUNEX	2061.588	1665.244244	0	1985.414511	452.5123	14.1944	12	4076.282617	32600.03	1580.590656	1070.403311	431536.885	1810.049	56.7776	48	16305.1305	1985.097465
Winter	CO2_NBIO_STREX	88.29575	0	0	0	452.5123	14.1944	12	4076.282617	32600.03	1580.590656	1070.403311	431536.885	1810.049	56.7776	48	16305.1305	8.771679952
Winter	NOX_IDLEX	0	0	0	0	452.5123	14.1944	12	4076.282617	32600.03	1580.590656	1070.403311	431536.885	1810.049	56.7776	48	16305.1305	0
Winter	NOX_RUNEX	0.274245	2.329438205	0	1.273666048	452.5123	14.1944	12	4076.282617	32600.03	1580.590656	1070.403311	431536.885	1810.049	56.7776	48	16305.1305	1.204521711
Winter	NOX_STREX	0.848565	0	0	0	452.5123	14.1944	12	4076.282617	32600.03	1580.590656	1070.403311	431536.885	1810.049	56.7776	48	16305.1305	0.084300091
Winter	PM10_IDLEX	0	0	0	0	452.5123	14.1944	12	4076.282617	32600.03	1580.590656	1070.403311	431536.885	1810.049	56.7776	48	16305.1305	0
Winter	PM10_PMBW	0.123562	0.079072893	0.130340079	0.068670129	452.5123	14.1944	12	4076.282617	32600.03	1580.590656	1070.403311	431536.885	1810.049	56.7776	48	16305.1305	0.07268035
Winter	PM10_PMTW	0.011341	0.029936049	0.012000007	0.033483234	452.5123	14.1944	12	4076.282617	32600.03	1580.590656	1070.403311	431536.885	1810.049	56.7776	48	16305.1305	0.031875586
Winter	PM10_RUNEX	0.000967	0.006299396	0	0.003900944	452.5123	14.1944	12	4076.282617	32600.03	1580.590656	1070.403311	431536.885	1810.049	56.7776	48	16305.1305	0.003695202
Winter	PM10_STREX	0.000366	0	0	0	452.5123	14.1944	12	4076.282617	32600.03	1580.590656	1070.403311	431536.885	1810.049	56.7776	48	16305.1305	3.63938E-05
Winter	PM25_IDLEX	0	0	0	0	452.5123	14.1944	12	4076.282617	32600.03	1580.590656	1070.403311	431536.885	1810.049	56.7776	48	16305.1305	0
Winter	PM25_PMBW	0.052955	0.033888383	0.055860034	0.029430055	452.5123	14.1944	12	4076.282617	32600.03	1580.590656	1070.403311	431536.885	1810.049	56.7776	48	16305.1305	0.031148721
Winter	PM25_PMTW	0.002835	0.007484012	0.003000002	0.008370809	452.5123	14.1944	12	4076.282617	32600.03	1580.590656	1070.403311	431536.885	1810.049	56.7776	48	16305.1305	0.007968897
Winter	PM25_RUNEX	0.000889	0.006026887	0	0.003732191	452.5123	14.1944	12	4076.282617	32600.03	1580.590656	1070.403311	431536.885	1810.049	56.7776	48	16305.1305	0.003532832
Winter	PM25_STREX	0.000337	0	0	0	452.5123	14.1944	12	4076.282617	32600.03	1580.590656	1070.403311	431536.885	1810.049	56.7776	48	16305.1305	3.34627E-05
Winter	ROG_DIURN	0.022281	0	0	0	452.5123	14.1944	12	4076.282617	32600.03	1580.590656	1070.403311	431536.885	1810.049	56.7776	48	16305.1305	0.000600731
Winter	ROG_HTSK	0.082018	0	0	0	452.5123	14.1944	12	4076.282617	32600.03	1580.590656	1070.403311	431536.885	1810.049	56.7776	48	16305.1305	0.008148036
Winter	ROG_IDLEX	0	0	0	0	452.5123	14.1944	12	4076.282617	32600.03	1580.590656	1070.403311	431536.885	1810.049	56.7776	48	16305.1305	0
Winter	ROG_RESTL	0.017231	0	0	0	452.5123	14.1944	12	4076.282617	32600.03	1580.590656	1070.403311	431536.885	1810.049	56.7776	48	16305.1305	0.000427941
Winter	ROG_RUNEX	0.019899	0.003027946	0	0.167085413	452.5123	14.1944	12	4076.282617	32600.03	1580.590656	1070.403311	431536.885	1810.049	56.7776	48	16305.1305	0.155867419
Winter	ROG_RUNLS	0.574984	0	0	0	452.5123	14.1944	12	4076.282617	32600.03	1580.590656	1070.403311	431536.885	1810.049	56.7776	48	16305.1305	0.057121361
Winter	ROG_STREX	0.483562	0	0	0	452.5123	14.1944	12	4076.282617	32600.03	1580.590656	1070.403311	431536.885	1810.049	56.7776	48	16305.1305	0.04803909
Winter	SO2_IDLEX	0	0	0	0	452.5123	14.1944	12	4076.282617	32600.03	1580.590656	1070.403311	431536.885	1810.049	56.7776	48	16305.1305	0
Winter	SO2_RUNEX	0.020401	0.015742547	0	0	452.5123	14.1944	12	4076.282617	32600.03	1580.590656	1070.403311	431536.885	1810.049	56.7776	48	16305.1305	0.001478098
Winter	SO2_STREX	0.000874	0	0	0	452.5123	14.1944	12	4076.282617	32600.03	1580.590656	1070.403311	431536.885	1810.049	56.7776	48	16305.1305	8.68029E-05
Winter	TOG_DIURN	0.022281	0	0	0	452.5123	14.1944	12	4076.282617	32600.03	1580.590656	1070.403311	431536.885	1810.049	56.7776	48	16305.1305	0.000600731
Winter	TOG_HTSK	0.082018	0	0	0	452.5123	14.1944	12	4076.282617	32600.03	1580.590656	1070.403311	431536.885	1810.049	56.7776	48	16305.1305	0.008148036
Winter	TOG_IDLEX	0	0	0	0	452.5123	14.1944	12	4076.282617	32600.03	1580.590656	1070.403311	431536.885	1810.049	56.7776	48	16305.1305	0
Winter	TOG_RESTL	0.017231	0	0	0	452.5123	14.1944	12	4076.282617	32600.03	1580.590656	1070.403311	431536.885	1810.049	56.7776	48	16305.1305	0.000427941
Winter	TOG_RUNEX	0.029037	0.076565831	0	6.94642344	452.5123	14.1944	12	4076.282617	32600.03	1580.590656	1070.403311	431536.885	1810.049	56.7776	48	16305.1305	6.424128632
Winter	TOG_RUNLS	0.574984	0	0	0	452.5123	14.1944	12	4076.282617	32600.03	1580.590656	1070.403311	431536.885	1810.049	56.7776	48	16305.1305	0.057121361
Winter	TOG_STREX	0.529439	0	0	0	452.5123	14.1944	12	4076.282617	32600.03	1580.590656	1070.403311	431536.885	1810.049	56.7776	48	16305.1305	0.052596757

#### **MCY CalEEMod Emission Rate Worksheet**

Vehicle Class: MCY **Pollutant Emission Rates Population** VMT Trips **CalEEMod Emission** Season DSL NG MCY Gas MCY Gas MCY NG MCY Gas MCY DSL MCY NG Gas MCY DSL MCY NG MCY DSL Rate 0 0 CH4\_IDLEX 0 0 162674.9076 0 0 1166527.499 0 0 325349.8152 0 0 Annual Annual CH4\_RUNEX 0.383298034 0 0 162674.9076 0 0 1166527.499 0 0 325349.8152 0 0 0.383298034 Annual CH4\_STREX 0.237101158 0 0 162674.9076 0 0 1166527.499 0 0 325349.8152 0 0.237101158 CO\_IDLEX 0 Annual 0 0 162674.9076 0 0 1166527.499 0 325349.8152 0 0 CO\_RUNEX 0 162674.9076 0 0 0 0 0 19.74398471 Annual 19.74398471 0 1166527.499 325349.8152 0 0 0 8.467870083 CO\_STREX 8.467870083 0 0 1166527.499 0 325349.8152 0 0 162674.9076 0 Annual CO2\_NBIO\_IDLEX 0 0 0 0 0 0 162674.9076 1166527.499 0 325349.8152 0 0 Annual CO2\_NBIO\_RUNEX 0 0 223.4539569 Annual 223.4539569 0 0 162674.9076 0 1166527.499 0 325349.8152 0 CO2\_NBIO\_STREX 60.30286137 0 0 162674.9076 0 0 1166527.499 0 325349.8152 0 60.30286137 Annual Annual NOX\_IDLEX 0 0 162674.9076 0 0 1166527.499 0 0 325349.8152 0 0 0 NOX\_RUNEX 0 0 0 1.133757106 Annual 1.133757106 0 0 162674.9076 1166527.499 0 325349.8152 NOX\_STREX 0.263191322 0 0 0 0 0.263191322 0 0 162674.9076 1166527.499 0 325349.8152 0 Annual PM10\_IDLEX 0 0 162674.9076 0 0 1166527.499 0 0 325349.8152 0 0 0 Annual 0 PM10\_PMBW 0.011760003 0 0 162674.9076 0 0 1166527.499 0 325349.8152 0 0.011760003 Annual Annual PM10 PMTW 0.004000001 0 0 162674.9076 0 0 1166527.499 0 0 325349.8152 0 0 0.004000001 PM10 RUNEX 0.002314602 0 0 162674.9076 0 0 0 0 325349.8152 0 0.002314602 Annual 1166527.499 0 Annual PM10\_STREX 0.00344551 0 0 162674.9076 0 0 1166527.499 0 325349.8152 0 0 0.00344551 PM25\_IDLEX 0 0 0 0 0 0 0 Annual 0 0 162674.9076 1166527.499 325349.8152 0 0.005040001 0 0.005040001 Annual PM25\_PMBW 0 0 162674.9076 0 0 1166527.499 0 325349.8152 0 0 PM25\_PMTW 0.001 0 0 162674.9076 0 0 1166527.499 0 325349.8152 0 0.001 Annual 0 0 PM25\_RUNEX 0 0 Annual 0.002165897 0 0 162674.9076 1166527.499 0 325349.8152 0 0.002165897 PM25\_STREX 0 0 0 0.003250763 0 1166527.499 0 325349.8152 0 0.003250763 Annual 0 162674.9076 0 ROG\_DIURN 2.196652571 0 0 162674.9076 0 0 1166527.499 0 0 325349.8152 0 0 1.098326286 Annual 0.69187704 Annual ROG\_HTSK 0 0 162674.9076 0 0 1166527.499 0 0 325349.8152 0 0 0.69187704 **ROG IDLEX** 0 0 0 325349.8152 0 Annual 0 0 0 162674.9076 1166527.499 0 0 0 Annual ROG\_RESTL 1.363752759 0 0 162674.9076 0 1166527.499 0 325349.8152 0 0.68187638 2.647083699 0 0 0 ROG\_RUNEX 0 0 162674.9076 1166527.499 0 325349.8152 0 2.647083699 Annual 0 0 0 0 0 ROG\_RUNLS 0 0 325349.8152 2.163250875 Annual 2.163250875 0 162674.9076 1166527.499 0 ROG\_STREX 1.836073919 0 0 162674.9076 0 0 1166527.499 0 0 325349.8152 0 1.836073919 Annual 0 Annual SO2\_IDLEX 0 0 0 162674.9076 0 0 1166527.499 0 0 325349.8152 0 0 0 0 0 Annual SO2 RUNEX 0.002211258 0 0 162674.9076 0 1166527.499 0 325349.8152 0 0.002211258 SO2\_STREX 0 0 0 0 Annual 0.000596746 0 0 162674.9076 1166527.499 0 325349.8152 0 0.000596746 0 0 0 0 0 0 TOG\_DIURN 2.196652571 0 162674.9076 1166527.499 325349.8152 0 1.098326286 Annual TOG\_HTSK 0.69187704 0 0 0 1166527.499 0 325349.8152 0 0.69187704 Annual 0 162674.9076 0 0 0 0 Annual TOG\_IDLEX 0 0 0 162674.9076 0 1166527.499 0 325349.8152 0 0 TOG\_RESTL 1.363752759 0 162674.9076 0 0 1166527.499 0 325349.8152 0 0.68187638 Annual Annual TOG\_RUNEX 3.268561277 0 0 162674.9076 0 0 1166527.499 0 0 325349.8152 0 0 3.268561277 0 0 0 0 Annual TOG\_RUNLS 2.163250875 0 0 162674.9076 1166527.499 0 325349.8152 0 2.163250875 0 TOG\_STREX 1.997967654 0 0 162674.9076 0 0 1166527.499 0 325349.8152 0 1.997967654 Annual 0 CH4\_IDLEX 0 0 162674.9076 0 0 1166527.499 0 0 325349.8152 0 0 0 Summer 0 CH4\_RUNEX 0 0 0.375472696 Summer 0.375472696 0 0 162674.9076 0 1166527.499 0 325349.8152 0 CH4\_STREX 0 0.211387873 0 0 162674.9076 0 0 1166527.499 0 325349.8152 0 0 0.211387873 Summer CO\_IDLEX 0 0 0 1166527.499 0 0 0 0 Summer 0 162674.9076 325349.8152 0 18.94496473 CO\_RUNEX 0 0 162674.9076 0 0 1166527.499 0 0 325349.8152 0 0 18.94496473 Summer CO\_STREX 7.729527101 0 0 0 1166527.499 0 0 325349.8152 0 7.729527101 Summer 0 162674.9076 0 0 1166527.499 0 CO2\_NBIO\_IDLEX 0 0 162674.9076 0 0 325349.8152 0 0 Summer 0 162674.9076 221.9377647 CO2\_NBIO\_RUNEX 221.9377647 0 0 1166527.499 0 325349.8152 0 Summer 0 0 CO2\_NBIO\_STREX 58.43135306 0 0 0 0 58.43135306 Summer 0 0 162674.9076 1166527.499 0 325349.8152 0 NOX\_IDLEX 0 162674.9076 0 0 0 0 1166527.499 0 325349.8152 0 0 0 Summer 0 0 162674.9076 0.990253812 NOX\_RUNEX 0.990253812 0 0 0 1166527.499 0 0 325349.8152 0 0 Summer 0 1166527.499 325349.8152 Summer NOX\_STREX 0.249365973 0 162674.9076 0 0.249365973 PM10\_IDLEX 325349.8152 Summer 0 0 162674.9076 0 0 1166527.499 0 0 0 0 0 PM10 PMBW Summer 0.011760003 0 0 162674.9076 0 0 1166527.499 0 0 325349.8152 0 0 0.011760003 PM10\_PMTW 0.004000001 0 162674.9076 0 0 0 0.004000001 0 0 1166527.499 0 325349.8152 0 Summer PM10\_RUNEX 0 0 0 0.002314602 0.002314602 0 0 162674.9076 0 1166527.499 0 325349.8152 Summer PM10\_STREX 0.00344551 0 0 1166527.499 0 325349.8152 0 0.00344551 Summer 0 0 162674.9076 0 325349.8152 Summer PM25\_IDLEX 0 0 0 162674.9076 0 0 1166527.499 0 0 0 0 PM25 PMBW 0 162674.9076 Summer 0.005040001 0 0 0 1166527.499 0 325349.8152 0 0.005040001 PM25 PMTW 0.001 0 0 325349.8152 0 0.001 Summer 0 0 162674.9076 0 1166527.499 0 0 PM25 RUNEX 0 0 1166527.499 0 325349.8152 0 0.002165897 0 0 162674.9076 0 0.002165897 Summer PM25\_STREX 0 0 0 325349.8152 0 0.003250763 Summer 0.003250763 0 0 162674.9076 1166527.499 0 ROG\_DIURN 3.491951975 0 Summer 0 0 162674.9076 0 1166527.499 0 0 325349.8152 0 1.745975987 ROG\_HTSK 0.747001716 0 0 162674.9076 0 0 1166527.499 0 325349.8152 0 0.747001716 Summer Summer ROG\_IDLEX 0 0 162674.9076 0 0 1166527.499 0 0 325349.8152 0 0 0 0 162674.9076 0 0 325349.8152 0 1.094756695 Summer ROG RESTL 2.189513391 0 0 1166527.499 0 0 2.576920233 ROG\_RUNEX 2.576920233 0 0 162674.9076 0 0 1166527.499 0 325349.8152 0 Summer ROG\_RUNLS 2.031063992 0 0 162674.9076 0 0 1166527.499 0 0 325349.8152 0 2.031063992 Summer ROG\_STREX 1.625049101 0 0 Summer 0 0 162674.9076 0 1166527.499 0 325349.8152 0 1.625049101 SO2\_IDLEX 0 0 162674.9076 0 0 1166527.499 0 0 325349.8152 0 0 0 Summer SO2\_RUNEX 0 0 0 325349.8152 0 0.002196254 Summer 0.002196254 0 0 162674.9076 1166527.499 0 0.000578226 Summer SO2\_STREX 0.000578226 0 0 162674.9076 0 0 1166527.499 0 0 325349.8152 0 TOG\_DIURN 3.491951975 0 0 0 0 0 325349.8152 0 1.745975987 Summer 0 162674.9076 1166527.499 0 Summer TOG\_HTSK 0.747001716 0 0 162674.9076 0 0 1166527.499 0 0 325349.8152 0 0.747001716 0 TOG\_IDLEX 0 0 0 1166527.499 0 325349.8152 0 Summer 0 0 162674.9076 0 TOG\_RESTL 0 0 Summer 2.189513391 0 0 162674.9076 0 1166527.499 0 325349.8152 0 1.094756695 0 0 TOG\_RUNEX 3.184615142 0 0 162674.9076 0 1166527.499 0 325349.8152 0 3.184615142 Summer 0 TOG\_RUNLS 2.031063992 0 0 0 0 0 325349.8152 0 2.031063992 Summer 0 162674.9076 1166527.499 0 Summer TOG\_STREX 1.768409622 0 0 162674.9076 0 0 1166527.499 0 0 325349.8152 0 0 1.768409622 CH4\_IDLEX 0 0 325349.8152 Winter 0 0 0 162674.9076 0 1166527.499 0 0 0 0 0 Winter CH4 RUNEX 0.385048536 0 0 162674.9076 0 0 1166527.499 0 325349.8152 0 0.385048536 CH4\_STREX 0.242547683 0 0 0 325349.8152 0 0.242547683 Winter 0 0 162674.9076 1166527.499 0 0 0 0 0 CO\_IDLEX 0 0 162674.9076 0 0 325349.8152 0 Winter 0 1166527.499 0 CO\_RUNEX 19.90326165 0 162674.9076 0 0 1166527.499 0 325349.8152 0 19.90326165 Winter 0 0 0

8.609612178	0	0	325349.8152	0	0	1166527.499	0	0	0 162674.9076	0	8.609612178	CO_STREX	Winter
0	0	0	325349.8152	0	0	1166527.499	0	0	0 162674.9076	0	0	CO2_NBIO_IDLEX	Winter
223.7621943	0	0	325349.8152	0	0	1166527.499	0	0	0 162674.9076	0	223.7621943	CO2_NBIO_RUNEX	Winter
60.67720073	0	0	325349.8152	0	0	1166527.499	0	0	0 162674.9076	0	60.67720073	CO2_NBIO_STREX	Winter
0	0	0	325349.8152	0	0	1166527.499	0	0	0 162674.9076	0	0	NOX_IDLEX	Winter
1.107194869	0	0	325349.8152	0	0	1166527.499	0	0	0 162674.9076	0	1.107194869	NOX_RUNEX	Winter
0.266445751	0	0	325349.8152	0	0	1166527.499	0	0	0 162674.9076	0	0.266445751	NOX_STREX	Winter
0	0	0	325349.8152	0	0	1166527.499	0	0	0 162674.9076	0	0	PM10_IDLEX	Winter
0.011760003	0	0	325349.8152	0	0	1166527.499	0	0	0 162674.9076	0	0.011760003	PM10_PMBW	Winter
0.004000001	0	0	325349.8152	0	0	1166527.499	0	0	0 162674.9076	0	0.004000001	PM10_PMTW	Winter
0.002314602	0	0	325349.8152	0	0	1166527.499	0	0	0 162674.9076	0	0.002314602	PM10_RUNEX	Winter
0.00344551	0	0	325349.8152	0	0	1166527.499	0	0	0 162674.9076	0	0.00344551	PM10_STREX	Winter
0	0	0	325349.8152	0	0	1166527.499	0	0	0 162674.9076	0	0	PM25_IDLEX	Winter
0.005040001	0	0	325349.8152	0	0	1166527.499	0	0	0 162674.9076	0	0.005040001	PM25_PMBW	Winter
0.001	0	0	325349.8152	0	0	1166527.499	0	0	0 162674.9076	0	0.001	PM25_PMTW	Winter
0.002165897	0	0	325349.8152	0	0	1166527.499	0	0	0 162674.9076	0	0.002165897	PM25_RUNEX	Winter
0.003250763	0	0	325349.8152	0	0	1166527.499	0	0	0 162674.9076	0	0.003250763	PM25_STREX	Winter
1.193281763	0	0	325349.8152	0	0	1166527.499	0	0	0 162674.9076	0	2.386563527	ROG_DIURN	Winter
0.890111922	0	0	325349.8152	0	0	1166527.499	0	0	0 162674.9076	0	0.890111922	ROG_HTSK	Winter
0	0	0	325349.8152	0	0	1166527.499	0	0	0 162674.9076	0	0	ROG_IDLEX	Winter
0.654467664	0	0	325349.8152	0	0	1166527.499	0	0	0 162674.9076	0	1.308935328	ROG_RESTL	Winter
2.662795571	0	0	325349.8152	0	0	1166527.499	0	0	0 162674.9076	0	2.662795571	ROG_RUNEX	Winter
2.477617322	0	0	325349.8152	0	0	1166527.499	0	0	0 162674.9076	0	2.477617322	ROG_RUNLS	Winter
1.881113642	0	0	325349.8152	0	0	1166527.499	0	0	0 162674.9076	0	1.881113642	ROG_STREX	Winter
0	0	0	325349.8152	0	0	1166527.499	0	0	0 162674.9076	0	0	SO2_IDLEX	Winter
0.002214308	0	0	325349.8152	0	0	1166527.499	0	0	0 162674.9076	0	0.002214308	SO2_RUNEX	Winter
0.00060045	0	0	325349.8152	0	0	1166527.499	0	0	0 162674.9076	0	0.00060045	SO2_STREX	Winter
1.193281763	0	0	325349.8152	0	0	1166527.499	0	0	0 162674.9076	0	2.386563527	TOG_DIURN	Winter
0.890111922	0	0	325349.8152	0	0	1166527.499	0	0	0 162674.9076	0	0.890111922	TOG_HTSK	Winter
0	0	0	325349.8152	0	0	1166527.499	0	0	0 162674.9076	0	0	TOG_IDLEX	Winter
0.654467664	0	0	325349.8152	0	0	1166527.499	0	0	0 162674.9076	0	1.308935328	TOG_RESTL	Winter
3.287310324	0	0	325349.8152	0	0	1166527.499	0	0	0 162674.9076	0	3.287310324	TOG_RUNEX	Winter
2.477617322	0	0	325349.8152	0	0	1166527.499	0	0	0 162674.9076	0	2.477617322	TOG_RUNLS	Winter
2.046965596	0	0	325349.8152	0	0	1166527.499	0	0	0 162674.9076	0	2.046965596	TOG_STREX	Winter

#### **SBUS CalEEMod Emission Rate Worksheet**

Annual Annual Annual Annual Annual	Pollutant  CH4_IDLEX CH4_RUNEX CH4_STREX	Gas 2.40435301	DSL 0.014250226	NG	SBUS Gas	Population SBUS DSL	SBUS NG	SBUS Gas	VMT	SBUS NG	SBUS Gas	Trips SBUS DSL	SBUS NG	CalEEMod Emission
Annual Annual Annual	CH4_RUNEX CH4_STREX	2.40435301			3DO3 Ga3				VRIIV IIVI	XKI IX IVIG				Rate
Annual Annual Annual	CH4_RUNEX CH4_STREX			U	1174.759873		0		SBUS DSL 107317.5496	0	4699.039492		0	0.065664816
Annual	_	0.013031167	0.005667334		1174.759873		0		107317.5496	0	4699.039492		0	0.007970136
		0.057269332	0	0	1174.759873	3383.904588	0	48830.15752	107317.5496	0	4699.039492	39049.78978	0	0.00615127
Annual	CO_IDLEX	81.96026688	6.139538807	0	1174.759873	3383.904588	0	48830.15752	107317.5496	0	4699.039492	39049.78978	0	2.675711515
	CO_RUNEX		0.343426599		1174.759873		0		107317.5496	0	4699.039492		0	0.67450895
Annual	CO_STREX	8.027677564	0		1174.759873		0		107317.5496	0	4699.039492		0	0.862248762
Annual	CO2_NBIO_IDLEX		3660.618053		1174.759873		0		107317.5496	0	4699.039492		0	354.1442866
Annual Annual	CO2_NBIO_RUNEX CO2_NBIO_STREX	48.5905735	1244.986334 0		1174.759873 1174.759873		0 0		107317.5496 107317.5496	0 0	4699.039492 4699.039492		0 0	1133.337637 5.219088775
Annual	NOX_IDLEX		43.09148434		1174.759873		0		107317.5496	0	4699.039492		0	3.357855057
Annual	NOX_RUNEX		7.402431801		1174.759873		0		107317.5496	0	4699.039492		0	5.228910485
Annual	NOX_STREX		0.821464403		1174.759873		0		107317.5496	0	4699.039492		0	0.797062447
Annual	PM10_IDLEX	0	0.063238795	0	1174.759873	3383.904588	0	48830.15752	107317.5496	0	4699.039492	39049.78978	0	0.004891423
Annual	PM10_PMBW	0.744800204	0.744800213	0	1174.759873	3383.904588	0	48830.15752	107317.5496	0	4699.039492	39049.78978	0	0.74480021
Annual	PM10_PMTW		0.012000003		1174.759873		0		107317.5496	0	4699.039492		0	0.010749132
Annual	PM10_RUNEX		0.045883651		1174.759873		0		107317.5496	0	4699.039492		0	0.031877966
Annual	PM10_STREX	0.000422223	0		1174.759873		0		107317.5496	0	4699.039492		0	4.53507E-05
Annual	PM25_IDLEX		0.060503112 0.319200091		1174.759873 1174.759873		0 0		107317.5496 107317.5496	0 0	4699.039492 4699.039492		0 0	0.004679823 0.31920009
Annual Annual	PM25_PMBW PM25_PMTW		0.003000001		1174.759873		0		107317.5496	0	4699.039492		0	0.002687283
Annual	PM25_RUNEX		0.043898745		1174.759873		0		107317.5496	0	4699.039492		0	0.030486155
Annual	PM25_STREX	0.000388218	0		1174.759873		0		107317.5496	0	4699.039492		0	4.16983E-05
Annual	ROG_DIURN	0.034742278	0		1174.759873		0		107317.5496	0	4699.039492		0	0.000932913
Annual	ROG_HTSK	0.074382648	0	0	1174.759873	3383.904588	0	48830.15752	107317.5496	0	4699.039492	39049.78978	0	0.007989402
Annual	ROG_IDLEX	10.59516639	0.306803454	0	1174.759873	3383.904588	0	48830.15752	107317.5496	0	4699.039492	39049.78978	0	0.308236132
Annual	ROG_RESTL	0.017644016	0		1174.759873		0		107317.5496	0	4699.039492		0	0.000473784
Annual	ROG_RUNEX		0.122016156		1174.759873		0		107317.5496	0	4699.039492		0	0.104037919
Annual	ROG_RUNLS	0.532265579	0		1174.759873		0		107317.5496	0	4699.039492		0	0.057170375
Annual	ROG_STREX	0.330711136	0		1174.759873		0		107317.5496	0	4699.039492 4699.039492		0 0	0.035521515 0.00337761
Annual Annual	SO2_IDLEX SO2_RUNEX		0.034583704 0.011762014		1174.759873 1174.759873		0		107317.5496 107317.5496	0	4699.039492		0	0.010831698
Annual	SO2_KONEX SO2_STREX	0.000480843	0.011702014		1174.759873		0		107317.5496	0	4699.039492		0	5.16471E-05
Annual	TOG_DIURN	0.034742278	0		1174.759873		0		107317.5496	0	4699.039492		0	0.000932913
Annual	TOG_HTSK	0.074382648	0		1174.759873		0	48830.15752	107317.5496	0	4699.039492		0	0.007989402
Annual	TOG_IDLEX	15.46044192	0.349272378	0	1174.759873	3383.904588	0	48830.15752	107317.5496	0	4699.039492	39049.78978	0	0.442165231
Annual	TOG_RESTL	0.017644016	0	0	1174.759873	3383.904588	0	48830.15752	107317.5496	0	4699.039492	39049.78978	0	0.000473784
Annual	TOG_RUNEX	0.094155976	0.138906106		1174.759873		0		107317.5496	0	4699.039492		0	0.124911946
Annual	TOG_RUNLS	0.532265579	0		1174.759873		0		107317.5496	0	4699.039492		0	0.057170375
Annual	TOG_STREX	0.362087067	0		1174.759873		0		107317.5496	0	4699.039492		0 0	0.038891588
Summer Summer	CH4_IDLEX CH4_RUNEX		0.013993539 0.005667334		1174.759873 1174.759873		0		107317.5496 107317.5496	0	4699.039492 4699.039492		0	0.065697007 0.008060205
Summer	CH4_STREX	0.051098717	0		1174.759873		0		107317.5496	0	4699.039492		0	0.005488487
Summer	CO_IDLEX		5.608331827		1174.759873		0		107317.5496	0	4699.039492		0	2.634623473
Summer	CO_RUNEX	1.433259026	0.343426599	0	1174.759873	3383.904588	0	48830.15752	107317.5496	0	4699.039492	39049.78978	0	0.684236529
Summer	CO_STREX	6.550297765	0	0	1174.759873	3383.904588	0	48830.15752	107317.5496	0	4699.039492	39049.78978	0	0.70356415
Summer	CO2_NBIO_IDLEX		3775.157013		1174.759873		0		107317.5496	0	4699.039492		0	363.0036988
Summer	CO2_NBIO_RUNEX		1244.986334		1174.759873		0		107317.5496	0	4699.039492		0	1133.35504
Summer	CO2_NBIO_STREX	46.12861883	0		1174.759873		0		107317.5496	0	4699.039492		0	4.954651477
Summer Summer	NOX_IDLEX NOX_RUNEX		44.10001177 6.997539674		1174.759873 1174.759873		0		107317.5496 107317.5496	0	4699.039492 4699.039492		0 0	3.4358631 4.933188251
Summer	NOX_RONEX		0.821464403		1174.759873		0		107317.5496	0	4699.039492		0	0.793744666
Summer	PM10_IDLEX		0.053401639		1174.759873		0		107317.5496	0	4699.039492		0	0.004130535
Summer	PM10_PMBW		0.744800213		1174.759873		0		107317.5496	0	4699.039492	39049.78978	0	0.74480021
Summer	PM10_PMTW	0.008000002	0.012000003	0	1174.759873	3383.904588	0	48830.15752	107317.5496	0	4699.039492	39049.78978	0	0.010749132
Summer	PM10_RUNEX		0.045883651		1174.759873		0		107317.5496	0	4699.039492		0	0.031877966
Summer	PM10_STREX	0.000422223	0		1174.759873		0		107317.5496	0	4699.039492		0	4.53507E-05
Summer	PM25_IDLEX		0.051091508		1174.759873		0		107317.5496	0	4699.039492		0	0.003951849
Summer	PM25_PMBW		0.319200091 0.003000001		1174.759873 1174.759873	3383.904588 3383.904588	0		107317.5496 107317.5496	0	4699.039492 4699.039492		0 0	0.31920009 0.002687283
Summer	PM25_PMTW		0.043898745		1174.759873		0		107317.5496	0 0	4699.039492		0	0.030486155
Summer	PM25_RUNEX PM25_STREX	0.001008342			1174.759873		0		107317.5496	0	4699.039492		0	4.16983E-05
Summer	ROG_DIURN	0.050097956	0		1174.759873		0		107317.5496	0	4699.039492		0	0.001345249
Summer	ROG_HTSK	0.075447527	0		1174.759873		0		107317.5496	0	4699.039492		0	0.008103781
Summer	ROG_IDLEX	10.59516639	0.301277056	0	1174.759873	3383.904588	0	48830.15752	107317.5496	0	4699.039492	39049.78978	0	0.307808674
Summer	ROG_RESTL	0.024544044	0	0	1174.759873	3383.904588	0	48830.15752	107317.5496	0	4699.039492	39049.78978	0	0.000659066
Summer	ROG_RUNEX		0.122016156		1174.759873		0		107317.5496	0	4699.039492		0	0.104498122
Summer	ROG_RUNLS	0.47714778	0		1174.759873		0		107317.5496	0	4699.039492		0	0.0512502
Summer	ROG_STREX	0.294902388	0		1174.759873		0		107317.5496	0	4699.039492		0	0.031675315
Summer	SO2_IDLEX		0.035665812		1174.759873		0		107317.5496	0	4699.039492		0	0.003461309
Summer Summer	SO2_RUNEX SO2_STREX	0.008787627	0.011762014		1174.759873 1174.759873		0		107317.5496 107317.5496	0	4699.039492 4699.039492		0 0	0.01083187 4.90303E-05
Summer	TOG_DIURN	0.050097956	0 N		1174.759873		0		107317.5496	0	4699.039492		0	0.001345249
Summer	TOG_BIOKIV	0.075447527	0		1174.759873		0		107317.5496	0	4699.039492		0	0.001343243
Summer	TOG_IDLEX		0.342980994		1174.759873		0		107317.5496	0	4699.039492		0	0.441678602
Summer	TOG_RESTL	0.024544044	0		1174.759873		0		107317.5496	0	4699.039492	39049.78978	0	0.000659066
Summer	TOG_RUNEX	0.096303365	0.138906106	0	1174.759873	3383.904588	0	48830.15752	107317.5496	0	4699.039492	39049.78978	0	0.125583473
Summer	TOG_RUNLS	0.47714778	0		1174.759873		0		107317.5496	0	4699.039492		0	0.0512502
Summer	TOG_STREX	0.322880994	0	0	1174.759873	3383.904588	0	48830.15752	107317.5496	0	4699.039492	39049.78978	0	0.034680483

Winter	CH4_IDLEX	2.403961481	0.014604698	0	1174.759873	3383.904588	0	48830.15752	107317.5496	0	4699.039492	39049.78978	0	0.065681721
Winter	CH4_RUNEX	0.012943605	0.005667334	0	1174.759873	3383.904588	0	48830.15752	107317.5496	0	4699.039492	39049.78978	0	0.007942753
Winter	CH4_STREX	0.058686339	0	0	1174.759873	3383.904588	0	48830.15752	107317.5496	0	4699.039492	39049.78978	0	0.00630347
Winter	CO_IDLEX	81.96026688	6.873110352	0	1174.759873	3383.904588	0	48830.15752	107317.5496	0	4699.039492	39049.78978	0	2.732452144
Winter	CO_RUNEX	1.392603644	0.343426599	0	1174.759873	3383.904588	0	48830.15752	107317.5496	0	4699.039492	39049.78978	0	0.67152287
Winter	CO_STREX	8.30767376	0	0	1174.759873	3383.904588	0	48830.15752	107317.5496	0	4699.039492	39049.78978	0	0.892323011
Winter	CO2_NBIO_IDLEX	2644.128202	3502.445203	0	1174.759873	3383.904588	0	48830.15752	107317.5496	0	4699.039492	39049.78978	0	341.9098602
Winter	CO2_NBIO_RUNEX	887.9421789	1244.986334	0	1174.759873	3383.904588	0	48830.15752	107317.5496	0	4699.039492	39049.78978	0	1133.332294
Winter	CO2_NBIO_STREX	49.06196485	0	0	1174.759873	3383.904588	0	48830.15752	107317.5496	0	4699.039492	39049.78978	0	5.26972068
Winter	NOX_IDLEX	0.92338533	41.698756	0	1174.759873	3383.904588	0	48830.15752	107317.5496	0	4699.039492	39049.78978	0	3.250129663
Winter	NOX_RUNEX	0.443100396	7.273815661	0	1174.759873	3383.904588	0	48830.15752	107317.5496	0	4699.039492	39049.78978	0	5.137729845
Winter	NOX_STREX	0.603308893	0.821464403	0	1174.759873	3383.904588	0	48830.15752	107317.5496	0	4699.039492	39049.78978	0	0.79803243
Winter	PM10_IDLEX	0	0.076823438	0	1174.759873	3383.904588	0	48830.15752	107317.5496	0	4699.039492	39049.78978	0	0.005942175
Winter	PM10_PMBW	0.744800204	0.744800213	0	1174.759873	3383.904588	0	48830.15752	107317.5496	0	4699.039492	39049.78978	0	0.74480021
Winter	PM10_PMTW	0.008000002	0.012000003	0	1174.759873	3383.904588	0	48830.15752	107317.5496	0	4699.039492	39049.78978	0	0.010749132
Winter	PM10_RUNEX	0.001096664	0.045883651	0	1174.759873	3383.904588	0	48830.15752	107317.5496	0	4699.039492	39049.78978	0	0.031877966
Winter	PM10_STREX	0.000422223	0	0	1174.759873	3383.904588	0	48830.15752	107317.5496	0	4699.039492	39049.78978	0	4.53507E-05
Winter	PM25_IDLEX	0	0.07350009	0	1174.759873	3383.904588	0	48830.15752	107317.5496	0	4699.039492	39049.78978	0	0.005685119
Winter	PM25_PMBW	0.319200087	0.319200091	0	1174.759873	3383.904588	0	48830.15752	107317.5496	0	4699.039492	39049.78978	0	0.31920009
Winter	PM25_PMTW	0.002000001	0.003000001	0	1174.759873	3383.904588	0	48830.15752	107317.5496	0	4699.039492	39049.78978	0	0.002687283
Winter	PM25_RUNEX	0.001008342	0.043898745	0	1174.759873	3383.904588	0	48830.15752	107317.5496	0	4699.039492	39049.78978	0	0.030486155
Winter	PM25_STREX	0.000388218	0	0	1174.759873	3383.904588	0	48830.15752	107317.5496	0	4699.039492	39049.78978	0	4.16983E-05
Winter	ROG_DIURN	0.036109256	0	0	1174.759873	3383.904588	0	48830.15752	107317.5496	0	4699.039492	39049.78978	0	0.000969619
Winter	ROG_HTSK	0.080225268	0	0	1174.759873	3383.904588	0	48830.15752	107317.5496	0	4699.039492	39049.78978	0	0.008616955
Winter	ROG_IDLEX	10.59516639	0.314435148	0	1174.759873	3383.904588	0	48830.15752	107317.5496	0	4699.039492	39049.78978	0	0.308826432
Winter	ROG_RESTL	0.017108358	0	0	1174.759873	3383.904588	0	48830.15752	107317.5496	0	4699.039492	39049.78978	0	0.0004594
Winter	ROG_RUNEX	0.06407362	0.122016156	0	1174.759873	3383.904588	0	48830.15752	107317.5496	0	4699.039492	39049.78978	0	0.103896497
Winter	ROG_RUNLS	0.653242228	0	0	1174.759873	3383.904588	0	48830.15752	107317.5496	0	4699.039492	39049.78978	0	0.070164415
Winter	ROG_STREX	0.338926665	0	0	1174.759873	3383.904588	0	48830.15752	107317.5496	0	4699.039492	39049.78978	0	0.036403941
Winter	SO2_IDLEX	0.026165792	0.033089366	0	1174.759873	3383.904588	0	48830.15752	107317.5496	0	4699.039492	39049.78978	0	0.003262025
Winter	SO2_RUNEX	0.008786908	0.011762014	0	1174.759873	3383.904588	0	48830.15752	107317.5496	0	4699.039492	39049.78978	0	0.010831645
Winter	SO2_STREX	0.000485508	0	0	1174.759873	3383.904588	0	48830.15752	107317.5496	0	4699.039492	39049.78978	0	5.21482E-05
Winter	TOG_DIURN	0.036109256	0	0	1174.759873	3383.904588	0	48830.15752	107317.5496	0	4699.039492	39049.78978	0	0.000969619
Winter	TOG_HTSK	0.080225268	0	0	1174.759873	3383.904588	0	48830.15752	107317.5496	0	4699.039492	39049.78978	0	0.008616955
Winter	TOG_IDLEX	15.46044192	0.35796048	0	1174.759873	3383.904588	0	48830.15752	107317.5496	0	4699.039492	39049.78978	0	0.442837242
Winter	TOG_RESTL	0.017108358	0	0	1174.759873	3383.904588	0	48830.15752	107317.5496	0	4699.039492	39049.78978	0	0.0004594
Winter	TOG_RUNEX		0.138906106	0	1174.759873	3383.904588	0	48830.15752	107317.5496	0	4699.039492	39049.78978	0	0.124705584
Winter	TOG_RUNLS	0.653242228	0	0	1174.759873	3383.904588	0		107317.5496	0		39049.78978	0	0.070164415
Winter	TOG_STREX	0.371082036	0	0	1174.759873	3383.904588	0		107317.5496	0		39049.78978	0	0.039857733
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#### MH CalEEMod Emission Rate Worksheet

	MH CaleEMod Er	mission Rate	worksneet		Vehicle Class:	MH								
Season	Pollutant	Er	mission Rates		veriicie Ciass.	Population			VMT			Trips		CalEEMod Emission
-		Gas	DSL	NG	MH Gas	MH DSL	MH NG	MH Gas	MH DSL	MH NG	MH Gas	MH DSL	MH NG	
Annual	CH4_IDLEX	0		0	18811.68292	5250.292691	0	189118.5703	55996.49428	0	1881.920759	525.0292691	0	0
Annual	CH4_RUNEX		0.003433632			5250.292691	0		55996.49428	0	1881.920759		0	0.003433632
Annual	CH4_STREX	0	0			5250.292691 5250.292691	0		55996.49428	0	1881.920759 1881.920759		0	0
Annual Annual	CO_IDLEX CO_RUNEX	0 0 308172118	0.308172118			5250.292691	0 0		55996.49428 55996.49428	0 0	1881.920759		0 0	0.308172118
Annual	CO_KONEX CO_STREX	0.308172118				5250.292691	0		55996.49428	0	1881.920759		0	0.308172118
Annual	CO2_NBIO_IDLEX	0	0			5250.292691	0		55996.49428	0	1881.920759		0	0
Annual	CO2_NBIO_RUNEX	992.0534837	992.0534837	0	18811.68292	5250.292691	0	189118.5703	55996.49428	0	1881.920759	525.0292691	0	992.0534837
Annual	CO2_NBIO_STREX	0	0	0	18811.68292	5250.292691	0	189118.5703	55996.49428	0	1881.920759	525.0292691	0	0
Annual	NOX_IDLEX	0	0			5250.292691	0		55996.49428	0	1881.920759		0	0
Annual	NOX_RUNEX		3.851053637			5250.292691	0		55996.49428	0	1881.920759		0	3.851053637
Annual	NOX_STREX	0	0			5250.292691	0		55996.49428	0		525.0292691 525.0292691	0	0
Annual Annual	PM10_IDLEX PM10_PMBW		0.130340037			5250.292691 5250.292691	0 0		55996.49428 55996.49428	0 0	1881.920759		0 0	0.130340037
Annual	PM10_PMTW		0.016000005			5250.292691	0		55996.49428	0	1881.920759		0	0.016000005
Annual	PM10_RUNEX		0.091837035			5250.292691	0		55996.49428	0	1881.920759		0	0.091837035
Annual	PM10_STREX	0	0	0	18811.68292	5250.292691	0	189118.5703	55996.49428	0	1881.920759	525.0292691	0	0
Annual	PM25_IDLEX	0	0	0	18811.68292	5250.292691	0	189118.5703	55996.49428	0	1881.920759	525.0292691	0	0
Annual	PM25_PMBW		0.055860016			5250.292691	0		55996.49428	0	1881.920759		0	0.055860016
Annual	PM25_PMTW		0.004000001			5250.292691	0		55996.49428	0		525.0292691	0	0.004000001
Annual	PM25_RUNEX	0.087864205	0.087864205			5250.292691 5250.292691	0		55996.49428 55996.49428	0 0	1881.920759 1881.920759		0 0	0.087864205
Annual Annual	PM25_STREX ROG_DIURN	0	0			5250.292691	0		55996.49428	0	1881.920759		0	0
Annual	ROG_HTSK	0	0			5250.292691	0		55996.49428	0	1881.920759		0	0
Annual	ROG_IDLEX	0	0			5250.292691	0		55996.49428	0		525.0292691	0	0
Annual	ROG_RESTL	0	0	0	18811.68292	5250.292691	0	189118.5703	55996.49428	0	1881.920759	525.0292691	0	0
Annual	ROG_RUNEX	0.073924069	0.073924069			5250.292691	0		55996.49428	0		525.0292691	0	0.073924069
Annual	ROG_RUNLS	0	0			5250.292691	0		55996.49428	0	1881.920759		0	0
Annual	ROG_STREX	0	0			5250.292691	0		55996.49428	0	1881.920759		0	0
Annual Annual	SO2_IDLEX SO2_RUNEX	0 009378473	0 0.009378473			5250.292691 5250.292691	0 0		55996.49428 55996.49428	0 0	1881.920759 1881.920759		0 0	0.009378473
Annual	SO2_KONEX	0.005378473				5250.292691	0		55996.49428	0		525.0292691	0	0.005576475
Annual	TOG_DIURN	0	0			5250.292691	0		55996.49428	0	1881.920759		0	0
Annual	TOG_HTSK	0	0	0	18811.68292	5250.292691	0	189118.5703	55996.49428	0	1881.920759	525.0292691	0	0
Annual	TOG_IDLEX	0	0	0	18811.68292	5250.292691	0	189118.5703	55996.49428	0	1881.920759	525.0292691	0	0
Annual	TOG_RESTL	0	0			5250.292691	0		55996.49428	0	1881.920759		0	0
Annual	TOG_RUNEX		0.084157637			5250.292691	0		55996.49428	0	1881.920759		0	0.084157637
Annual	TOG_RUNLS	0	0			5250.292691	0 0		55996.49428 55996.49428	0 0	1881.920759		0 0	0
Annual Summer	TOG_STREX CH4_IDLEX	0	_			5250.292691 5250.292691	0		55996.49428	0	1881.920759 1881.920759	525.0292691	0	0
Summer	CH4_RUNEX		0.003433632			5250.292691	0		55996.49428	0		525.0292691	0	0.003433632
Summer	CH4_STREX	0				5250.292691	0		55996.49428	0	1881.920759		0	0
Summer	CO_IDLEX	0	0	0	18811.68292	5250.292691	0	189118.5703	55996.49428	0	1881.920759	525.0292691	0	0
Summer	CO_RUNEX	0.308172118	0.308172118	0	18811.68292	5250.292691	0	189118.5703	55996.49428	0	1881.920759	525.0292691	0	0.308172118
Summer	CO_STREX	0				5250.292691	0		55996.49428	0		525.0292691	0	0
Summer	CO2_NBIO_IDLEX	0	_			5250.292691	0		55996.49428	0	1881.920759		0	0
Summer Summer	CO2_NBIO_RUNEX	992.0534837	992.0534837			5250.292691 5250.292691	0 0		55996.49428 55996.49428	0 0	1881.920759 1881.920759	525.0292691	0 0	992.0534837
Summer	CO2_NBIO_STREX NOX_IDLEX	0	0			5250.292691	0		55996.49428	0	1881.920759		0	0
Summer	NOX_RUNEX	_	3.637639963			5250.292691	0		55996.49428	0	1881.920759		0	3.637639963
Summer	NOX_STREX	0				5250.292691	0		55996.49428	0	1881.920759		0	0
Summer	PM10_IDLEX	0	0	0	18811.68292	5250.292691	0	189118.5703	55996.49428	0	1881.920759	525.0292691	0	0
Summer	PM10_PMBW		0.130340037			5250.292691	0		55996.49428	0		525.0292691	0	0.130340037
Summer	PM10_PMTW		0.016000005			5250.292691	0		55996.49428	0	1881.920759		0	0.016000005
Summer	PM10_RUNEX		0.091837035			5250.292691	0		55996.49428	0		525.0292691	0	0.091837035
Summer Summer	PM10_STREX PM25_IDLEX	0	0			5250.292691 5250.292691	0		55996.49428 55996.49428	0 0	1881.920759	525.0292691	0 0	0
Summer	PM25_PMBW	•	0.055860016			5250.292691	0		55996.49428	0		525.0292691	0	0.055860016
Summer	PM25_PMTW		0.004000001		18811.68292		0		55996.49428	0	1881.920759		0	0.004000001
	PM25_RUNEX	0.087864205	0.087864205	0	18811.68292	5250.292691	0	189118.5703	55996.49428	0	1881.920759	525.0292691	0	0.087864205
Summer	PM25_STREX	0	0	0	18811.68292	5250.292691	0	189118.5703	55996.49428	0	1881.920759	525.0292691	0	0
Summer	ROG_DIURN	0	0			5250.292691	0		55996.49428	0	1881.920759		0	0
Summer	ROG_HTSK	0	0			5250.292691	0		55996.49428	0	1881.920759		0	0
Summer	ROG_IDLEX	0	0			5250.292691	0		55996.49428	0		525.0292691	0	0
Summer Summer	ROG_RESTL ROG_RUNEX	0 073924069	0 0.073924069			5250.292691 5250.292691	0 0		55996.49428 55996.49428	0		525.0292691 525.0292691	0 0	0.073924069
Summer	ROG_RUNLS	0.073324003	0.073324003			5250.292691	0		55996.49428	0	1881.920759		0	0.073924003
Summer	ROG_STREX	0	0			5250.292691	0		55996.49428	0	1881.920759		0	0
Summer	SO2_IDLEX	0	0	0	18811.68292	5250.292691	0	189118.5703	55996.49428	0	1881.920759	525.0292691	0	0
Summer	SO2_RUNEX	0.009378473	0.009378473			5250.292691	0		55996.49428	0		525.0292691	0	0.009378473
Summer	SO2_STREX	0	0			5250.292691	0		55996.49428	0	1881.920759		0	0
Summer	TOG_DIURN	0	0			5250.292691	0		55996.49428	0	1881.920759		0	0
Summer	TOG_HTSK	0	0			5250.292691 5250.292691	0		55996.49428 55996.49428	0 0	1881.920759 1881.920759	525.0292691 525.0292691	0 0	U
Summer Summer	TOG_IDLEX TOG_RESTL	n	0			5250.292691	0		55996.49428	0		525.0292691	0	0
Summer	TOG_RUNEX	0.084157637	0.084157637			5250.292691	0		55996.49428	0	1881.920759		0	0.084157637
Summer	TOG_RUNLS	0	0			5250.292691	0		55996.49428	0		525.0292691	0	0
Summer	TOG_STREX	0	0	0	18811.68292	5250.292691	0	189118.5703	55996.49428	0	1881.920759	525.0292691	0	0

Winter	CH4_IDLEX	0	0	0	18811.68292	5250.292691	0	189118.5703	55996.49428	0	1881.920759	525.0292691	0	0
Winter	CH4_RUNEX	0.003433632	0.003433632	0	18811.68292	5250.292691	0	189118.5703	55996.49428	0	1881.920759	525.0292691	0	0.003433632
Winter	CH4_STREX	0	0	0	18811.68292	5250.292691	0	189118.5703	55996.49428	0	1881.920759	525.0292691	0	0
Winter	CO_IDLEX	0	0	0	18811.68292	5250.292691	0	189118.5703	55996.49428	0	1881.920759	525.0292691	0	0
Winter	CO_RUNEX	0.308172118	0.308172118	0	18811.68292	5250.292691	0	189118.5703	55996.49428	0	1881.920759	525.0292691	0	0.308172118
Winter	CO_STREX	0	0	0	18811.68292	5250.292691	0	189118.5703	55996.49428	0	1881.920759	525.0292691	0	0
Winter	CO2_NBIO_IDLEX	0	0	0	18811.68292	5250.292691	0	189118.5703	55996.49428	0	1881.920759	525.0292691	0	0
Winter	CO2_NBIO_RUNEX	992.0534837	992.0534837	0	18811.68292	5250.292691	0	189118.5703	55996.49428	0	1881.920759	525.0292691	0	992.0534837
Winter	CO2_NBIO_STREX	0	0	0	18811.68292	5250.292691	0	189118.5703	55996.49428	0	1881.920759	525.0292691	0	0
Winter	NOX_IDLEX	0	0	0	18811.68292	5250.292691	0	189118.5703	55996.49428	0	1881.920759	525.0292691	0	0
Winter	NOX_RUNEX	3.778944235	3.778944235	0	18811.68292	5250.292691	0	189118.5703	55996.49428	0	1881.920759	525.0292691	0	3.778944235
Winter	NOX_STREX	0	0	0	18811.68292	5250.292691	0	189118.5703	55996.49428	0	1881.920759	525.0292691	0	0
Winter	PM10_IDLEX	0	0	0	18811.68292	5250.292691	0	189118.5703	55996.49428	0	1881.920759	525.0292691	0	0
Winter	PM10_PMBW	0.130340037	0.130340037	0	18811.68292	5250.292691	0	189118.5703	55996.49428	0	1881.920759	525.0292691	0	0.130340037
Winter	PM10_PMTW	0.016000005	0.016000005	0	18811.68292	5250.292691	0	189118.5703	55996.49428	0	1881.920759	525.0292691	0	0.016000005
Winter	PM10_RUNEX	0.091837035	0.091837035	0	18811.68292	5250.292691	0	189118.5703	55996.49428	0	1881.920759	525.0292691	0	0.091837035
Winter	PM10_STREX	0	0	0	18811.68292	5250.292691	0	189118.5703	55996.49428	0	1881.920759	525.0292691	0	0
Winter	PM25_IDLEX	0	0	0	18811.68292	5250.292691	0	189118.5703	55996.49428	0	1881.920759	525.0292691	0	0
Winter	PM25_PMBW	0.055860016	0.055860016	0	18811.68292	5250.292691	0	189118.5703	55996.49428	0	1881.920759	525.0292691	0	0.055860016
Winter	PM25_PMTW	0.004000001	0.004000001	0	18811.68292	5250.292691	0	189118.5703	55996.49428	0	1881.920759	525.0292691	0	0.004000001
Winter	PM25_RUNEX	0.087864205	0.087864205	0	18811.68292	5250.292691	0	189118.5703	55996.49428	0	1881.920759	525.0292691	0	0.087864205
Winter	PM25_STREX	0	0	0	18811.68292	5250.292691	0	189118.5703	55996.49428	0	1881.920759	525.0292691	0	0
Winter	ROG_DIURN	0	0	0	18811.68292	5250.292691	0	189118.5703	55996.49428	0	1881.920759	525.0292691	0	0
Winter	ROG_HTSK	0	0	0	18811.68292	5250.292691	0	189118.5703	55996.49428	0	1881.920759	525.0292691	0	0
Winter	ROG_IDLEX	0	0	0	18811.68292	5250.292691	0	189118.5703	55996.49428	0	1881.920759	525.0292691	0	0
Winter	ROG_RESTL	0	0	0	18811.68292	5250.292691	0	189118.5703	55996.49428	0	1881.920759	525.0292691	0	0
Winter	ROG_RUNEX	0.073924069	0.073924069	0	18811.68292	5250.292691	0	189118.5703	55996.49428	0	1881.920759	525.0292691	0	0.073924069
Winter	ROG_RUNLS	0	0	0	18811.68292	5250.292691	0	189118.5703	55996.49428	0	1881.920759	525.0292691	0	0
Winter	ROG_STREX	0	0	0	18811.68292	5250.292691	0	189118.5703	55996.49428	0	1881.920759	525.0292691	0	0
Winter	SO2_IDLEX	0	0	0	18811.68292	5250.292691	0	189118.5703	55996.49428	0	1881.920759	525.0292691	0	0
Winter	SO2 RUNEX	0.009378473	0.009378473	0	18811.68292	5250.292691	0	189118.5703	55996.49428	0	1881.920759	525.0292691	0	0.009378473
Winter	SO2_STREX	0	0	0	18811.68292	5250.292691	0	189118.5703	55996.49428	0	1881.920759	525.0292691	0	0
Winter	TOG_DIURN	0	0	0	18811.68292	5250.292691	0	189118.5703		0	1881.920759	525.0292691	0	0
Winter	TOG_HTSK	0	0	0	18811.68292	5250.292691	0	189118.5703	55996.49428	0	1881.920759	525.0292691	0	0
Winter	TOG_IDLEX	0	0		18811.68292		0	189118.5703	55996.49428	0	1881.920759	525.0292691	0	0
Winter	TOG_RESTL	0	0		18811.68292		0	189118.5703		0		525.0292691	0	0
Winter	TOG_RUNEX	0.084157637	0.084157637		18811.68292		0	189118.5703		0	1881.920759		0	0.084157637
Winter	TOG_RUNLS	0	0		18811.68292		0	189118.5703		0		525.0292691	0	0
Winter	TOG_STREX	0	0		18811.68292		0	189118.5703		0		525.0292691	0	0
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EMFAC2017 Derived CalEEMod Annual Emission Rates: Year 2023<sup>1,2</sup>

Season	Pollutant	LDA	LDT1	LDT2	MDV	LHDT1	LHDT2	MHDT	HHDT	OBUS	UBUS	MCY	SBUS	МН
Annual	CH4_IDLEX	0	0	0	0	0.0053646	0.003739874	0.004429676	0.027112777	0.0083144	0	0	0.0779603	0
Annual	CH4_RUNEX	0.0026488	0.0067162	0.0044259	0.0056774	0.0049911	0.00353615	0.002098437	0.080794696	0.0049407	5.8457404	0.3793828	0.0067075	0.0029973
Annual	CH4_STREX	0.04594	0.0644528	0.0621927	0.0735395	0.0146928	0.010141118	0.01214523	5.37702E-07	0.0213683	0.010689	0.2333185	0.0070645	0
Annual	CO_IDLEX	0	0	0	0	0.1880428	0.15020591	0.402060079	6.711337612	0.6110078	0	0	3.1414479	0
Annual	CO_RUNEX	0.6677619	1.2994074	0.9401663	1.0893777	0.5668675	0.385681423	0.279345143	0.458958773	0.6148988	45.42295	18.860918	0.5677932	0.2536482
Annual	CO_STREX	2.035179	2.1878958	2.5541988	2.921072	1.0817311	0.719063258	1.374440565	0.009544199	2.3416056	0.7140135	8.5427308	0.9654059	0
Annual	CO2_NBIO_IDLEX	0	0	0	0	8.8131527	13.35562063	64.65459783	1125.749118	90.165899	0	0	354.45463	0
Annual	CO2_NBIO_RUNEX	265.53617	313.29995	332.67085	408.74857	652.97785	654.0656006	1030.640554	1398.542104	1355.7012	1987.9891	223.64968	1085.9919	953.66624
Annual	CO2_NBIO_STREX	52.296695	62.197275	66.531117	80.840383	12.056787	9.215277478	12.05733356	0.084910459	19.024992	8.4195229	59.207707	5.9718833	0
Annual	NOX_IDLEX	0	0	0	0	0.0514367	0.081516643	0.351832613	5.748731259	0.3498612	0	0	3.0315076	0
Annual	NOX_RUNEX	0.0357309	0.1045631	0.0747983	0.0968482	0.5508272	0.70693649	1.0837912	2.710419736	1.1641273	0.4681467	1.1309028	4.3792026	3.2715493
Annual	NOX_STREX <sup>3</sup>	0.1706377	0.2364107	0.2541526	0.3092632	0.3151844	0.218239816	1.582378976	2.349947623	0.837069	0.0808686	0.2636946	0.9548067	0
Annual	PM10_IDLEX	0	0	0	0	0.0007836	0.001275852	0.000326295	0.003192103	0.0001182	0	0	0.0035863	0
Annual	PM10_PMBW	0.03675	0.03675	0.03675	0.03675	0.07644	0.089180026	0.130340037	0.061065773	0.13034	0.0726803	0.01176	0.7448002	0.13034
Annual	PM10_PMTW	0.008	0.008	0.008	0.008	0.0097291	0.010571401	0.012000003	0.0355935	0.012	0.0318756	0.004	0.0106101	0.016
Annual	PM10_RUNEX	0.0017096	0.0025018	0.0018228	0.0019552	0.0059884	0.009626651	0.006129862	0.018509047	0.0070871	0.0032067	0.0024798	0.025098	0.068592
Annual	PM10_STREX	0.001759	0.0024475	0.0018152	0.001934	0.0002682	0.000152021	0.000134664	1.35134E-06	0.0002	5.657E-05	0.0031545	6.024E-05	0
Annual	PM25_IDLEX	0	0	0	0	0.0007497	0.001220659	0.000312179	0.003054014	0.0001131	0	0	0.0034312	0
Annual	PM25_PMBW	0.01575	0.01575	0.01575	0.01575	0.03276	0.038220011	0.055860016	0.026171045	0.05586	0.0311487	0.00504	0.3192001	0.05586
Annual	PM25_PMTW	0.002	0.002	0.002	0.002	0.0024323	0.00264285	0.003000001	0.008898375	0.003	0.0079689	0.001	0.0026525	0.004
Annual	PM25_RUNEX	0.0015748	0.0023022	0.0016777	0.0018024	0.0057009	0.009193948	0.005858162	0.017708314	0.0067657	0.0030642	0.002316	0.0239975	0.0656247
Annual	PM25_STREX	0.0016174	0.0022505	0.0016691	0.0017785	0.0002466	0.000139778	0.000123819	1.24251E-06	0.0001839	5.201E-05	0.0029646	5.539E-05	0
Annual	ROG_DIURN	0.0485481	0.1163076	0.0695771	0.0798617	0.0023517	0.001432193	0.000622711	5.8985E-06	0.0018398	0.0005933	1.0738086	0.0010292	0
Annual	ROG_HTSK	0.0948775	0.1831003	0.1160839	0.1328979	0.0748625	0.049766721	0.026111492	0.000228962	0.0222733	0.007413	0.6362594	0.0089743	0
Annual	ROG_IDLEX	0	0	0	0	0.0214182	0.017294514	0.020737347	0.453442066	0.052181	0	0	0.3610447	0
Annual	ROG_RESTL	0.0466668	0.0994371	0.0712848	0.0854523	0.0014551	0.000907864	0.000410135	4.17331E-06	0.0009505	0.0004339	0.6530354	0.0005595	0
Annual	ROG_RUNEX	0.0102535	0.0295709	0.0181675	0.0242442	0.0445951	0.046695017	0.015251681	0.024845407	0.0288668	0.0851639	2.5957164	0.0872273	0.0645308
Annual	ROG_RUNLS	0.2028204	0.6432311	0.3898705	0.4108341	0.5146778	0.315106976	0.137367245	0.00119217	0.2672535	0.0470756	1.884499	0.0556535	0
Annual	ROG_STREX	0.2036304	0.3177917	0.2862628	0.3583514	0.0722541	0.049775325	0.064004501	2.83402E-06	0.1123431	0.0462141	1.8021736	0.0407824	0
Annual	SO2_IDLEX	0	0	0	0	8.56E-05	0.000128033	0.000614634	0.010454588	0.000858	0	0	0.0033855	0
Annual	SO2_RUNEX	0.0025944	0.0030617	0.0032504	0.0039917	0.0063743	0.006328589	0.009854346	0.012702244	0.0131071	0.0014048	0.0022132	0.0103936	0.0090156
Annual	SO2_STREX	0.0005111	0.0006078	0.0006502	0.00079	0.0001193	9.11926E-05	0.000119317	8.40258E-07	0.0001883	8.332E-05	0.0005859	5.91E-05	0
Annual	TOG_DIURN	0.0485772	0.1163773	0.0696189	0.0799095	0.0023517	0.001432193	0.000622711	5.8985E-06	0.0018398	0.0005933	1.0738086	0.0010292	0
Annual	TOG_HTSK	0.0949343	0.1832101	0.1161535	0.1329776				0.000228962		0.007413		0.0089743	0
Annual	TOG_IDLEX	0	0	0	0		0.023647824		0.522300441		0		0.5200243	0
Annual	TOG_RESTL		0.0994968				0.000907864		4.17331E-06				0.0005595	0
Annual	TOG_RUNEX		0.0431481		0.0352073		0.055587616		0.108570399	0.0399759		3.23302	0.1047514	0.0734641
Annual	TOG_RUNLS	0.2029421					0.315106976		0.00119217		0.0470756	1.884499	0.0556535	0
Annual	TOG_STREX	0.223105	0.3481848		0.3926202		0.054497716		3.1029E-06		0.0505986	1.9618647	0.0446516	0
Summer	CH4_IDLEX	0	0	0	0		0.003747939			0.0084017	0		0.0780221	0
Summer	CH4_RUNEX		0.0071128		0.0060286		0.003574332						0.0067846	0.0029973
Summer	CH4_STREX	0.0413817	0.0577299		0.0661051		0.009797129		5.15116E-07		0.0099367			0
Summer	CO_IDLEX	0	0	0	0	0.1880428	0.15020591	0.33614153	6.614680042	0.6057805	0	0	3.1069229	0

Summer	CO RUNEX	0 7321428	1.4103324	1.026741	1 1853782	0 5769349	0.389608117	0.284017669	0.459580012	0.6266804 45.4234	7 18.147893	0 5757989	0.2536482
Summer	CO STREX	1.738097	1.8646477	2.1788974	2.4855973	1.0342149	0.687546034	1.305473735	0.009065344	2.2147005 0.62851		0.7877367	0.2330 102
Summer	CO2 NBIO IDLEX	0	0	0	0	8.8131527	13.35562063	64.72740237	1113.069069	89.135867	0 0	361.51282	0
Summer	CO2 NBIO RUNEX	277.14091	325.13297	344.12979	420.70064	652.996	654.0725529	1030.648812	1398.543134	1355.7221 1987.	9 222.30364		953.66624
Summer	CO2_NBIO_STREX	51.747183	61.560242	65.825803	80.011371	11.972614	9.159220262	11.93957872	0.084151062	18.808733 8.27250		5.6754419	0
Summer	NOX_IDLEX	0	0	0	0	0.0514367	0.081516643	0.344271757	5.497732375	0.3324624	0 0	3.0898482	0
Summer	NOX_RUNEX	0.031418	0.091357	0.0655661	0.0848698	0.5163176	0.666666221	1.019443652	2.5644129	1.0884472 0.46585	4 0.9882573	4.130506	3.0901471
Summer	NOX_STREX <sup>3</sup>	0.1579896	0.2189358	0.2353294	0.2863485	0.3019845	0.209100507	1.577426763	2.349899386	0.8269003 0.0773	7 0.2500233	0.9508335	0
Summer	PM10_IDLEX	0	0	0	0	0.0007836	0.001275852	0.000277787	0.00277905	0.000105	0 0	0.0030311	0
Summer	PM10_PMBW	0.03675	0.03675	0.03675	0.03675	0.07644	0.089180026	0.130340037	0.061065773	0.13034 0.07268	0.01176	0.7448002	0.13034
Summer	PM10_PMTW	0.008	0.008	0.008	0.008	0.0097291	0.010571401	0.012000003	0.0355935	0.012 0.03187	0.004	0.0106101	0.016
Summer	PM10_RUNEX	0.0017096	0.0025018	0.0018228	0.0019552	0.0059884	0.009626651	0.006129862	0.018509047	0.0070871 0.00320	0.0024798	0.025098	0.068592
Summer	PM10_STREX	0.001759	0.0024475	0.0018152	0.001934	0.0002682	0.000152021	0.000134664	1.35134E-06	0.0002 5.657E-	0.0031545	6.024E-05	0
Summer	PM25_IDLEX	0	0	0	0	0.0007497	0.001220659	0.00026577	0.002658829	0.0001005	0 0	0.0029	0
Summer	PM25_PMBW	0.01575	0.01575	0.01575	0.01575	0.03276	0.038220011	0.055860016	0.026171045	0.05586 0.03114	0.00504	0.3192001	0.05586
Summer	PM25_PMTW	0.002	0.002	0.002	0.002	0.0024323	0.00264285	0.003000001	0.008898375	0.003 0.00796	0.001	0.0026525	0.004
Summer	PM25_RUNEX	0.0015748	0.0023022	0.0016777	0.0018024	0.0057009	0.009193948	0.005858162	0.017708314	0.0067657 0.00306	2 0.002316	0.0239975	0.0656247
Summer	PM25_STREX	0.0016174	0.0022505	0.0016691	0.0017785	0.0002466	0.000139778	0.000123819	1.24251E-06	0.0001839 5.201E-	0.0029646	5.539E-05	0
Summer	ROG_DIURN	0.0746046	0.1785587	0.1068912	0.1226862	0.0034572	0.002107869	0.000924745	9.22711E-06	0.0026502 0.00086	1.7062643	0.0014874	0
Summer	ROG_HTSK	0.0976925	0.1902445	0.1197632	0.1366752	0.0766221	0.051290753	0.026901082	0.000233609	0.0227302 0.00765	0.6934909	0.0091168	0
Summer	ROG_IDLEX	0	0	0	0	0.0214182	0.017294514	0.019988167	0.479629877	0.0536896	0 0	0.360963	0
Summer	ROG_RESTL	0.0644464	0.1380466	0.0979693	0.117423	0.0020042	0.001253122	0.000573297	6.29508E-06	0.0013153 0.00059	8 1.0501442	0.0007738	0
Summer	ROG_RUNEX	0.0108609	0.0311692	0.0192109	0.0255346	0.0451047	0.046863897	0.015449276	0.024855871	0.0293774 0.08519	.9 2.5359613	0.0876148	0.0645308
Summer	ROG_RUNLS	0.1907956	0.5945428	0.3617762	0.3828771	0.4980661	0.304221417	0.132218733	0.001172723	0.2602334 0.04262	7 1.762383	0.0498313	0
Summer	ROG_STREX	0.1818684	0.2826024	0.2554993	0.319532	0.0696159	0.047957982	0.061490873	2.72272E-06	0.1078431 0.04279	.1 1.6014928	0.0363666	0
Summer	SO2_IDLEX	0	0	0	0	8.56E-05	0.000128033	0.000615482	0.010334377	0.0008482	0 0	0.0034522	0
Summer	SO2_RUNEX	0.0027078	0.0031774	0.0033624	0.0041085	0.0063745	0.006328658	0.009854428	0.012702254	0.0131073 0.00140	8 0.0021999	0.0103938	0.0090156
Summer	SO2_STREX	0.0005057	0.0006016	0.0006433	0.0007819	0.0001185	9.06379E-05	0.000118152	8.32743E-07	0.0001861 8.186E-	0.0005672	5.616E-05	0
Summer	TOG_DIURN	0.0746492	0.1786658	0.1069553	0.1227598	0.0034572	0.002107869	0.000924745	9.22711E-06	0.0026502 0.00086	1.7062643	0.0014874	0
Summer	TOG_HTSK	0.0977511	0.1903586	0.119835	0.1367571	0.0766221	0.051290753	0.026901082	0.000233609	0.0227302 0.00765	0.6934909	0.0091168	0
Summer	TOG_IDLEX	0	0	0	0	0.0302578	0.023647824	0.027532076	0.552295727	0.0697898	0 0	0.5199314	0
Summer	TOG_RESTL	0.064485	0.1381294	0.0980281	0.1174934	0.0020042	0.001253122	0.000573297	6.29508E-06	0.0013153 0.00059	1.0501442	0.0007738	0
Summer	TOG_RUNEX	0.015799	0.0454821	0.0279922	0.0370919	0.0572973	0.055834045	0.02040387	0.108585667	0.0407209 5.96792	7 3.1604134	0.1053168	0.0734641
Summer	TOG_RUNLS	0.1909101	0.5948995	0.3619933	0.3831068	0.4980661	0.304221417	0.132218733	0.001172723	0.2602334 0.04262	7 1.762383	0.0498313	0
Summer	TOG_STREX	0.1992618	0.30963	0.2799352	0.350089	0.0762206	0.052507953	0.067324766	2.98104E-06	0.1180746 0.04685	9 1.7434648	0.0398168	0

Winter	CH4_IDLEX	0	0	0	0	0.0053623	0.003738228	0.004755644	0.019367591	0.0082137	0	0	0.0779519	0
Winter	CH4_RUNEX	0.0025922	0.0065898	0.0043362	0.0055643	0.0049648	0.003525854	0.002084755	0.000982357	0.0049102	5.845738	0.3808597	0.0066841	0.0029973
Winter	CH4_STREX	0.0469714	0.0659758	0.0636062	0.0752233	0.0148013	0.010215764	0.012224641	5.43021E-07	0.0215653	0.010859	0.2385597	0.0072391	0
Winter	CO_IDLEX	0	0	0	0	0.1880428	0.15020591	0.494268672	6.742204456	0.6182265	0	0	3.1891252	0
Winter	CO_RUNEX	0.6441606	1.2584424	0.9083777	1.0536717	0.5641616	0.384620603	0.27800503	0.2405674	0.6115202	45.422828	19.002128	0.5653356	0.2536482
Winter	CO_STREX	2.1039466	2.262753	2.6416309	3.0225705	1.0903493	0.72484399	1.388103183	0.009639247	2.3679778	0.7310553	8.6925866	0.9990781	0
Winter	CO2_NBIO_IDLEX	0	0	0	0	8.8131527	13.35562063	64.54724383	1124.169213	91.588323	0	0	344.7076	0
Winter	CO2_NBIO_RUNEX	261.24676	308.92604	328.43544	404.33013	652.97296	654.063719	1030.638182	1344.426825	1355.6952	1987.9888	223.92116	1085.9875	953.66624
Winter	CO2_NBIO_STREX	52.423418	62.343921	66.694603	81.032523	12.072359	9.225757714	12.08093291	0.085061202	19.070431	8.4491363	59.588478	6.028657	0
Winter	NOX_IDLEX	0	0	0	0	0.0514367	0.081516643	0.362272847	5.983795226	0.3738881	0	0	2.950942	0
Winter	NOX_RUNEX	0.0346535	0.1015983	0.0725931	0.0940163	0.5407694	0.694192723	1.063140786	2.619128585	1.1421248	0.4676589	1.1042842	4.3027652	3.2102623
Winter	NOX_STREX <sup>3</sup>	0.1734488	0.2403163	0.258341	0.3143696	0.3181803	0.220313856	1.583556759	2.34995909	0.8395138	0.0816833	0.2669177	0.9559683	0
Winter	PM10_IDLEX	0	0	0	0	0.0007836	0.001275852	0.000393282	0.003532494	0.0001364	0	0	0.0043531	0
Winter	PM10_PMBW	0.03675	0.03675	0.03675	0.03675	0.07644	0.089180026	0.130340037	0.060071404	0.13034	0.0726803	0.01176	0.7448002	0.13034
Winter	PM10_PMTW	0.008	0.008	0.008	0.008	0.0097291	0.010571401	0.012000003	0.035013694	0.012	0.0318756	0.004	0.0106101	0.016
Winter	PM10_RUNEX	0.0017096	0.0025018	0.0018228	0.0019552	0.0059884	0.009626651	0.006129862	0.01840963	0.0070871	0.0032067	0.0024798	0.025098	0.068592
Winter	PM10_STREX	0.001759	0.0024475	0.0018152	0.001934	0.0002682	0.000152021	0.000134664	1.35134E-06	0.0002	5.657E-05	0.0031545	6.024E-05	0
Winter	PM25_IDLEX	0	0	0	0	0.0007497	0.001220659	0.000376269	0.00337968	0.0001305	0	0	0.0041648	0
Winter	PM25_PMBW	0.01575	0.01575	0.01575	0.01575	0.03276	0.038220011	0.055860016	0.025744888	0.05586	0.0311487	0.00504	0.3192001	0.05586
Winter	PM25_PMTW	0.002	0.002	0.002	0.002	0.0024323	0.00264285	0.003000001	0.008753423	0.003	0.0079689	0.001	0.0026525	0.004
Winter	PM25_RUNEX	0.0015748	0.0023022	0.0016777	0.0018024	0.0057009	0.009193948	0.005858162	0.017613198	0.0067657	0.0030642	0.002316	0.0239975	0.0656247
Winter	PM25_STREX	0.0016174	0.0022505	0.0016691	0.0017785	0.0002466	0.000139778	0.000123819	1.24251E-06	0.0001839	5.201E-05	0.0029646	5.539E-05	0
Winter	ROG_DIURN	0.0471019	0.1159358	0.0664427	0.0755843	0.0024634	0.001472167	0.000638475	6.12953E-06	0.0019124	0.0005831	1.1672672	0.0010334	0
Winter	ROG_HTSK	0.1020048	0.2046621	0.1250085	0.1417094	0.0855001	0.055700371	0.028119968	0.000259159	0.0235875	0.0079413	0.8176386	0.0093494	0
Winter	ROG_IDLEX	0	0	0	0	0.0214182	0.017294514	0.021790034	0.416978921	0.0500976	0	0	0.3611574	0
Winter	ROG_RESTL	0.0445377	0.0950178	0.0680111	0.0816259	0.0014332	0.000879439	0.000399563	4.15483E-06	0.0009308	0.0004127	0.6255157	0.0005356	0
Winter	ROG_RUNEX	0.0100512	0.0290343	0.0178205	0.0237958	0.0444549	0.046648608	0.015194406	0.019840127	0.0287188	0.0851569	2.6089407	0.0871082	0.0645308
Winter	ROG_RUNLS	0.231365	0.7604246	0.4573523	0.4781807	0.5575434	0.343473351	0.150997808	0.001268176	0.2862837	0.0574779	2.1754633	0.0684553	0
Winter	ROG_STREX	0.2085277	0.3256827	0.293186	0.3670807	0.0728238	0.050167792	0.064583384	2.85966E-06	0.1134266	0.046989	1.8452498	0.0417955	0
Winter	SO2_IDLEX	0	0	0	0	8.56E-05	0.000128033	0.000613395	0.010620593	0.0008714	0	0	0.0032934	0
Winter	SO2_RUNEX	0.0025525	0.003019	0.003209	0.0039485	0.0063742	0.00632857	0.009854323	0.012702241	0.013107	0.0014048	0.0022159	0.0103936	0.0090156
Winter	SO2_STREX	0.0005123	0.0006093	0.0006518	0.0007919	0.0001195	9.12964E-05	0.000119551	8.4175E-07	0.0001887	8.361E-05	0.0005897	5.966E-05	0
Winter	TOG_DIURN	0.0471302	0.1160054	0.0664825	0.0756296	0.0024634	0.001472167	0.000638475	6.12953E-06	0.0019124	0.0005831	1.1672672	0.0010334	0
Winter	TOG_HTSK	0.1020659	0.2047848	0.1250835	0.1417944	0.0855001	0.055700371	0.028119968	0.000259159	0.0235875	0.0079413	0.8176386	0.0093494	0
Winter	TOG_IDLEX	0	0	0	0	0.0302578	0.023647824	0.030315123	0.47469876	0.0657005	0	0	0.5201527	0
Winter	TOG_RESTL	0.0445644	0.0950748	0.0680519	0.0816748	0.0014332	0.000879439	0.000399563	4.15483E-06	0.0009308	0.0004127	0.6255157	0.0005356	0
Winter	TOG_RUNEX	0.0146168	0.0423648	0.0259621	0.0345534	0.0563491	0.055519896	0.020031963	0.022711975	0.03976	5.9678767	3.2490501	0.1045776	0.0734641
Winter	TOG_RUNLS	0.2315038	0.7608808	0.4576267	0.4784676	0.5575434	0.343473351	0.150997808	0.001268176	0.2862837	0.0574779	2.1754633	0.0684553	0
Winter	TOG_STREX	0.2284706	0.3568304	0.3212262	0.4021842	0.0797329	0.054927418	0.070710676	3.13096E-06	0.1241879	0.051447	2.0087467	0.0457609	0

<sup>1</sup> Source: California Air Resources Board. EMFAC2017 Web Database. https://www.arb.ca.gov/emfac/2017/; California Air Pollution Control Officers Association (CAPCOA). 2017, November. California Emissions Estimator Model User's Guide, Version 2016.3.2, Appendix A.

<sup>2</sup> Unless otherwise noted, per CalEEMod methodology, the calculated CalEEMod emission rates are derived from the emission rates obtained using the EMFAC2017 Web Database for the Los Angeles (SC) region.

<sup>3</sup> Because EMFAC2017 provides vehicle trips data for MHDT and HHDT diesel trucks, the formula provided in Appendix A of the CalEEMod User's Guide in calculating the NO  $_{\rm X}$  STREX emission rates are utilized.

# LDA CalEEMod Emission Rate Worksheet

<b>C</b>	Dallatant	Adiostos aut Fastan		Fariasian Bata	_	Vehicle Class:	LDA			\			<b>T</b>		Caleena de Euricaia de
Season	Pollutant	Adjustment Factor		Emission Rates DSL	ELEC	LDA Gas	Population LDA DSL	LDA Elec	LDA Gas	LDA DSL	LDA Elec	LDA Cas	Trips LDA DSL	LDA Elec	CalEEMod Emission
Annual	CH4 IDLEX		Gas 0	031		3986929.129						LDA Gas			Rate 0
Annual	CH4_IDLEX		_	0.000872156		3986929.129									0.002648795
Annual	CH4_KONEX		0.00273323	0.000872130 N		3986929.129									0.045940047
Annual	CO_IDLEX	1.0027	0.047481331	0		3986929.129									0.043340047
Annual	CO RUNEX		0.688463055	· ·		3986929.129									0.667761938
Annual	CO_STREX		2.103461752	0.20113034		3986929.129									2.035179046
Annual	CO2_NBIO_IDLEX	1.0126	0	0		3986929.129									0
Annual	CO2 NBIO RUNEX			209.5617715		3986929.129									265.5361731
Annual	CO2_NBIO_STREX		54.05131225	0		3986929.129									52.29669521
Annual	NOX_IDLEX	1.0007	0	0		3986929.129									0
Annual	NOX_RUNEX			0.064741579		3986929.129									0.035730879
Annual	NOX_STREX	1.0007	0.17636277	0.0017.12373		3986929.129									0.170637671
Annual	PM10 IDLEX	1.0032	0	0		3986929.129									0
Annual	PM10_PMBW		0.036750011	0.036750011		3986929.129									0.036750011
Annual	PM10_PMTW		0.008000002	0.008000002		3986929.129									0.008000002
Annual	PM10_RUNEX	1.0032		0.008345632		3986929.129									0.001709632
Annual	PM10_STREX		0.001818003	0		3986929.129									0.001758987
Annual	PM25_IDLEX	1.0032	0	0	0	3986929.129	36740.62878	91678.53845	149418105.6	1426244.815	3806341.937	18815397.63	174171.298	457107.9273	0
Annual	PM25_PMBW		0.015750005	0.015750005	0.015750005	3986929.129	36740.62878	91678.53845	149418105.6	1426244.815	3806341.937	18815397.63	174171.298	457107.9273	0.015750005
Annual	PM25_PMTW		0.002000001	0.002000001	0.002000001	3986929.129	36740.62878	91678.53845	149418105.6	1426244.815	3806341.937	18815397.63	174171.298	457107.9273	0.002000001
Annual	PM25_RUNEX	1.0032	0.001553761	0.007984604	0	3986929.129	36740.62878	91678.53845	149418105.6	1426244.815	3806341.937	18815397.63	174171.298	457107.9273	0.001574826
Annual	PM25_STREX	1.0032	0.001671632	0	0	3986929.129	36740.62878	91678.53845	149418105.6	1426244.815	3806341.937	18815397.63	174171.298	457107.9273	0.001617368
Annual	ROG_DIURN		0.236283346	0	0.022407439	3986929.129	36740.62878	91678.53845	149418105.6	1426244.815	3806341.937	18815397.63	174171.298	457107.9273	0.048548101
Annual	ROG_HTSK		0.097941986	0	0.004888026	3986929.129	36740.62878	91678.53845	149418105.6	1426244.815	3806341.937	18815397.63	174171.298	457107.9273	0.094877483
Annual	ROG_IDLEX		0	0	0	3986929.129	36740.62878	91678.53845	149418105.6	1426244.815	3806341.937	18815397.63	174171.298	457107.9273	0
Annual	ROG_RESTL		0.22744976	0	0.007500233	3986929.129	36740.62878	91678.53845	149418105.6	1426244.815	3806341.937	18815397.63	174171.298	457107.9273	0.046666775
Annual	ROG_RUNEX		0.010433326	0.018777004	0	3986929.129	36740.62878	91678.53845	149418105.6	1426244.815	3806341.937	18815397.63	174171.298	457107.9273	0.010253485
Annual	ROG_RUNLS		0.20962527	0	0	3986929.129	36740.62878	91678.53845	149418105.6	1426244.815	3806341.937	18815397.63	174171.298	457107.9273	0.202820401
Annual	ROG_STREX		0.210462467	0	0	3986929.129	36740.62878	91678.53845	149418105.6	1426244.815	3806341.937	18815397.63	174171.298	457107.9273	0.203630422
Annual	SO2_IDLEX		0	0	0	3986929.129	36740.62878	91678.53845	149418105.6	1426244.815	3806341.937	18815397.63	174171.298	457107.9273	0
Annual	SO2_RUNEX		0.002666326	0.001981112	0	3986929.129	36740.62878	91678.53845	149418105.6	1426244.815	3806341.937	18815397.63	174171.298	457107.9273	0.002594382
Annual	SO2_STREX		0.000528226			3986929.129									0.000511079
Annual	TOG_DIURN		0.236425116			3986929.129									0.048577167
Annual	TOG_HTSK		0.098000751	0		3986929.129									0.094934341
Annual	TOG_IDLEX	1.0007	0	0		3986929.129									0
Annual	TOG_RESTL	1.0006	0.22758623			3986929.129									0.046694753
Annual	TOG_RUNEX		0.015230247			3986929.129									0.014912074
Annual	TOG_RUNLS		0.209751045			3986929.129									0.202942094
Annual	TOG_STREX	1.0007	0.230590436	0		3986929.129									0.223104995
_	CH4_IDLEX		0	0		3986929.129									0
Summer	CH4_RUNEX			0.000872156		3986929.129									0.002829231
_	CH4_STREX	4 0007	0.042770058	_		3986929.129									0.041381653
Summer	CO_IDLEX	1.0027	0	0 20115024		3986929.129									0
Summer	CO_RUNEX		0.755098482	0.28115834		3986929.129									0.732142764
_	CO_STREX CO2_NBIO_IDLEX	1.0126	1.796412197	0		3986929.129 3986929.129									1.738096953 0
Summer Summer	CO2_NBIO_IDLEX			209.5617715		3986929.129									277.140912
Summer	CO2_NBIO_STREX		53.48336338			3986929.129									51.74718313
Summer	NOX_IDLEX	1.0007	0	0		3986929.129									0
Summer	NOX_RUNEX		0.031934174	0.06118556		3986929.129									0.03141796
Summer	NOX_STREX		0.163290313	0.00110330		3986929.129									0.157989572
Summer	PM10_IDLEX	1.0032	0.103230313	0		3986929.129									0
Summer	PM10 PMBW	1.0001	•	0.036750011		3986929.129									0.036750011
Summer	PM10_PMTW					3986929.129									0.008000002
Summer	PM10_RUNEX	1.0032		0.008345632		3986929.129									0.001709632
Summer	PM10_STREX		0.001818003	0		3986929.129									0.001758987
Summer	PM25_IDLEX	1.0032	0	0	0	3986929.129	36740.62878	91678.53845	149418105.6	1426244.815	3806341.937	18815397.63	174171.298	457107.9273	0
Summer	PM25_PMBW		0.015750005	0.015750005		3986929.129									0.015750005
Summer	PM25_PMTW		0.002000001	0.002000001	0.002000001	3986929.129	36740.62878	91678.53845	149418105.6	1426244.815	3806341.937	18815397.63	174171.298	457107.9273	0.002000001
Summer	PM25_RUNEX	1.0032	0.001553761	0.007984604	0	3986929.129	36740.62878	91678.53845	149418105.6	1426244.815	3806341.937	18815397.63	174171.298	457107.9273	0.001574826
Summer	PM25_STREX	1.0032	0.001671632	0	0	3986929.129	36740.62878	91678.53845	149418105.6	1426244.815	3806341.937	18815397.63	174171.298	457107.9273	0.001617368
Summer	ROG_DIURN		0.362949786	0	0.040970996	3986929.129	36740.62878	91678.53845	149418105.6	1426244.815	3806341.937	18815397.63	174171.298	457107.9273	0.074604584
Summer	ROG_HTSK		0.100851478	0	0.004888026	3986929.129	36740.62878	91678.53845	149418105.6	1426244.815	3806341.937	18815397.63	174171.298	457107.9273	0.097692528
Summer	ROG_IDLEX		0	0	0	3986929.129	36740.62878	91678.53845	149418105.6	1426244.815	3806341.937	18815397.63	174171.298	457107.9273	0
Summer	ROG_RESTL		0.313983399	0	0.015694905	3986929.129	36740.62878	91678.53845	149418105.6	1426244.815	3806341.937	18815397.63	174171.298	457107.9273	0.064446407
Summer	ROG_RUNEX		0.011062042	0.018777004	0	3986929.129	36740.62878	91678.53845	149418105.6	1426244.815	3806341.937	18815397.63	174171.298	457107.9273	0.010860928
Summer	ROG_RUNLS		0.197197069			3986929.129									0.190795646
	ROG_STREX		0.187970293	_		3986929.129									0.18186839
	SO2_IDLEX		0	_		3986929.129									0
	SO2_RUNEX			0.001981112		3986929.129									0.002707791
	SO2_STREX		0.000522676			3986929.129									0.000505708
	TOG_DIURN		0.363167555			3986929.129									0.074649231
	TOG_HTSK		0.100911989	_		3986929.129									0.097751074
	TOG_IDLEX	1.0007	0 21/171720			3986929.129									0 06448E03
	TOG_RESTL		0.314171789			3986929.129									0.06448503
	TOG_RUNEX		0.016148256	0.021376371		3986929.129 3986929.129									0.015799023 0.190910123
	TOG_RUNLS TOG_STREX		0.197315388			3986929.129									0.190910123
Janniel	.00_JINLA	1.0007	5.20JJ+12J1	U	Ü	5500525.125	337-10.02078	J±070.JJ04J	1.5-10103.0	1,20274.013	3000371.J3/	10010071.00	±, ¬±, 1.230	137 107.3273	0.133201704

Vehicle Class: LDA

Winter	CH4_IDLEX		0	0	0	3986929.129	36740.62878	91678.53845	149418105.6	1426244.815	3806341.937	18815397.63	174171.298	457107.9273	0
Winter	CH4_RUNEX		0.002674631	0.000872156	0	3986929.129	36740.62878	91678.53845	149418105.6	1426244.815	3806341.937	18815397.63	174171.298	457107.9273	0.002592179
Winter	CH4_STREX		0.048547375	0	0	3986929.129	36740.62878	91678.53845	149418105.6	1426244.815	3806341.937	18815397.63	174171.298	457107.9273	0.046971427
Winter	CO_IDLEX	1.0027	0	0	0	3986929.129	36740.62878	91678.53845	149418105.6	1426244.815	3806341.937	18815397.63	174171.298	457107.9273	0
Winter	CO_RUNEX	1.0027	0.664035185	0.28115834	0	3986929.129	36740.62878	91678.53845	149418105.6	1426244.815	3806341.937	18815397.63	174171.298	457107.9273	0.644160582
Winter	CO_STREX	1.0027	2.174536565	0	0	3986929.129	36740.62878	91678.53845	149418105.6	1426244.815	3806341.937	18815397.63	174171.298	457107.9273	2.103946624
Winter	CO2_NBIO_IDLEX	1.0126	0	0	0	3986929.129	36740.62878	91678.53845	149418105.6	1426244.815	3806341.937	18815397.63	174171.298	457107.9273	0
Winter	CO2_NBIO_RUNEX	1.0126	268.3952248	209.5617715	0	3986929.129	36740.62878	91678.53845	149418105.6	1426244.815	3806341.937	18815397.63	174171.298	457107.9273	261.2467608
Winter	CO2_NBIO_STREX	1.0126	54.18228696	0	0	3986929.129	36740.62878	91678.53845	149418105.6	1426244.815	3806341.937	18815397.63	174171.298	457107.9273	52.42341822
Winter	NOX_IDLEX	1.0007	0	0	0	3986929.129	36740.62878	91678.53845	149418105.6	1426244.815	3806341.937	18815397.63	174171.298	457107.9273	0
Winter	NOX_RUNEX	1.0007	0.035260832	0.063514853	0	3986929.129	36740.62878	91678.53845	149418105.6	1426244.815	3806341.937	18815397.63	174171.298	457107.9273	0.034653543
Winter	NOX_STREX	1.0007	0.179268203	0	0	3986929.129	36740.62878	91678.53845	149418105.6	1426244.815	3806341.937	18815397.63	174171.298	457107.9273	0.173448788
Winter	PM10_IDLEX	1.0032	0	0	0	3986929.129	36740.62878	91678.53845	149418105.6	1426244.815	3806341.937	18815397.63	174171.298	457107.9273	0
Winter	PM10_PMBW		0.036750011	0.036750011	0.036750011	3986929.129	36740.62878	91678.53845	149418105.6	1426244.815	3806341.937	18815397.63	174171.298	457107.9273	0.036750011
Winter	PM10_PMTW		0.008000002	0.008000002	0.008000002	3986929.129	36740.62878	91678.53845	149418105.6	1426244.815	3806341.937	18815397.63	174171.298	457107.9273	0.008000002
Winter	PM10_RUNEX	1.0032	0.001689841	0.008345632	0	3986929.129	36740.62878	91678.53845	149418105.6	1426244.815	3806341.937	18815397.63	174171.298	457107.9273	0.001709632
Winter	PM10_STREX	1.0032	0.001818003	0	0	3986929.129	36740.62878	91678.53845	149418105.6	1426244.815	3806341.937	18815397.63	174171.298	457107.9273	0.001758987
Winter	PM25_IDLEX	1.0032	0	0	0	3986929.129	36740.62878	91678.53845	149418105.6	1426244.815	3806341.937	18815397.63	174171.298	457107.9273	0
Winter	PM25_PMBW		0.015750005	0.015750005	0.015750005	3986929.129	36740.62878	91678.53845	149418105.6	1426244.815	3806341.937	18815397.63	174171.298	457107.9273	0.015750005
Winter	PM25_PMTW		0.002000001	0.002000001	0.002000001	3986929.129	36740.62878	91678.53845	149418105.6	1426244.815	3806341.937	18815397.63	174171.298	457107.9273	0.002000001
Winter	PM25_RUNEX	1.0032	0.001553761	0.007984604	0	3986929.129	36740.62878	91678.53845	149418105.6	1426244.815	3806341.937	18815397.63	174171.298	457107.9273	0.001574826
Winter	PM25_STREX	1.0032	0.001671632	0	0	3986929.129	36740.62878	91678.53845	149418105.6	1426244.815	3806341.937	18815397.63	174171.298	457107.9273	0.001617368
Winter	ROG_DIURN		0.229373901	0	0.016129757	3986929.129	36740.62878	91678.53845	149418105.6	1426244.815	3806341.937	18815397.63	174171.298	457107.9273	0.047101942
Winter	ROG_HTSK		0.105308438	0	0.004888026	3986929.129	36740.62878	91678.53845	149418105.6	1426244.815	3806341.937	18815397.63	174171.298	457107.9273	0.102004806
Winter	ROG_IDLEX		0	0	0	3986929.129	36740.62878	91678.53845	149418105.6	1426244.815	3806341.937	18815397.63	174171.298	457107.9273	0
Winter	ROG_RESTL		0.217132229	0	0.004571725	3986929.129	36740.62878	91678.53845	149418105.6	1426244.815	3806341.937	18815397.63	174171.298	457107.9273	0.044537684
Winter	ROG_RUNEX		0.010223967	0.018777004	0	3986929.129	36740.62878	91678.53845	149418105.6	1426244.815	3806341.937	18815397.63	174171.298	457107.9273	0.010051208
Winter	ROG_RUNLS		0.239127546	0	0	3986929.129	36740.62878	91678.53845	149418105.6	1426244.815	3806341.937	18815397.63	174171.298	457107.9273	0.231364972
Winter	ROG_STREX		0.215524059	0	0	3986929.129	36740.62878	91678.53845	149418105.6	1426244.815	3806341.937	18815397.63	174171.298	457107.9273	0.208527704
Winter	SO2_IDLEX		0	0	0	3986929.129	36740.62878	91678.53845	149418105.6	1426244.815	3806341.937	18815397.63	174171.298	457107.9273	0
Winter	SO2_RUNEX		0.002622939	0.001981112	0	3986929.129	36740.62878	91678.53845	149418105.6	1426244.815	3806341.937	18815397.63	174171.298	457107.9273	0.002552463
Winter	SO2_STREX		0.000529506	0	0	3986929.129	36740.62878	91678.53845	149418105.6	1426244.815	3806341.937	18815397.63	174171.298	457107.9273	0.000512317
Winter	TOG_DIURN	1.0006	0.229511526	0	0.016129757	3986929.129	36740.62878	91678.53845	149418105.6	1426244.815	3806341.937	18815397.63	174171.298	457107.9273	0.047130157
Winter	TOG_HTSK	1.0006	0.105371623	0	0.004888026	3986929.129	36740.62878	91678.53845	149418105.6	1426244.815	3806341.937	18815397.63	174171.298	457107.9273	0.10206594
Winter	TOG_IDLEX	1.0007	0	0	0	3986929.129	36740.62878	91678.53845	149418105.6	1426244.815	3806341.937	18815397.63	174171.298	457107.9273	0
Winter	TOG_RESTL	1.0006	0.217262509	0	0.004571725	3986929.129	36740.62878	91678.53845	149418105.6	1426244.815	3806341.937	18815397.63	174171.298	457107.9273	0.044564393
Winter	TOG_RUNEX	1.0007	0.014924601	0.021376371	0	3986929.129	36740.62878	91678.53845	149418105.6	1426244.815	3806341.937	18815397.63	174171.298	457107.9273	0.01461677
Winter	TOG_RUNLS	1.0006	0.239271022	0	0	3986929.129	36740.62878	91678.53845	149418105.6	1426244.815	3806341.937	18815397.63	174171.298	457107.9273	0.231503791
Winter	TOG_STREX	1.0007	0.23613609	0	0	3986929.129	36740.62878	91678.53845	149418105.6	1426244.815	3806341.937	18815397.63	174171.298	457107.9273	0.228470624

## **LDT1 CalEEMod Emission Rate Worksheet**

_	<b></b>					Vehicle Class:	LDT1								
Season	Pollutant	Adjustment Factor		Emission Rates		1571.0	Population	1574.51	1571.0	VMT	1074.51	1074.0	Trips	1074.51	CalEEMod Emission
			Gas	DSL	ELEC	LDT1 Gas	LDT1 DSL	LDT1 Elec	LDT1 Gas	LDT1 DSL	LDT1 Elec	LDT1 Gas	LDT1 DSL	LDT1 Elec	Rate
Annual	CH4_IDLEX		0	-		472375.6724			17372474.6		196781.6242	2187811.2	894.9059766		0
Annual	CH4_RUNEX			0.008481451		472375.6724					196781.6242		894.9059766		0.006716235
Annual	CH4_STREX		0.06516359	0	0	472375.6724	252.4118747	4635.248736	17372474.6	6132.921962	196781.6242		894.9059766	23233.68477	0.064452764
Annual	CO_IDLEX	1.0027		0	_	472375.6724	252.4118747	4635.248736	17372474.6	6132.921962	196781.6242	2187811.2	894.9059766	23233.68477	0
Annual	CO_RUNEX	1.0027	1.314205416	1.074680539	0	472375.6724	252.4118747	4635.248736	17372474.6	6132.921962	196781.6242	2187811.2	894.9059766	23233.68477	1.299407424
Annual	CO_STREX	1.0027	2.212025355	0	0	472375.6724	252.4118747	4635.248736	17372474.6	6132.921962	196781.6242	2187811.2	894.9059766	23233.68477	2.18789583
Annual	CO2_NBIO_IDLEX	1.0126	0	0	0	472375.6724	252.4118747	4635.248736	17372474.6	6132.921962	196781.6242	2187811.2	894.9059766	23233.68477	0
Annual	CO2_NBIO_RUNEX	1.0126	316.7966087	461.0331077	0	472375.6724	252.4118747	4635.248736	17372474.6	6132.921962	196781.6242	2187811.2	894.9059766	23233.68477	313.2999487
Annual	CO2_NBIO_STREX	1.0126	62.88322704	0	0	472375.6724	252.4118747	4635.248736	17372474.6	6132.921962	196781.6242	2187811.2	894.9059766	23233.68477	62.19727543
Annual	NOX_IDLEX	1.0007	0	0	0	472375.6724	252.4118747	4635.248736	17372474.6	6132.921962	196781.6242	2187811.2	894.9059766	23233.68477	0
Annual	NOX_RUNEX	1.0007	0.105435804	0.987556601	0	472375.6724	252.4118747	4635.248736	17372474.6	6132.921962	196781.6242	2187811.2	894.9059766	23233.68477	0.104563115
Annual	NOX_STREX	1.0007	0.239017946	0	0	472375.6724	252.4118747	4635.248736	17372474.6	6132.921962	196781.6242	2187811.2	894.9059766	23233.68477	0.236410657
Annual	PM10_IDLEX	1.0032	0	0	0	472375.6724	252.4118747	4635.248736	17372474.6	6132.921962	196781.6242	2187811.2	894.9059766	23233.68477	0
Annual	PM10_PMBW		0.036750011	0.036750011	0.036750011	472375.6724	252.4118747	4635.248736	17372474.6	6132.921962	196781.6242	2187811.2	894.9059766	23233.68477	0.036750011
Annual	PM10 PMTW		0.008000002	0.008000002	0.008000002	472375.6724	252.4118747	4635.248736	17372474.6	6132.921962	196781.6242	2187811.2	894.9059766	23233.68477	0.008000002
Annual	PM10_RUNEX	1.0032	0.002483107					4635.248736					894.9059766	23233.68477	0.002501809
Annual	PM10 STREX	1.0032	0.002474476	0	0	472375.6724	252.4118747	4635.248736	17372474.6	6132,921962	196781.6242	2187811.2	894.9059766	23233.68477	0.002447483
Annual	PM25_IDLEX	1.0032		0	_								894.9059766		0
Annual	PM25_PMBW	1.0002		0.015750005				4635.248736			196781.6242		894.9059766		0.015750005
Annual	PM25_PMTW							4635.248736			196781.6242		894.9059766		0.002000001
Annual	PM25_RUNEX	1 0032	0.002283205										894.9059766		0.002302166
Annual	PM25_KONEX PM25_STREX		0.002283203	0.123673233						6132.921962			894.9059766		0.002302100
	ROG DIURN	1.0032	0.544400345	0									894.9059766		0.116307571
Annual	_										196781.6242				
Annual	ROG_HTSK		0.18506773	0				4635.248736			196781.6242		894.9059766		0.183100291
Annual	ROG_IDLEX		0	0	_				_		196781.6242		894.9059766		0
Annual	ROG_RESTL		0.465549413	_	0.007500233						196781.6242		894.9059766		0.099437147
Annual	ROG_RUNEX			0.182600655				4635.248736			196781.6242		894.9059766		0.029570868
Annual	ROG_RUNLS		0.650325098	0	_						196781.6242		894.9059766		0.643231131
Annual	ROG_STREX		0.321296515	0						6132.921962					0.317791703
Annual	SO2_IDLEX		0	0				4635.248736					894.9059766		0
Annual	SO2_RUNEX		0.00309595	0.004358421				4635.248736					894.9059766	23233.68477	0.003061727
Annual	SO2_STREX		0.000614537	0	0	472375.6724	252.4118747	4635.248736	17372474.6	6132.921962	196781.6242	2187811.2	894.9059766	23233.68477	0.000607834
Annual	TOG_DIURN	1.0006	0.544726986	0	0.022407439	472375.6724	252.4118747	4635.248736	17372474.6	6132.921962	196781.6242	2187811.2	894.9059766	23233.68477	0.116377327
Annual	TOG_HTSK	1.0006	0.18517877	0	0.004888026	472375.6724	252.4118747	4635.248736	17372474.6	6132.921962	196781.6242	2187811.2	894.9059766	23233.68477	0.18321012
Annual	TOG_IDLEX	1.0007	0	0	0	472375.6724	252.4118747	4635.248736	17372474.6	6132.921962	196781.6242	2187811.2	894.9059766	23233.68477	0
Annual	TOG_RESTL	1.0006	0.465828743	0	0.007500233	472375.6724	252.4118747	4635.248736	17372474.6	6132.921962	196781.6242	2187811.2	894.9059766	23233.68477	0.0994968
Annual	TOG_RUNEX	1.0007	0.043578725	0.207878706	0	472375.6724	252.4118747	4635.248736	17372474.6	6132.921962	196781.6242	2187811.2	894.9059766	23233.68477	0.043148132
Annual	TOG_RUNLS	1.0006	0.650715293	0	0	472375.6724	252.4118747	4635.248736	17372474.6	6132.921962	196781.6242	2187811.2	894.9059766	23233.68477	0.64361707
Annual	TOG_STREX	1.0007	0.352024769	0	0	472375.6724	252.4118747	4635.248736	17372474.6	6132.921962	196781.6242	2187811.2	894.9059766	23233.68477	0.348184763
Summer	CH4 IDLEX		0	0	0	472375.6724	252.4118747	4635.248736	17372474.6	6132.921962	196781.6242	2187811.2	894.9059766	23233.68477	0
Summer	CH4 RUNEX		0.007192866	0.008481451				4635.248736					894.9059766	23233.68477	0.007112781
Summer	CH4_STREX		0.058366554	0				4635.248736					894.9059766		0.057729872
Summer	CO_IDLEX	1.0027	0	0						6132.921962			894.9059766		0
Summer	CO RUNEX		1.426425988	1 074680539				4635.248736					894.9059766		1.410332367
Summer	CO_STREX		1.885212285	0.07				4635.248736					894.9059766		1.864647749
Summer	CO2_NBIO_IDLEX	1.0126	1.003212203	0				4635.248736					894.9059766		0
Summer	CO2_NBIO_RUNEX	1.0126	Ū	461.0331077				4635.248736					894.9059766		325.1329666
	CO2_NBIO_STREX		62.23916762	401.0331077				4635.248736					894.9059766		61.56024163
Summer			02.23910702	0				4635.248736							
Summer	NOX_IDLEX	1.0007	· ·	ū									894.9059766		0 001356074
Summer	NOX_RUNEX		0.092094538					4635.248736					894.9059766		0.091356974
Summer	NOX_STREX		0.221350355	0				4635.248736							0.21893579
Summer	PM10_IDLEX	1.0032		0				4635.248736					894.9059766		0
Summer	PM10_PMBW							4635.248736					894.9059766		0.036750011
Summer	PM10_PMTW									6132.921962			894.9059766		0.008000002
Summer	PM10_RUNEX		0.002483107					4635.248736					894.9059766		0.002501809
Summer	PM10_STREX		0.002474476	0				4635.248736					894.9059766		0.002447483
Summer	PM25_IDLEX	1.0032		0				4635.248736					894.9059766		0
Summer	PM25_PMBW							4635.248736					894.9059766		0.015750005
Summer	PM25_PMTW							4635.248736					894.9059766	23233.68477	0.002000001
Summer	PM25_RUNEX	1.0032	0.002283205	0.129879233	0	472375.6724	252.4118747	4635.248736	17372474.6	6132.921962	196781.6242	2187811.2	894.9059766	23233.68477	0.002302166
Summer	PM25_STREX	1.0032	0.002275283	0	0	472375.6724	252.4118747	4635.248736	17372474.6	6132.921962	196781.6242	2187811.2	894.9059766	23233.68477	0.002250463
Summer	ROG_DIURN		0.835714696	0	0.040970996	472375.6724	252.4118747	4635.248736	17372474.6	6132.921962	196781.6242	2187811.2	894.9059766	23233.68477	0.178558749
Summer	ROG_HTSK		0.19229072	0	0.004888026	472375.6724	252.4118747	4635.248736	17372474.6	6132.921962	196781.6242	2187811.2	894.9059766	23233.68477	0.19024449
Summer	ROG_IDLEX		0	0	0	472375.6724	252.4118747	4635.248736	17372474.6	6132.921962	196781.6242	2187811.2	894.9059766	23233.68477	0
Summer	ROG_RESTL		0.646260887	0	0.015694905	472375.6724	252.4118747	4635.248736	17372474.6	6132.921962	196781.6242	2187811.2	894.9059766	23233.68477	0.138046557
	ROG_RUNEX			0.182600655				4635.248736						23233.68477	0.03116924
	ROG_RUNLS		0.60109982					4635.248736							0.594542819
	ROG_STREX		0.285719086					4635.248736							0.282602365
	SO2_IDLEX		0.203713000	_				4635.248736							0
	SO2_RUNEX		_	0.004358421									894.9059766		0.003177367
	SO2_KONEX SO2_STREX		0.003212941					4635.248736							0.003177307
	TOG_DIURN	1 0006	0.836216125					4635.248736							0.178665833
	<del>-</del>												894.9059766		
	TOG_HTSK		0.192406094	_											0.190358606
	TOG_IDLEX	1.0007		_				4635.248736							0 139130365
	TOG_RESTL		0.646648644					4635.248736							0.138129365
	TOG_RUNEX		0.045939939					4635.248736							0.045482084
	TOG_RUNLS		0.60146048										894.9059766		0.594899545
Summer	TOG_STREX	1.0007	0.313044846	0	0	4/2375.6724	252.4118747	4635.248736	1/372474.6	6132.921962	196781.6242	2187811.2	894.9059766	23233.68477	0.309630046

Vehicle Class: LDT1

Winter	CH4_IDLEX		0	0	0	472375.6724	252.4118747	4635.248736	17372474.6	6132.921962	196781.6242	2187811.2	894.9059766	23233.68477	0
Winter	CH4_RUNEX		0.006663814	0.008481451	0	472375.6724	252.4118747	4635.248736	17372474.6	6132.921962	196781.6242	2187811.2	894.9059766	23233.68477	0.006589837
Winter	CH4_STREX		0.066703387	0	0	472375.6724	252.4118747	4635.248736	17372474.6	6132.921962	196781.6242	2187811.2	894.9059766	23233.68477	0.065975764
Winter	CO_IDLEX	1.0027	0	0	0	472375.6724	252.4118747	4635.248736	17372474.6	6132.921962	196781.6242	2187811.2	894.9059766	23233.68477	0
Winter	CO_RUNEX	1.0027	1.272761923	1.074680539	0	472375.6724	252.4118747	4635.248736	17372474.6	6132.921962	196781.6242	2187811.2	894.9059766	23233.68477	1.258442412
Winter	CO_STREX	1.0027	2.287708049	0	0	472375.6724	252.4118747	4635.248736	17372474.6	6132.921962	196781.6242	2187811.2	894.9059766	23233.68477	2.262752953
Winter	CO2_NBIO_IDLEX	1.0126	0	0	0	472375.6724	252.4118747	4635.248736	17372474.6	6132.921962	196781.6242	2187811.2	894.9059766	23233.68477	0
Winter	CO2_NBIO_RUNEX	1.0126	312.3716091	461.0331077	0	472375.6724	252.4118747	4635.248736	17372474.6	6132.921962	196781.6242	2187811.2	894.9059766	23233.68477	308.9260374
Winter	CO2_NBIO_STREX	1.0126	63.0314901	0	0	472375.6724	252.4118747	4635.248736	17372474.6	6132.921962	196781.6242	2187811.2	894.9059766	23233.68477	62.34392119
Winter	NOX_IDLEX	1.0007	0	0	0	472375.6724	252.4118747	4635.248736	17372474.6	6132.921962	196781.6242	2187811.2	894.9059766	23233.68477	0
Winter	NOX_RUNEX	1.0007	0.102442963	0.968868957	0	472375.6724	252.4118747	4635.248736	17372474.6	6132.921962	196781.6242	2187811.2	894.9059766	23233.68477	0.101598306
Winter	NOX_STREX	1.0007	0.242966687	0	0	472375.6724	252.4118747	4635.248736	17372474.6	6132.921962	196781.6242	2187811.2	894.9059766	23233.68477	0.240316324
Winter	PM10_IDLEX	1.0032	0	0	0	472375.6724	252.4118747	4635.248736	17372474.6	6132.921962	196781.6242	2187811.2	894.9059766	23233.68477	0
Winter	PM10_PMBW		0.036750011	0.036750011	0.036750011	472375.6724	252.4118747	4635.248736	17372474.6	6132.921962	196781.6242	2187811.2	894.9059766	23233.68477	0.036750011
Winter	PM10_PMTW		0.008000002	0.008000002	0.008000002	472375.6724	252.4118747	4635.248736	17372474.6	6132.921962	196781.6242	2187811.2	894.9059766	23233.68477	0.008000002
Winter	PM10_RUNEX	1.0032	0.002483107	0.135751795	0	472375.6724	252.4118747	4635.248736	17372474.6	6132.921962	196781.6242	2187811.2	894.9059766	23233.68477	0.002501809
Winter	PM10_STREX	1.0032	0.002474476	0	0	472375.6724	252.4118747	4635.248736	17372474.6	6132.921962	196781.6242	2187811.2	894.9059766	23233.68477	0.002447483
Winter	PM25_IDLEX	1.0032	0	0	0	472375.6724	252.4118747	4635.248736	17372474.6	6132.921962	196781.6242	2187811.2	894.9059766	23233.68477	0
Winter	PM25_PMBW		0.015750005	0.015750005	0.015750005	472375.6724	252.4118747	4635.248736	17372474.6	6132.921962	196781.6242	2187811.2	894.9059766	23233.68477	0.015750005
Winter	PM25_PMTW		0.002000001	0.002000001	0.002000001	472375.6724	252.4118747	4635.248736	17372474.6	6132.921962	196781.6242	2187811.2	894.9059766	23233.68477	0.002000001
Winter	PM25_RUNEX	1.0032	0.002283205	0.129879233	0	472375.6724	252.4118747	4635.248736	17372474.6	6132.921962	196781.6242	2187811.2	894.9059766	23233.68477	0.002302166
Winter	PM25_STREX	1.0032	0.002275283	0	0	472375.6724	252.4118747	4635.248736	17372474.6	6132.921962	196781.6242	2187811.2	894.9059766	23233.68477	0.002250463
Winter	ROG_DIURN		0.5427213	0	0.016129757	472375.6724	252.4118747	4635.248736	17372474.6	6132.921962	196781.6242	2187811.2	894.9059766	23233.68477	0.115935843
Winter	ROG_HTSK		0.206867288	0	0.004888026	472375.6724	252.4118747	4635.248736	17372474.6	6132.921962	196781.6242	2187811.2	894.9059766	23233.68477	0.204662052
Winter	ROG_IDLEX		0	0	0	472375.6724	252.4118747	4635.248736	17372474.6	6132.921962	196781.6242	2187811.2	894.9059766	23233.68477	0
Winter	ROG_RESTL		0.444884338	0	0.004571725	472375.6724	252.4118747	4635.248736	17372474.6	6132.921962	196781.6242	2187811.2	894.9059766	23233.68477	0.095017835
Winter	ROG_RUNEX		0.029308998	0.182600655	0	472375.6724	252.4118747	4635.248736	17372474.6	6132.921962	196781.6242	2187811.2	894.9059766	23233.68477	0.029034333
Winter	ROG_RUNLS		0.768811037	0	0	472375.6724	252.4118747	4635.248736	17372474.6	6132.921962	196781.6242	2187811.2	894.9059766	23233.68477	0.760424585
Winter	ROG_STREX		0.32927452	0	0	472375.6724	252.4118747	4635.248736	17372474.6	6132.921962	196781.6242	2187811.2	894.9059766	23233.68477	0.325682682
Winter	SO2_IDLEX		0	0	0	472375.6724	252.4118747	4635.248736	17372474.6	6132.921962	196781.6242	2187811.2	894.9059766	23233.68477	0
Winter	SO2_RUNEX		0.003052706	0.004358421	0	472375.6724	252.4118747	4635.248736	17372474.6	6132.921962	196781.6242	2187811.2	894.9059766	23233.68477	0.003018982
Winter	SO2_STREX		0.000615986	0	0	472375.6724	252.4118747	4635.248736	17372474.6	6132.921962	196781.6242	2187811.2	894.9059766	23233.68477	0.000609267
Winter	TOG_DIURN	1.0006	0.543046932	0	0.016129757	472375.6724	252.4118747	4635.248736	17372474.6	6132.921962	196781.6242	2187811.2	894.9059766	23233.68477	0.116005384
Winter	TOG_HTSK	1.0006	0.206991409	0	0.004888026	472375.6724	252.4118747	4635.248736	17372474.6	6132.921962	196781.6242	2187811.2	894.9059766	23233.68477	0.204784819
Winter	TOG_IDLEX	1.0007	0	0	0	472375.6724	252.4118747	4635.248736	17372474.6	6132.921962	196781.6242	2187811.2	894.9059766	23233.68477	0
Winter	TOG_RESTL	1.0006	0.445151268	0	0.004571725	472375.6724	252.4118747	4635.248736	17372474.6	6132.921962	196781.6242	2187811.2	894.9059766	23233.68477	0.09507484
Winter	TOG_RUNEX	1.0007	0.04278624	0.207878706	0	472375.6724	252.4118747	4635.248736	17372474.6	6132.921962	196781.6242	2187811.2	894.9059766	23233.68477	0.042364796
Winter	TOG_RUNLS	1.0006	0.769272323	0	0	472375.6724	252.4118747	4635.248736	17372474.6	6132.921962	196781.6242	2187811.2	894.9059766	23233.68477	0.760880839
Winter	TOG_STREX	1.0007	0.36076576	0	0	472375.6724	252.4118747	4635.248736	17372474.6	6132.921962	196781.6242	2187811.2	894.9059766	23233.68477	0.356830407

## **LDT2 CalEEMod Emission Rate Worksheet**

Season	Pollutant	Adjustment Factor		Emission Rate	S	venicie ciass:	Population			VMT			Trips		CalEEMod Emission
			Gas	DSL	ELEC	LDT2 Gas	LDT2 DSL	LDT2 Elec	LDT2 Gas	LDT2 DSL	LDT2 Elec	LDT2 Gas	LDT2 DSL	LDT2 Elec	Rate
Annual	CH4_IDLEX		0	_		1397479.324				404272.1374					0
Annual Annual	CH4_RUNEX CH4_STREX		0.004501744 0.06352109	0.001045686 0		1397479.324 1397479.324				404272.1374 404272.1374					0.004425947 0.062192666
Annual	CO IDLEX	1.0027	0.00332103	0		1397479.324				404272.1374					0.002132000
Annual	CO_RUNEX	1.0027	0.956492475	0.19307509	0	1397479.324	9765.230182	18283.6283	52162943.36	404272.1374	584568.8418	6567821.268	48008.05802	92279.45183	0.940166324
Annual	CO_STREX		2.608756042	0	0	1397479.324	9765.230182	18283.6283	52162943.36	404272.1374	584568.8418	6567821.268	48008.05802	92279.45183	2.554198804
Annual	CO2_NBIO_IDLEX	1.0126	0	0						404272.1374					0
Annual Annual	CO2_NBIO_RUNEX CO2_NBIO_STREX		336.7696497 67.95221026	284.8409516		1397479.324 1397479.324				404272.1374 404272.1374					332.6708527 66.53111727
Annual	NOX_IDLEX	1.0027	07.93221020	0		1397479.324				404272.1374					00.33111727
Annual	NOX_RUNEX		0.075864289	0.04541514		1397479.324				404272.1374					0.074798329
Annual	NOX_STREX	1.0007	0.259581237	0		1397479.324				404272.1374	584568.8418	6567821.268	48008.05802	92279.45183	0.254152583
Annual	PM10_IDLEX	1.0032	0	0		1397479.324				404272.1374					0
Annual	PM10_PMBW				0.036750011 0.008000002					404272.1374					0.036750011 0.008000002
Annual Annual	PM10_PMTW PM10_RUNEX	1.0032		0.005906612		1397479.324				404272.1374					0.001822813
Annual	PM10_STREX		0.001854015	0	_	1397479.324				404272.1374					0.001815241
Annual	PM25_IDLEX	1.0032	0	0	0	1397479.324	9765.230182	18283.6283	52162943.36	404272.1374	584568.8418	6567821.268	48008.05802	92279.45183	0
Annual	PM25_PMBW				0.015750005					404272.1374					0.015750005
Annual	PM25_PMTW	1 0022			0.002000001					404272.1374					0.002000001
Annual Annual	PM25_RUNEX PM25_STREX		0.001665719	0.005651094		1397479.324 1397479.324				404272.1374 404272.1374					0.001677712 0.001669079
Annual	ROG_DIURN	1.0001	0.333687499	0	0.022407439					404272.1374					0.069577147
Annual	ROG_HTSK		0.118494782	0	0.004888026	1397479.324	9765.230182	18283.6283	52162943.36	404272.1374	584568.8418	6567821.268	48008.05802	92279.45183	0.116083928
Annual	ROG_IDLEX		0	0	•	1397479.324				404272.1374					0
Annual	ROG_RESTL		0.342079661		0.007500233					404272.1374					0.071284829
Annual Annual	ROG_RUNEX ROG_RUNLS		0.018337414 0.398198062	0.022513 0		1397479.324 1397479.324				404272.1374 404272.1374					0.018167496 0.389870496
Annual	ROG_KONES		0.292377306	0	_					404272.1374					0.286262783
Annual	SO2_IDLEX		0		0	1397479.324	9765.230182	18283.6283	52162943.36	404272.1374	584568.8418	6567821.268	48008.05802	92279.45183	0
Annual	SO2_RUNEX			0.002692771						404272.1374					0.003250393
Annual	SO2_STREX	4 0005	0.000664075							404272.1374					0.000650187
Annual Annual	TOG_DIURN TOG_HTSK		0.333887711 0.118565879		0.022407439 0.004888026										0.069618856 0.116153538
Annual	TOG_ITISK	1.0007	0.110303073	0						404272.1374					0.110153550
Annual	TOG_RESTL		0.342284909	0	0.007500233										0.071327587
Annual	TOG_RUNEX	1.0007	0.026771792	0.025629554						404272.1374					0.026468665
Annual	TOG_RUNLS	1.0006	0.39843698	0						404272.1374					0.390104419
Annual Summer	TOG_STREX CH4 IDLEX	1.0007	0.320340124	0						404272.1374 404272.1374					0.313640811 0
	CH4_IDLEX CH4_RUNEX		•	0.001045686						404272.1374					0.004710941
	CH4_STREX		0.057148139							404272.1374					0.055952993
Summer	CO_IDLEX	1.0027	0	0	0	1397479.324	9765.230182	18283.6283	52162943.36	404272.1374	584568.8418	6567821.268	48008.05802	92279.45183	0
	CO_RUNEX									404272.1374					1.026740995
Summer Summer	CO_STREX	1.0027 1.0126	2.22543828	0						404272.1374 404272.1374					2.178897414 0
	CO2_NBIO_IDLEX CO2_NBIO_RUNEX		•	284.8409516						404272.1374					344.1297939
Summer	CO2_NBIO_STREX		67.23183021	0						404272.1374					65.82580262
Summer	NOX_IDLEX	1.0007	0	0	0	1397479.324	9765.230182	18283.6283	52162943.36	404272.1374	584568.8418	6567821.268	48008.05802	92279.45183	0
Summer	NOX_RUNEX			0.042917129						404272.1374					0.065566082
Summer	NOX_STREX		0.240355975							404272.1374					0.235329381
Summer Summer	PM10_IDLEX PM10_PMBW	1.0032	0 036750011	0 0 036750011	0.036750011					404272.1374 404272.1374					0 0.036750011
Summer	PM10 PMTW				0.008000002										0.008000002
Summer	PM10_RUNEX	1.0032	0.001811591	0.005906612	. 0	1397479.324	9765.230182	18283.6283	52162943.36	404272.1374	584568.8418	6567821.268	48008.05802	92279.45183	0.001822813
Summer	PM10_STREX		0.001854015	0						404272.1374					0.001815241
Summer	PM25_IDLEX	1.0032	0	0.04.575.0005						404272.1374					0
Summer Summer	PM25_PMBW PM25_PMTW				0.015750005 0.002000001										0.015750005 0.002000001
Summer	PM25_RUNEX	1.0032		0.005651094						404272.1374					0.001677712
Summer	PM25_STREX	1.0032	0.001704731	0	0	1397479.324	9765.230182	18283.6283	52162943.36	404272.1374	584568.8418	6567821.268	48008.05802	92279.45183	0.001669079
	ROG_DIURN		0.512557559		0.040970996										0.106891184
	ROG_HTSK		0.122252612		0.004888026										0.11976317
_	ROG_IDLEX		0.470062003	_	0.015694905					404272.1374					0 0.097969325
Summer Summer	ROG_RESTL ROG_RUNEX		0.470062003							404272.1374					0.019210884
	ROG_RUNLS		0.369503675							404272.1374					0.361776199
	ROG_STREX		0.260956724							404272.1374					0.255499304
	SO2_IDLEX		0							404272.1374					0
	SO2_RUNEX			0.002692771						404272.1374					0.003362377
	SO2_STREX	1 0000	0.000657035		0.040970996					404272.1374					0.000643294
	TOG_DIURN TOG HTSK		0.512865093 0.122325964		0.040970996										0.106955252 0.119834988
	TOG_ITISK TOG_IDLEX	1.0007	0.122323904	_						404272.1374					0.119834988
	TOG_RESTL		0.47034404		0.015694905										0.098028081
Summer	TOG_RUNEX			0.025629554						404272.1374					0.02799223
	TOG_RUNLS		0.369725377							404272.1374					0.361993264
Summer	TOG_STREX	1.0007	0.285914525	0	0	139/479.324	9/65.230182	18283.6283	52162943.36	404272.1374	584568.8418	656/821.268	48008.05802	922/9.45183	0.279935159

Vehicle Class: LDT2

Winter	CH4_IDLEX		0	0	0	1397479.324	9765.230182	18283.6283	52162943.36	404272.1374	584568.8418	6567821.268	48008.05802	92279.45183	0
Winter	CH4_RUNEX		0.004410305	0.001045686	0	1397479.324	9765.230182	18283.6283	52162943.36	404272.1374	584568.8418	6567821.268	48008.05802	92279.45183	0.004336209
Winter	CH4_STREX		0.06496485	0	0	1397479.324	9765.230182	18283.6283	52162943.36	404272.1374	584568.8418	6567821.268	48008.05802	92279.45183	0.063606232
Winter	CO_IDLEX	1.0027	0	0	0	1397479.324	9765.230182	18283.6283	52162943.36	404272.1374	584568.8418	6567821.268	48008.05802	92279.45183	0
Winter	CO_RUNEX	1.0027	0.924101248	0.19307509	0	1397479.324	9765.230182	18283.6283	52162943.36	404272.1374	584568.8418	6567821.268	48008.05802	92279.45183	0.908377706
Winter	CO_STREX	1.0027	2.698055696	0	0	1397479.324	9765.230182	18283.6283	52162943.36	404272.1374	584568.8418	6567821.268	48008.05802	92279.45183	2.641630923
Winter	CO2_NBIO_IDLEX	1.0126	0	0	0	1397479.324	9765.230182	18283.6283	52162943.36	404272.1374	584568.8418	6567821.268	48008.05802	92279.45183	0
Winter	CO2_NBIO_RUNEX	1.0126	332.4539423	284.8409516	0	1397479.324	9765.230182	18283.6283	52162943.36	404272.1374	584568.8418	6567821.268	48008.05802	92279.45183	328.4354353
Winter	CO2_NBIO_STREX	1.0126	68.11918807	0	0	1397479.324	9765.230182	18283.6283	52162943.36	404272.1374	584568.8418	6567821.268	48008.05802	92279.45183	66.69460305
Winter	NOX_IDLEX	1.0007	0	0	0	1397479.324	9765.230182	18283.6283	52162943.36	404272.1374	584568.8418	6567821.268	48008.05802	92279.45183	0
Winter	NOX_RUNEX	1.0007	0.073623936	0.044553301	0	1397479.324	9765.230182	18283.6283	52162943.36	404272.1374	584568.8418	6567821.268	48008.05802	92279.45183	0.072593101
Winter	NOX_STREX	1.0007	0.263859116	0	0	1397479.324	9765.230182	18283.6283	52162943.36	404272.1374	584568.8418	6567821.268	48008.05802	92279.45183	0.258340997
Winter	PM10_IDLEX	1.0032	0	0	0	1397479.324	9765.230182	18283.6283	52162943.36	404272.1374	584568.8418	6567821.268	48008.05802	92279.45183	0
Winter	PM10_PMBW		0.036750011	0.036750011	0.036750011	1397479.324	9765.230182	18283.6283	52162943.36	404272.1374	584568.8418	6567821.268	48008.05802	92279.45183	0.036750011
Winter	PM10_PMTW		0.008000002	0.008000002	0.008000002	1397479.324	9765.230182	18283.6283	52162943.36	404272.1374	584568.8418	6567821.268	48008.05802	92279.45183	0.008000002
Winter	PM10_RUNEX	1.0032	0.001811591	0.005906612	0	1397479.324	9765.230182	18283.6283	52162943.36	404272.1374	584568.8418	6567821.268	48008.05802	92279.45183	0.001822813
Winter	PM10_STREX	1.0032	0.001854015	0	0	1397479.324	9765.230182	18283.6283	52162943.36	404272.1374	584568.8418	6567821.268	48008.05802	92279.45183	0.001815241
Winter	PM25_IDLEX	1.0032	0	0	0	1397479.324	9765.230182	18283.6283	52162943.36	404272.1374	584568.8418	6567821.268	48008.05802	92279.45183	0
Winter	PM25_PMBW		0.015750005	0.015750005	0.015750005	1397479.324	9765.230182	18283.6283	52162943.36	404272.1374	584568.8418	6567821.268	48008.05802	92279.45183	0.015750005
Winter	PM25_PMTW		0.002000001	0.002000001	0.002000001	1397479.324	9765.230182	18283.6283	52162943.36	404272.1374	584568.8418	6567821.268	48008.05802	92279.45183	0.002000001
Winter	PM25_RUNEX	1.0032	0.001665719	0.005651094	0	1397479.324	9765.230182	18283.6283	52162943.36	404272.1374	584568.8418	6567821.268	48008.05802	92279.45183	0.001677712
Winter	PM25_STREX	1.0032	0.001704731	0	0	1397479.324	9765.230182	18283.6283	52162943.36	404272.1374	584568.8418	6567821.268	48008.05802	92279.45183	0.001669079
Winter	ROG_DIURN		0.318723642	0	0.016129757	1397479.324	9765.230182	18283.6283	52162943.36	404272.1374	584568.8418	6567821.268	48008.05802	92279.45183	0.066442663
Winter	ROG_HTSK		0.127609976	0	0.004888026	1397479.324	9765.230182	18283.6283	52162943.36	404272.1374	584568.8418	6567821.268	48008.05802	92279.45183	0.125008494
Winter	ROG_IDLEX		0	0	0	1397479.324	9765.230182	18283.6283	52162943.36	404272.1374	584568.8418	6567821.268	48008.05802	92279.45183	0
Winter	ROG_RESTL		0.326403427	0	0.004571725	1397479.324	9765.230182	18283.6283	52162943.36	404272.1374	584568.8418	6567821.268	48008.05802	92279.45183	0.068011066
Winter	ROG_RUNEX		0.017983877	0.022513	0	1397479.324	9765.230182	18283.6283	52162943.36	404272.1374	584568.8418	6567821.268	48008.05802	92279.45183	0.017820537
Winter	ROG_RUNLS		0.467121262	0	0	1397479.324	9765.230182	18283.6283	52162943.36	404272.1374	584568.8418	6567821.268	48008.05802	92279.45183	0.457352297
Winter	ROG_STREX		0.299448416	0	0	1397479.324	9765.230182	18283.6283	52162943.36	404272.1374	584568.8418	6567821.268	48008.05802	92279.45183	0.293186015
Winter	SO2_IDLEX		0	0	0	1397479.324	9765.230182	18283.6283	52162943.36	404272.1374	584568.8418	6567821.268	48008.05802	92279.45183	0
Winter	SO2_RUNEX		0.003248964	0.002692771	0	1397479.324	9765.230182	18283.6283	52162943.36	404272.1374	584568.8418	6567821.268	48008.05802	92279.45183	0.003209001
Winter	SO2_STREX		0.000665707	0	0	1397479.324	9765.230182	18283.6283	52162943.36	404272.1374	584568.8418	6567821.268	48008.05802	92279.45183	0.000651785
Winter	TOG_DIURN	1.0006	0.318914876	0	0.016129757	1397479.324	9765.230182	18283.6283	52162943.36	404272.1374	584568.8418	6567821.268	48008.05802	92279.45183	0.066482502
Winter	TOG_HTSK	1.0006	0.127686542	0	0.004888026	1397479.324	9765.230182	18283.6283	52162943.36	404272.1374	584568.8418	6567821.268	48008.05802	92279.45183	0.125083459
Winter	TOG_IDLEX	1.0007	0	0	0	1397479.324	9765.230182	18283.6283	52162943.36	404272.1374	584568.8418	6567821.268	48008.05802	92279.45183	0
Winter	TOG_RESTL	1.0006	0.32659927	0	0.004571725	1397479.324	9765.230182	18283.6283	52162943.36	404272.1374	584568.8418	6567821.268	48008.05802	92279.45183	0.068051865
Winter	TOG_RUNEX	1.0007	0.026255603	0.025629554	0	1397479.324	9765.230182	18283.6283	52162943.36	404272.1374	584568.8418	6567821.268	48008.05802	92279.45183	0.02596208
Winter	TOG_RUNLS	1.0006	0.467401535	0	0	1397479.324	9765.230182	18283.6283	52162943.36	404272.1374	584568.8418	6567821.268	48008.05802	92279.45183	0.457626709
Winter	TOG_STREX	1.0007	0.32808751	0	0	1397479.324	9765.230182	18283.6283	52162943.36	404272.1374	584568.8418	6567821.268	48008.05802	92279.45183	0.321226171

## **MDV CalEEMod Emission Rate Worksheet**

	MDV CaleFixIod F	mission kate wo	rksneet			Vehicle Class:	MDV								
Season	Pollutant	Adjustment Factor		Emission Rates	5	veriicie Ciass.	Population			VMT			Trips		CalEEMod Emission
		•	Gas	DSL	ELEC	MDV Gas	MDV DSL	MDV Elec	MDV Gas	MDV DSL	MDV Elec	MDV Gas	MDV DSL	MDV Elec	Rate
Annual	CH4_IDLEX		0	0	0	931795.9713	21297.50738	10378.926	32264362.15	823486.0536	342100.1259	4326648.043	104465.343	52903.33041	0
Annual	CH4_RUNEX		0.005865248							823486.0536					0.005677421
Annual	CH4_STREX	1 0027	0.076214252	0						823486.0536					0.073539477
Annual Annual	CO_IDLEX CO_RUNEX	1.0027	0 1.121812685	0 0 271127808						823486.0536 823486.0536					0 1.089377714
Annual	CO_STREX		3.027317077	0.271127808						823486.0536					2.921071962
Annual	CO2_NBIO_IDLEX	1.0126	0	0						823486.0536					0
Annual	CO2_NBIO_RUNEX	1.0126	414.122974	367.984445	0	931795.9713	21297.50738	10378.926	32264362.15	823486.0536	342100.1259	4326648.043	104465.343	52903.33041	408.7485727
Annual	CO2_NBIO_STREX		83.78070634	0						823486.0536					80.84038309
Annual	NOX_IDLEX	1.0007	0	0						823486.0536					0
Annual	NOX_RUNEX			0.041106898						823486.0536 823486.0536					0.096848179
Annual Annual	NOX_STREX PM10_IDLEX	1.0007 1.0032	0.32051172	0						823486.0536					0.30926321 0
Annual	PM10_PMBW	1.0032	0.036750011	J						823486.0536					0.036750011
Annual	PM10_PMTW		0.008000002	0.008000002	0.008000002	931795.9713	21297.50738	10378.926	32264362.15	823486.0536	342100.1259	4326648.043	104465.343	52903.33041	0.008000002
Annual	PM10_RUNEX	1.0032	0.001903774	0.004783377	0	931795.9713	21297.50738	10378.926	32264362.15	823486.0536	342100.1259	4326648.043	104465.343	52903.33041	0.001955226
Annual	PM10_STREX		0.002004383	0						823486.0536					0.001934038
Annual	PM25_IDLEX	1.0032	0	0						823486.0536					0
Annual	PM25_PMBW									823486.0536 823486.0536					0.015750005 0.002000001
Annual Annual	PM25_PMTW PM25_RUNEX	1 0032	0.002000001							823486.0536					0.00200001
Annual	PM25_STREX		0.001730073	0.004370431						823486.0536					0.001778509
Annual	ROG_DIURN		0.384063087	0						823486.0536					0.079861656
Annual	ROG_HTSK		0.137671915	0	0.004888026	931795.9713	21297.50738	10378.926	32264362.15	823486.0536	342100.1259	4326648.043	104465.343	52903.33041	0.132897925
Annual	ROG_IDLEX		0	0	0	931795.9713	21297.50738	10378.926	32264362.15	823486.0536	342100.1259	4326648.043	104465.343	52903.33041	0
Annual	ROG_RESTL		0.411132635							823486.0536					0.085452308
Annual	ROG_RUNEX			0.014572836						823486.0536					0.024244195
Annual	ROG_RUNLS ROG_STREX		0.425776977 0.371385302	0						823486.0536 823486.0536					0.410834134 0.358351361
Annual Annual	SO2_IDLEX		0.571363302	0						823486.0536					0.556551501
Annual	SO2_RUNEX		0.004047089	0.003478776						823486.0536					0.003991675
Annual	SO2_STREX		0.000818762	0		931795.9713	21297.50738	10378.926	32264362.15	823486.0536	342100.1259	4326648.043	104465.343	52903.33041	0.000790027
Annual	TOG_DIURN	1.0006	0.384293525	0	0.022407439	931795.9713	21297.50738	10378.926	32264362.15	823486.0536	342100.1259	4326648.043	104465.343	52903.33041	0.079909542
Annual	TOG_HTSK		0.137754519	0						823486.0536					0.132977629
Annual	TOG_IDLEX	1.0007	0	0						823486.0536					0
Annual	TOG_RESTL		0.411379315	0.016590205						823486.0536 823486.0536					0.085503569 0.035207288
Annual Annual	TOG_RUNEX TOG_RUNLS		0.036033738	0.010590205						823486.0536					0.411080635
Annual	TOG_STREX		0.406900582	0						823486.0536					0.392620215
Summer	CH4_IDLEX		0	0						823486.0536					0
Summer	CH4_RUNEX		0.006229093	0.00067688	0	931795.9713	21297.50738	10378.926	32264362.15	823486.0536	342100.1259	4326648.043	104465.343	52903.33041	0.00602858
Summer	CH4_STREX		0.068509455	0						823486.0536					0.066105084
Summer	CO_IDLEX	1.0027	0	0						823486.0536					0
Summer Summer	CO_RUNEX CO_STREX		2.576003385	0.271127808						823486.0536 823486.0536					1.185378171 2.485597336
Summer	CO2_NBIO_IDLEX	1.0126	2.570005385	0						823486.0536					2.483397330
Summer	CO2_NBIO_RUNEX		426.5068271	367.984445						823486.0536					420.7006439
Summer	CO2_NBIO_STREX	1.0126	82.92154119	0	0	931795.9713	21297.50738	10378.926	32264362.15	823486.0536	342100.1259	4326648.043	104465.343	52903.33041	80.01137075
Summer	NOX_IDLEX	1.0007	0	0		931795.9713	21297.50738	10378.926	32264362.15	823486.0536	342100.1259	4326648.043	104465.343	52903.33041	0
Summer	NOX_RUNEX			0.038847163						823486.0536					0.084869768
Summer	NOX_STREX	1.0007	0.29676353	0						823486.0536					0.286348474
Summer Summer	PM10_IDLEX PM10_PMBW	1.0032	0 0.036750011	0 0 036750011						823486.0536 823486.0536					0 0.036750011
Summer	PM10_PMTW									823486.0536					0.008000002
Summer	PM10_RUNEX	1.0032	0.001903774							823486.0536					0.001955226
Summer	PM10_STREX	1.0032	0.002004383	0	0	931795.9713	21297.50738	10378.926	32264362.15	823486.0536	342100.1259	4326648.043	104465.343	52903.33041	0.001934038
Summer	PM25_IDLEX	1.0032	0	0						823486.0536					0
Summer	PM25_PMBW									823486.0536					0.015750005
	PM25_PMTW	1 0022								823486.0536					0.002000001
	PM25_RUNEX PM25_STREX		0.001750679 0.001843197							823486.0536 823486.0536					0.001802372 0.001778509
	ROG_DIURN	1.0032	0.589937871							823486.0536					0.122686199
	ROG_HTSK		0.141586543							823486.0536					0.136675167
Summer	ROG_IDLEX		0	0	0	931795.9713	21297.50738	10378.926	32264362.15	823486.0536	342100.1259	4326648.043	104465.343	52903.33041	0
	ROG_RESTL		0.564891689	0						823486.0536					0.117423
	ROG_RUNEX			0.014572836						823486.0536					0.025534647
	ROG_RUNLS		0.396803046							823486.0536					0.382877056
	ROG_STREX SO2_IDLEX		0.331153978	_						823486.0536 823486.0536					0.319531973 0
	SO2_RUNEX			0.003478776						823486.0536					0.004108478
	SO2_KONEX		0.0004108113	0.003478770						823486.0536					0.004108478
	TOG_DIURN	1.0006	0.590291834	_						823486.0536					0.122759754
	TOG_HTSK	1.0006	0.141671495	0	0.004888026	931795.9713	21297.50738	10378.926	32264362.15	823486.0536	342100.1259	4326648.043	104465.343	52903.33041	0.136757138
	TOG_IDLEX	1.0007	0							823486.0536					0
	TOG_RESTL		0.565230624							823486.0536					0.117493432
	TOG_RUNEX			0.016590205						823486.0536					0.037091934
	TOG_RUNLS TOG_STREX		0.397041128 0.362822409							823486.0536 823486.0536					0.383106783 0.350088986
Juilliel	.OO_JINEA	1.0007	0.302022403	U	U	551755.5715	21237.30736	10370.320	J220 <del>4</del> J02.1J	023700.0330	3-2100.1233	<del></del> 5200+0.043	±0J.J43	52505.55041	0.0000000

Winter	CH4 IDLEX		0	0	0 931795.9	13 21297.50738	10378.926	32264362.15	823486.0536	342100.1259	4326648.043	104465.343 52903.33041	0
Winter	_ CH4_RUNEX		0.005748001	0.00067688								104465.343 52903.33041	0.005564262
Winter	CH4_STREX		0.077959367	0	0 931795.9	13 21297.50738	10378.926	32264362.15	823486.0536	342100.1259	4326648.043	104465.343 52903.33041	0.075223346
Winter	CO_IDLEX	1.0027	0	0	0 931795.9	13 21297.50738	10378.926	32264362.15	823486.0536	342100.1259	4326648.043	104465.343 52903.33041	0
Winter	CO_RUNEX	1.0027	1.084816734	0.271127808	0 931795.9	13 21297.50738	10378.926	32264362.15	823486.0536	342100.1259	4326648.043	104465.343 52903.33041	1.053671684
Winter	CO_STREX	1.0027	3.132507356	0	0 931795.9	13 21297.50738	10378.926	32264362.15	823486.0536	342100.1259	4326648.043	104465.343 52903.33041	3.022570539
Winter	CO2_NBIO_IDLEX	1.0126	0	0	0 931795.9	13 21297.50738	10378.926	32264362.15	823486.0536	342100.1259	4326648.043	104465.343 52903.33041	0
Winter	CO2_NBIO_RUNEX	1.0126	409.5449093	367.984445	0 931795.9	13 21297.50738	10378.926	32264362.15	823486.0536	342100.1259	4326648.043	104465.343 52903.33041	404.3301293
Winter	CO2_NBIO_STREX	1.0126	83.97983496	0	0 931795.9	13 21297.50738	10378.926	32264362.15	823486.0536	342100.1259	4326648.043	104465.343 52903.33041	81.0325232
Winter	NOX_IDLEX	1.0007	0	0	0 931795.9	13 21297.50738	10378.926	32264362.15	823486.0536	342100.1259	4326648.043	104465.343 52903.33041	0
Winter	NOX_RUNEX	1.0007	0.096383457	0.040327302	0 931795.9	13 21297.50738	10378.926	32264362.15	823486.0536	342100.1259	4326648.043	104465.343 52903.33041	0.094016291
Winter	NOX_STREX	1.0007	0.325803807	0	0 931795.9	13 21297.50738	10378.926	32264362.15	823486.0536	342100.1259	4326648.043	104465.343 52903.33041	0.31436957
Winter	PM10_IDLEX	1.0032	0	0	0 931795.9	13 21297.50738	10378.926	32264362.15	823486.0536	342100.1259	4326648.043	104465.343 52903.33041	0
Winter	PM10_PMBW		0.036750011	0.036750011	0.036750011 931795.9	13 21297.50738	10378.926	32264362.15	823486.0536	342100.1259	4326648.043	104465.343 52903.33041	0.036750011
Winter	PM10_PMTW		0.008000002	0.008000002	0.008000002 931795.9	13 21297.50738	10378.926	32264362.15	823486.0536	342100.1259	4326648.043	104465.343 52903.33041	0.008000002
Winter	PM10_RUNEX	1.0032	0.001903774	0.004783377	0 931795.9	13 21297.50738	10378.926	32264362.15	823486.0536	342100.1259	4326648.043	104465.343 52903.33041	0.001955226
Winter	PM10_STREX	1.0032	0.002004383	0	0 931795.9	13 21297.50738	10378.926	32264362.15	823486.0536	342100.1259	4326648.043	104465.343 52903.33041	0.001934038
Winter	PM25_IDLEX	1.0032	0	0	0 931795.9	13 21297.50738	10378.926	32264362.15	823486.0536	342100.1259	4326648.043	104465.343 52903.33041	0
Winter	PM25_PMBW		0.015750005	0.015750005	0.015750005 931795.9	13 21297.50738	10378.926	32264362.15	823486.0536	342100.1259	4326648.043	104465.343 52903.33041	0.015750005
Winter	PM25_PMTW		0.002000001	0.002000001	0.002000001 931795.9	13 21297.50738	10378.926	32264362.15	823486.0536	342100.1259	4326648.043	104465.343 52903.33041	0.002000001
Winter	PM25_RUNEX	1.0032	0.001750679	0.004576451	0 931795.9	13 21297.50738	10378.926	32264362.15	823486.0536	342100.1259	4326648.043	104465.343 52903.33041	0.001802372
Winter	PM25_STREX	1.0032	0.001843197	0	0 931795.9	13 21297.50738	10378.926	32264362.15	823486.0536	342100.1259	4326648.043	104465.343 52903.33041	0.001778509
Winter	ROG_DIURN		0.363549336	0	0.016129757 931795.9	13 21297.50738	10378.926	32264362.15	823486.0536	342100.1259	4326648.043	104465.343 52903.33041	0.075584289
Winter	ROG_HTSK		0.146803872	0	0.004888026 931795.9	13 21297.50738	10378.926	32264362.15	823486.0536	342100.1259	4326648.043	104465.343 52903.33041	0.141709391
Winter	ROG_IDLEX		0	0	0 931795.9	13 21297.50738	10378.926	32264362.15	823486.0536	342100.1259	4326648.043	104465.343 52903.33041	0
Winter	ROG_RESTL		0.392751459	0	0.004571725 931795.9	13 21297.50738	10378.926	32264362.15	823486.0536	342100.1259	4326648.043	104465.343 52903.33041	0.08162585
Winter	ROG_RUNEX		0.024283555	0.014572836	0 931795.9	13 21297.50738	10378.926	32264362.15	823486.0536	342100.1259	4326648.043	104465.343 52903.33041	0.023795847
Winter	ROG_RUNLS		0.495573099	0	0 931795.9	13 21297.50738	10378.926	32264362.15	823486.0536	342100.1259	4326648.043	104465.343 52903.33041	0.478180729
Winter	ROG_STREX		0.380432123	0	0 931795.9	13 21297.50738	10378.926	32264362.15	823486.0536	342100.1259	4326648.043	104465.343 52903.33041	0.367080679
Winter	SO2_IDLEX		0	0	0 931795.9	13 21297.50738	10378.926	32264362.15	823486.0536	342100.1259	4326648.043	104465.343 52903.33041	0
Winter	SO2_RUNEX		0.004002349	0.003478776	0 931795.9	13 21297.50738	10378.926	32264362.15	823486.0536	342100.1259	4326648.043	104465.343 52903.33041	0.003948495
Winter	SO2_STREX		0.000820708	0	0 931795.9	13 21297.50738	10378.926	32264362.15	823486.0536	342100.1259	4326648.043	104465.343 52903.33041	0.000791905
Winter	TOG_DIURN	1.0006	0.363767466	0	0.016129757 931795.9	13 21297.50738	10378.926	32264362.15	823486.0536	342100.1259	4326648.043	104465.343 52903.33041	0.075629617
Winter	TOG_HTSK	1.0006	0.146891955	0	0.004888026 931795.9	13 21297.50738	10378.926	32264362.15	823486.0536	342100.1259	4326648.043	104465.343 52903.33041	0.141794382
Winter	TOG_IDLEX	1.0007	0	0	0 931795.9	13 21297.50738	10378.926	32264362.15	823486.0536	342100.1259	4326648.043	104465.343 52903.33041	0
Winter	TOG_RESTL	1.0006	0.39298711	0	0.004571725 931795.9	13 21297.50738	10378.926	32264362.15	823486.0536	342100.1259	4326648.043	104465.343 52903.33041	0.081674819
Winter	TOG_RUNEX	1.0007	0.035378204	0.016590205	0 931795.9	13 21297.50738	10378.926	32264362.15	823486.0536	342100.1259	4326648.043	104465.343 52903.33041	0.034553359
Winter	TOG_RUNLS	1.0006	0.495870443	0	0 931795.9	13 21297.50738	10378.926	32264362.15	823486.0536	342100.1259	4326648.043	104465.343 52903.33041	0.478467637
Winter	TOG_STREX	1.0007	0.41681246	0	0 931795.9	13 21297.50738	10378.926	32264362.15	823486.0536	342100.1259	4326648.043	104465.343 52903.33041	0.402184229

## LDH1 CalEEMod Emission Rate Worksheet

	LDH1 CalEEMod	emission Rate	e worksneet		Vehicle Class:	LHDT1								
Season	Pollutant		mission Rates	51.50		Population			VMT			Trips		_CalEEMod Emission
Annual	CH4_IDLEX	Gas	DSL 0.005098128	ELEC	LHDT1 Gas 105195.9307	LHDT1 DSL 68776.35703	LHDT1 Elec 0	LHDT1 Gas	LHDT1 DSL 2893383.107	LHDT1 Elec 0	LHDT1 Gas	LHDT1 DSL 865120.0508	LHDT1 Elec 0	Rate 0.005364617
Annual	CH4_RUNEX	0.006618374	0.003038128		105195.9307		0		2893383.107	0		865120.0508	0	0.003304017
Annual	CH4_STREX	0.022803198	0		105195.9307		0		2893383.107	0		865120.0508	0	0.014692836
Annual	CO_IDLEX	3.75321727	0.909745076	0	105195.9307	68776.35703	0	3800052.408	2893383.107	0	1567262.626	865120.0508	0	0.188042836
Annual	CO_RUNEX		0.306036904				0		2893383.107	0	1567262.626	865120.0508	0	0.566867528
Annual	CO_STREX	1.678840506	0		105195.9307		0		2893383.107	0		865120.0508	0	1.081731096
Annual	CO2_NBIO_IDLEX		128.6640929		105195.9307		0		2893383.107	0		865120.0508	0	8.813152735
Annual	CO2_NBIO_RUNEX	801.786998 18.71206408	457.5379283		105195.9307 105195.9307		0 0		2893383.107 2893383.107	0 0		865120.0508 865120.0508	0 0	652.977849 12.05678652
Annual Annual	CO2_NBIO_STREX NOX_IDLEX		0 1.762594854		105195.9307		0		2893383.107	0		865120.0508	0	0.051436691
Annual	NOX_RUNEX		1.034558424				0		2893383.107	0		865120.0508	0	0.550827243
Annual	NOX_STREX	0.489164337	0		105195.9307		0		2893383.107	0		865120.0508	0	0.315184363
Annual	PM10_IDLEX	0	0.027712802	0	105195.9307	68776.35703	0	3800052.408	2893383.107	0	1567262.626	865120.0508	0	0.000783588
Annual	PM10_PMBW		0.076440022	0	105195.9307		0	3800052.408	2893383.107	0	1567262.626	865120.0508	0	0.076440022
Annual	PM10_PMTW		0.012000003		105195.9307	68776.35703	0		2893383.107	0		865120.0508	0	0.00972909
Annual	PM10_RUNEX		0.012086234		105195.9307		0		2893383.107	0		865120.0508	0	0.005988423
Annual Annual	PM10_STREX PM25_IDLEX	0.000416222	0 0.026513959		105195.9307 105195.9307		0 0		2893383.107 2893383.107	0 0		865120.0508 865120.0508	0 0	0.000268185 0.00074969
Annual	PM25_PMBW		0.020313939				0		2893383.107	0		865120.0508	0	0.032760009
Annual	PM25_PMTW		0.003000001				0		2893383.107	0		865120.0508	0	0.002432272
Annual	PM25_RUNEX		0.011563389		105195.9307	68776.35703	0		2893383.107	0		865120.0508	0	0.005700891
Annual	PM25_STREX	0.000382701	0	0	105195.9307	68776.35703	0	3800052.408	2893383.107	0	1567262.626	865120.0508	0	0.000246587
Annual	ROG_DIURN	0.054376276	0		105195.9307		0		2893383.107	0		865120.0508	0	0.002351671
Annual	ROG_HTSK	0.116186196					0		2893383.107	0		865120.0508	0	0.074862514
Annual	ROG_IDLEX		0.109759705		105195.9307		0		2893383.107	0		865120.0508	0	0.021418151
Annual Annual	ROG_RESTL ROG_RUNEX	0.033644376	0 0.061441713		105195.9307 105195.9307	68776.35703	0 0		2893383.107 2893383.107	0 0		865120.0508 865120.0508	0 0	0.001455055 0.044595068
Annual	ROG_RUNLS	0.798777024	0.001441713		105195.9307		0		2893383.107	0		865120.0508	0	0.514677805
Annual	ROG_STREX	0.112137957	0		105195.9307		0		2893383.107	0		865120.0508	0	0.072254103
Annual	SO2_IDLEX		0.001216338		105195.9307		0		2893383.107	0		865120.0508	0	8.56045E-05
Annual	SO2_RUNEX	0.007934332	0.004325379	0	105195.9307	68776.35703	0	3800052.408	2893383.107	0	1567262.626	865120.0508	0	0.006374284
Annual	SO2_STREX	0.000185171	0				0		2893383.107	0		865120.0508	0	0.000119312
Annual	TOG_DIURN	0.054376276			105195.9307		0		2893383.107	0		865120.0508	0	0.002351671
Annual	TOG_HTSK	0.116186196			105195.9307 105195.9307		0		2893383.107	0		865120.0508 865120.0508	0	0.074862514
Annual Annual	TOG_IDLEX TOG_RESTL	0.017939337	0.124954127 0		105195.9307		0 0		2893383.107 2893383.107	0 0		865120.0508	0 0	0.030257827 0.001455055
Annual	TOG_RUNEX		0.069947305		105195.9307		0		2893383.107	0		865120.0508	0	0.056553678
Annual	TOG_RUNLS	0.798777024	0		105195.9307		0		2893383.107	0		865120.0508	0	0.514677805
Annual	TOG_STREX	0.122776947	0	0	105195.9307	68776.35703	0	3800052.408	2893383.107	0	1567262.626	865120.0508	0	0.079109148
Summer	CH4_IDLEX	0.120974544	0.005098128	0	105195.9307	68776.35703	0	3800052.408	2893383.107	0	1567262.626	865120.0508	0	0.00537607
Summer	CH4_RUNEX	0.006788753	0.00285385		105195.9307		0		2893383.107	0		865120.0508	0	0.005087805
Summer	CH4_STREX	0.022027677	0		105195.9307		0		2893383.107	0		865120.0508	0	0.014193143
Summer	CO_IDLEX		0.909745076 0.306036904				0 0		2893383.107 2893383.107	0		865120.0508	0 0	0.188042836
Summer Summer	CO_RUNEX CO_STREX	1.605095651	0.300030904		105195.9307 105195.9307		0		2893383.107	0		865120.0508 865120.0508	0	0.576934866 1.034214907
Summer	CO2_NBIO_IDLEX		128.6640929		105195.9307		0		2893383.107	0		865120.0508	0	8.813152735
Summer	CO2_NBIO_RUNEX		457.5379283		105195.9307		0		2893383.107	0		865120.0508	0	652.9960042
Summer	CO2_NBIO_STREX	18.58142952	0	0	105195.9307	68776.35703	0	3800052.408	2893383.107	0	1567262.626	865120.0508	0	11.97261447
Summer	NOX_IDLEX	0.036967818	1.762594854	0	105195.9307	68776.35703	0	3800052.408	2893383.107	0	1567262.626	865120.0508	0	0.051436691
Summer	NOX_RUNEX		0.982262564		105195.9307		0		2893383.107	0		865120.0508	0	0.516317584
Summer	NOX_STREX	0.468678155			105195.9307		0		2893383.107	0		865120.0508	0	0.301984455
Summer	PM10_IDLEX		0.027712802 0.076440022		105195.9307		0 0		2893383.107	0 0		865120.0508 865120.0508	0 0	0.000783588
Summer Summer	PM10_PMBW PM10_PMTW		0.012000003		105195.9307 105195.9307		0		2893383.107 2893383.107	0		865120.0508	0	0.076440022 0.00972909
Summer	PM10_RUNEX		0.012086234		105195.9307		0		2893383.107	0		865120.0508	0	0.005988423
Summer	PM10_STREX	0.000416222	0		105195.9307		0		2893383.107	0		865120.0508	0	0.000268185
Summer	PM25_IDLEX	0	0.026513959	0	105195.9307	68776.35703	0	3800052.408	2893383.107	0	1567262.626	865120.0508	0	0.00074969
Summer	PM25_PMBW		0.032760009		105195.9307		0		2893383.107	0		865120.0508	0	0.032760009
Summer	PM25_PMTW		0.003000001		105195.9307		0		2893383.107	0		865120.0508	0	0.002432272
Summer	PM25_RUNEX		0.011563389		105195.9307		0		2893383.107	0		865120.0508	0	0.005700891
Summer Summer	PM25_STREX ROG_DIURN	0.000382701 0.079938353	0		105195.9307 105195.9307		0 0		2893383.107 2893383.107	0 0		865120.0508 865120.0508	0 0	0.000246587 0.003457182
Summer	ROG_HTSK	0.118917049			105195.9307		0		2893383.107	0		865120.0508	0	0.076622091
Summer	ROG_IDLEX		0.109759705		105195.9307		0		2893383.107	0		865120.0508	0	0.021418151
Summer	ROG_RESTL	0.046341678	0				0		2893383.107	0		865120.0508	0	0.00200419
Summer	ROG_RUNEX	0.032665603	0.061441713	0	105195.9307	68776.35703	0	3800052.408	2893383.107	0	1567262.626	865120.0508	0	0.045104702
Summer	ROG_RUNLS	0.772995825	0		105195.9307		0		2893383.107	0		865120.0508	0	0.498066146
Summer	ROG_STREX	0.10804348			105195.9307		0		2893383.107	0		865120.0508	0	0.069615899
Summer	SO2_IDLEX		0.001216338		105195.9307		0		2893383.107	0		865120.0508	0	8.56045E-05
Summer	SO2_RUNEX	0.007934649 0.000183878	0.004325379		105195.9307 105195.9307		0 0		2893383.107 2893383.107	0 0		865120.0508 865120.0508	0 0	0.006374463 0.000118479
Summer Summer	SO2_STREX TOG_DIURN	0.000183878	0		105195.9307		0		2893383.107	0		865120.0508	0	0.000118479
Summer	TOG_DIOKN TOG_HTSK	0.118917049	0		105195.9307		0		2893383.107	0		865120.0508	0	0.076622091
Summer	TOG_IDLEX		0.124954127		105195.9307		0		2893383.107	0		865120.0508	0	0.030257827
Summer	TOG_RESTL	0.046341678	0		105195.9307		0		2893383.107	0		865120.0508	0	0.00200419
Summer	TOG_RUNEX		0.069947305		105195.9307		0		2893383.107	0		865120.0508	0	0.057297335
Summer	TOG_RUNLS	0.772995825	0		105195.9307		0		2893383.107	0		865120.0508	0	0.498066146
Summer	TOG_STREX	0.118294011	0	0	105195.9307	68//6.35703	0	3800052.408	2893383.107	0	156/262.626	865120.0508	0	0.076220647

Winter	CH4_IDLEX	0.120656141	0.005098128	0 105195.9307	68776.35703	0	3800052.408	2893383.107	0	1567262.626	865120.0508	0	0.0053623
Winter	CH4_RUNEX	0.006572003	0.00285385	0 105195.9307	68776.35703	0	3800052.408	2893383.107	0	1567262.626	865120.0508	0	0.00496475
Winter	CH4_STREX	0.022971558	0	0 105195.9307	68776.35703	0	3800052.408	2893383.107	0	1567262.626	865120.0508	0	0.014801316
Winter	CO_IDLEX	3.75321727	0.909745076	0 105195.9307	68776.35703	0	3800052.408	2893383.107	0	1567262.626	865120.0508	0	0.188042836
Winter	CO_RUNEX	0.760699264	0.306036904	0 105195.9307	68776.35703	0	3800052.408	2893383.107	0	1567262.626	865120.0508	0	0.564161568
Winter	CO_STREX	1.692215846	0	0 105195.9307	68776.35703	0	3800052.408	2893383.107	0	1567262.626	865120.0508	0	1.090349259
Winter	CO2_NBIO_IDLEX	119.6615911	128.6640929	0 105195.9307	68776.35703	0	3800052.408	2893383.107	0	1567262.626	865120.0508	0	8.813152735
Winter	CO2_NBIO_RUNEX	801.7783782	457.5379283	0 105195.9307	68776.35703	0	3800052.408	2893383.107	0	1567262.626	865120.0508	0	652.9729553
Winter	CO2_NBIO_STREX	18.7362328	0	0 105195.9307	68776.35703	0	3800052.408	2893383.107	0	1567262.626	865120.0508	0	12.07235921
Winter	NOX_IDLEX	0.036967818	1.762594854	0 105195.9307	68776.35703	0	3800052.408	2893383.107	0	1567262.626	865120.0508	0	0.051436691
Winter	NOX_RUNEX	0.17846135	1.016610182	0 105195.9307	68776.35703	0	3800052.408	2893383.107	0	1567262.626	865120.0508	0	0.540769415
Winter	NOX_STREX	0.49381406	0	0 105195.9307	68776.35703	0	3800052.408	2893383.107	0	1567262.626	865120.0508	0	0.318180329
Winter	PM10_IDLEX	0	0.027712802	0 105195.9307	68776.35703	0	3800052.408	2893383.107	0	1567262.626	865120.0508	0	0.000783588
Winter	PM10_PMBW	0.076440022	0.076440022	0 105195.9307	68776.35703	0	3800052.408	2893383.107	0	1567262.626	865120.0508	0	0.076440022
Winter	PM10_PMTW	0.008000002	0.012000003	0 105195.9307	68776.35703	0	3800052.408	2893383.107	0	1567262.626	865120.0508	0	0.00972909
Winter	PM10_RUNEX	0.001345512	0.012086234	0 105195.9307	68776.35703	0	3800052.408	2893383.107	0	1567262.626	865120.0508	0	0.005988423
Winter	PM10_STREX	0.000416222	0	0 105195.9307	68776.35703	0	3800052.408	2893383.107	0	1567262.626	865120.0508	0	0.000268185
Winter	PM25_IDLEX	0	0.026513959	0 105195.9307	68776.35703	0	3800052.408	2893383.107	0	1567262.626	865120.0508	0	0.00074969
Winter	PM25_PMBW	0.032760009	0.032760009	0 105195.9307	68776.35703	0	3800052.408	2893383.107	0	1567262.626	865120.0508	0	0.032760009
Winter	PM25_PMTW	0.002000001	0.003000001	0 105195.9307	68776.35703	0	3800052.408	2893383.107	0	1567262.626	865120.0508	0	0.002432272
Winter	PM25_RUNEX	0.001237149	0.011563389	0 105195.9307	68776.35703	0	3800052.408	2893383.107	0	1567262.626	865120.0508	0	0.005700891
Winter	PM25_STREX	0.000382701	0	0 105195.9307	68776.35703	0	3800052.408	2893383.107	0	1567262.626	865120.0508	0	0.000246587
Winter	ROG_DIURN	0.056959007	0	0 105195.9307	68776.35703	0	3800052.408	2893383.107	0	1567262.626	865120.0508	0	0.002463369
Winter	ROG_HTSK	0.132695671	0	0 105195.9307	68776.35703	0	3800052.408	2893383.107	0	1567262.626	865120.0508	0	0.085500101
Winter	ROG_IDLEX	0.423478982	0.109759705	0 105195.9307	68776.35703	0	3800052.408	2893383.107	0	1567262.626	865120.0508	0	0.021418151
Winter	ROG_RESTL	0.033138548	0	0 105195.9307	68776.35703	0	3800052.408	2893383.107	0	1567262.626	865120.0508	0	0.001433179
Winter	ROG_RUNEX	0.031520997	0.061441713	0 105195.9307	68776.35703	0	3800052.408	2893383.107	0	1567262.626	865120.0508	0	0.044454877
Winter	ROG_RUNLS	0.865304138	0	0 105195.9307	68776.35703	0	3800052.408	2893383.107	0	1567262.626	865120.0508	0	0.557543371
Winter	ROG_STREX	0.113022133	0	0 105195.9307	68776.35703	0	3800052.408	2893383.107	0	1567262.626	865120.0508	0	0.072823807
Winter	SO2_IDLEX	0.001184148	0.001216338	0 105195.9307	68776.35703	0	3800052.408	2893383.107	0	1567262.626	865120.0508	0	8.56045E-05
Winter	SO2_RUNEX	0.007934247	0.004325379	0 105195.9307	68776.35703	0	3800052.408	2893383.107	0	1567262.626	865120.0508	0	0.006374235
Winter	SO2_STREX	0.00018541	0	0 105195.9307	68776.35703	0	3800052.408	2893383.107	0	1567262.626	865120.0508	0	0.000119466
Winter	TOG_DIURN	0.056959007	0	0 105195.9307	68776.35703	0	3800052.408	2893383.107	0	1567262.626	865120.0508	0	0.002463369
Winter	TOG_HTSK	0.132695671	0	0 105195.9307	68776.35703	0	3800052.408	2893383.107	0	1567262.626	865120.0508	0	0.085500101
Winter	TOG_IDLEX	0.617939537	0.124954127	0 105195.9307	68776.35703	0	3800052.408	2893383.107	0	1567262.626	865120.0508	0	0.030257827
Winter	TOG_RESTL	0.033138548	0	0 105195.9307	68776.35703	0	3800052.408	2893383.107	0	1567262.626	865120.0508	0	0.001433179
Winter	TOG_RUNEX	0.045995365	0.069947305	0 105195.9307	68776.35703	0	3800052.408	2893383.107	0	1567262.626	865120.0508	0	0.056349112
Winter	TOG_RUNLS	0.865304138	0	0 105195.9307	68776.35703	0	3800052.408	2893383.107	0	1567262.626	865120.0508	0	0.557543371
Winter	TOG_STREX	0.12374501	0	0 105195.9307	68776.35703	0	3800052.408	2893383.107	0	1567262.626	865120.0508	0	0.079732902
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#### **LDH2 CalEEMod Emission Rate Worksheet**

	LDH2 CalEEMod E	:mission Rate	e worksneet		Vehicle Class:	LHDT2								
Season	Pollutant	En	nission Rates		veriicie Ciass.	Population			VMT			Trips		CalEEMod Emission
		Gas	DSL	ELEC	LHDT2 Gas	LHDT2 DSL	LHDT2 Elec	LHDT2 Gas	LHDT2 DSL	LHDT2 Elec	LHDT2 Gas	LHDT2 DSL	LHDT2 Elec	•
Annual	CH4_IDLEX	0.120896403	0.005098128	C	17937.98852	27873.77545	0	625878.5235	1126544.027	0	267249.3013	350617.0299	0	0.003739874
Annual	CH4_RUNEX	0.004812831	0.002826859		17937.98852		0		1126544.027		267249.3013		0	0.00353615
Annual	CH4_STREX	0.023445732	0		17937.98852		0		1126544.027		267249.3013		0	0.010141118
Annual Annual	CO_IDLEX CO_RUNEX	0.536424065	0.909745076		) 17937.98852 ) 17937.98852		0 0		1126544.027 1126544.027	0 0	267249.3013 267249.3013		0 0	0.15020591 0.385681423
Annual	CO_STREX	1.662436441	0.301932737		17937.98852		0		1126544.027	0	267249.3013		0	0.719063258
Annual	CO2_NBIO_IDLEX	138.1885718	_		17937.98852		0		1126544.027	0	267249.3013		0	13.35562063
Annual	CO2_NBIO_RUNEX		506.2676696		17937.98852		0	625878.5235	1126544.027	0	267249.3013	350617.0299	0	654.0656006
Annual	CO2_NBIO_STREX	21.30523694	0	C	17937.98852	27873.77545	0	625878.5235	1126544.027	0	267249.3013	350617.0299	0	9.215277478
Annual	NOX_IDLEX	0.037086134			17937.98852		0		1126544.027	0	267249.3013		0	0.081516643
Annual	NOX_RUNEX	0.183237226	_		17937.98852		0		1126544.027	0	267249.3013		0	0.70693649
Annual Annual	NOX_STREX	0.504558978	0 0.02828127		) 17937.98852 ) 17937.98852		0 0		1126544.027 1126544.027	0 0	267249.3013 267249.3013		0 0	0.218239816 0.001275852
Annual	PM10_IDLEX PM10_PMBW	0.089180026			17937.98852		0		1126544.027	0	267249.3013		0	0.089180026
Annual	PM10_PMTW	0.008000002			17937.98852		0		1126544.027	0	267249.3013		0	0.010571401
Annual	PM10_RUNEX	0.001221239	0.014296479	C	17937.98852	27873.77545	0	625878.5235	1126544.027	0	267249.3013	350617.0299	0	0.009626651
Annual	PM10_STREX	0.000351465	0		17937.98852		0		1126544.027	0	267249.3013	350617.0299	0	0.000152021
Annual	PM25_IDLEX		0.027057835		17937.98852		0		1126544.027		267249.3013		0	0.001220659
Annual	PM25_PMBW	0.038220011			17937.98852		0		1126544.027	0	267249.3013		0	0.038220011
Annual Annual	PM25_PMTW PM25_RUNEX	0.002000001 0.001122884			) 17937.98852 ) 17937.98852		0 0		1126544.027 1126544.027	0 0	267249.3013 267249.3013		0 0	0.00264285 0.009193948
Annual	PM25_STREX	0.001122884	0.01307802		17937.98852		0		1126544.027	0	267249.3013		0	0.000139778
Annual	ROG_DIURN	0.049331279	0		17937.98852		0		1126544.027	•	267249.3013		0	0.001432193
Annual	ROG_HTSK	0.115058042	0	C	17937.98852	27873.77545	0	625878.5235	1126544.027	0	267249.3013	350617.0299	0	0.049766721
Annual	ROG_IDLEX	0.425146925	0.109759705		17937.98852		0	625878.5235	1126544.027		267249.3013		0	0.017294514
Annual	ROG_RESTL	0.031270976	0		17937.98852		0		1126544.027		267249.3013		0	0.000907864
Annual	ROG_RUNEX		0.060860602		17937.98852		0		1126544.027		267249.3013		0	0.046695017
Annual Annual	ROG_RUNLS ROG_STREX	0.728510759 0.115077935	0		) 17937.98852 ) 17937.98852		0 0		1126544.027 1126544.027	0	267249.3013 267249.3013	350617.0299 350617.0299	0 0	0.315106976 0.049775325
Annual	SO2_IDLEX	0.001367488	_		17937.98852		0		1126544.027	0	267249.3013		0	0.000128033
Annual	SO2_RUNEX	0.009105067			17937.98852		0		1126544.027	•	267249.3013		0	0.006328589
Annual	SO2_STREX	0.000210833	0	C	17937.98852	27873.77545	0	625878.5235	1126544.027	0	267249.3013	350617.0299	0	9.11926E-05
Annual	TOG_DIURN	0.049331279	0	C	17937.98852	27873.77545	0	625878.5235	1126544.027	0	267249.3013	350617.0299	0	0.001432193
Annual	TOG_HTSK	0.115058042	0		17937.98852		0		1126544.027	0	267249.3013		0	0.049766721
Annual	TOG_IDLEX	0.620373395			17937.98852		0		1126544.027	0	267249.3013		0	0.023647824
Annual Annual	TOG_RESTL TOG_RUNEX	0.031270976 0.030931794	0 0 069285749		17937.98852 17937.98852		0 0		1126544.027 1126544.027	0 0	267249.3013 267249.3013		0 0	0.000907864 0.055587616
Annual	TOG_RUNLS	0.030931794	0.009283749		17937.98852		0		1126544.027	0	267249.3013		0	0.315106976
Annual	TOG_STREX	0.125995853	0		17937.98852		0		1126544.027	0	267249.3013		0	0.054497716
Summer	CH4_IDLEX	0.121174187	0.005098128	C	17937.98852	27873.77545	0	625878.5235	1126544.027	0	267249.3013	350617.0299	0	0.003747939
Summer	CH4_RUNEX	0.004919741	0.002826859	C	17937.98852	27873.77545	0	625878.5235	1126544.027	0	267249.3013	350617.0299	0	0.003574332
Summer	CH4_STREX	0.022650447	0		17937.98852		0		1126544.027	0	267249.3013		0	0.009797129
Summer	CO_IDLEX		0.909745076		17937.98852		0		1126544.027	0	267249.3013		0	0.15020591
Summer Summer	CO_RUNEX CO_STREX	0.547418574 1.589570276	0.301932737		) 17937.98852 ) 17937.98852		0 0		1126544.027 1126544.027	0 0	267249.3013 267249.3013		0	0.389608117 0.687546034
Summer	CO2_NBIO_IDLEX	138.1885718			17937.98852		0		1126544.027	-	267249.3013		0	13.35562063
Summer	CO2_NBIO_RUNEX		506.2676696		17937.98852		0		1126544.027	0	267249.3013		0	654.0725529
Summer	CO2_NBIO_STREX	21.17563561	0	C	17937.98852	27873.77545	0	625878.5235	1126544.027	0	267249.3013	350617.0299	0	9.159220262
Summer	NOX_IDLEX	0.037086134	1.783078815	C	17937.98852	27873.77545	0	625878.5235	1126544.027	0	267249.3013	350617.0299	0	0.081516643
Summer	NOX_RUNEX	0.161271624	_		17937.98852		0		1126544.027	0	267249.3013		0	0.66666221
Summer	NOX_STREX	0.483429377	0		17937.98852		0		1126544.027		267249.3013		0	0.209100507
Summer Summer	PM10_IDLEX PM10_PMBW	0 0 080180026	0.02828127 0.089180026		) 17937.98852 ) 17937.98852		0 0		1126544.027 1126544.027	0 0	267249.3013 267249.3013		0 0	0.001275852 0.089180026
Summer	PM10_PMTW		0.012000003		17937.98852		0		1126544.027	0	267249.3013		0	0.010571401
Summer	PM10_RUNEX	0.001221239			17937.98852		0		1126544.027	0	267249.3013		0	0.009626651
Summer	PM10_STREX	0.000351465	0	C	17937.98852	27873.77545	0	625878.5235	1126544.027	0	267249.3013	350617.0299	0	0.000152021
Summer	PM25_IDLEX		0.027057835		17937.98852		0		1126544.027	0	267249.3013		0	0.001220659
Summer	PM25_PMBW	0.038220011			17937.98852		0		1126544.027		267249.3013		0	0.038220011
	PM25_PMTW	0.002000001	0.003000001		17937.98852		0		1126544.027 1126544.027	-	267249.3013		0	0.00264285
Summer	PM25_RUNEX PM25_STREX	0.001122884	0.01367802		17937.98852 17937.98852		0		1126544.027		267249.3013 267249.3013		0 0	0.009193948 0.000139778
Summer	ROG_DIURN	0.072604647	0		17937.98852		0		1126544.027		267249.3013		0	0.002107869
Summer	ROG_HTSK	0.118581524	0		17937.98852		0		1126544.027		267249.3013		0	0.051290753
Summer	ROG_IDLEX	0.425146925	0.109759705	C	17937.98852	27873.77545	0	625878.5235	1126544.027	0	267249.3013	350617.0299	0	0.017294514
Summer	ROG_RESTL	0.043163234	0	C	17937.98852	27873.77545	0		1126544.027	0	267249.3013	350617.0299	0	0.001253122
Summer	ROG_RUNEX	0.021670662	0.060860602		17937.98852		0		1126544.027	0	267249.3013		0	0.046863897
Summer	ROG_RUNLS	0.703343917	0		17937.98852		0		1126544.027	0	267249.3013		0	0.304221417
Summer Summer	ROG_STREX	0.110876332 0.001367488	0 0 001052011		) 17937.98852 ) 17937.98852		0 0		1126544.027 1126544.027		267249.3013 267249.3013		0 0	0.047957982 0.000128033
	SO2_IDLEX SO2_RUNEX	0.001367488			17937.98852		0		1126544.027		267249.3013		0	0.006328658
	SO2_KONEX	0.000103233	0.00478003		17937.98852		0		1126544.027	0	267249.3013		0	9.06379E-05
	TOG_DIURN	0.072604647	0		17937.98852		0		1126544.027	0	267249.3013		0	0.002107869
Summer	TOG_HTSK	0.118581524	0	C	17937.98852	27873.77545	0		1126544.027	0	267249.3013	350617.0299	0	0.051290753
	TOG_IDLEX		0.124954127		17937.98852		0		1126544.027		267249.3013		0	0.023647824
	TOG_RESTL	0.043163234	0		17937.98852		0		1126544.027	_	267249.3013		0	0.001253122
Summer	TOG_RUNEX		0.069285749		17937.98852		0		1126544.027	0	267249.3013		0	0.055834045
	TOG_RUNLS TOG_STREX	0.703343917 0.121395627	0		) 17937.98852 ) 17937.98852		0 0		1126544.027 1126544.027	0	267249.3013 267249.3013		0 0	0.304221417 0.052507953
Janninel	.00_01NEA	J.121000021	J		, 557,56652	5. 5.7 7 5 7 5	Ü	1_30,0.3233		J		220017.0233	J	5.55250,555

Winter	CH4_IDLEX	0.120839698	0.005098128	0	17937.98852	27873.77545	0	625878.5235	1126544.027	0	267249.3013	350617.0299	0	0.003738228
Winter	CH4_RUNEX	0.004784004	0.002826859	0	17937.98852	27873.77545	0	625878.5235	1126544.027	0	267249.3013	350617.0299	0	0.003525854
Winter	CH4_STREX	0.023618308	0	0	17937.98852	27873.77545	0	625878.5235	1126544.027	0	267249.3013	350617.0299	0	0.010215764
Winter	CO_IDLEX	3.760128638	0.909745076	0	17937.98852	27873.77545	0	625878.5235	1126544.027	0	267249.3013	350617.0299	0	0.15020591
Winter	CO_RUNEX	0.533453832	0.301932737	0	17937.98852	27873.77545	0	625878.5235	1126544.027	0	267249.3013	350617.0299	0	0.384620603
Winter	CO_STREX	1.675801189	0	0	17937.98852	27873.77545	0	625878.5235	1126544.027	0	267249.3013	350617.0299	0	0.72484399
Winter	CO2_NBIO_IDLEX	138.1885718	207.1180963	0	17937.98852	27873.77545	0	625878.5235	1126544.027	0	267249.3013	350617.0299	0	13.35562063
Winter	CO2_NBIO_RUNEX	920.087796	506.2676696	0	17937.98852	27873.77545	0	625878.5235	1126544.027	0	267249.3013	350617.0299	0	654.063719
Winter	CO2_NBIO_STREX	21.3294667	0	0	17937.98852	27873.77545	0	625878.5235	1126544.027	0	267249.3013	350617.0299	0	9.225757714
Winter	NOX_IDLEX	0.037086134	1.783078815	0	17937.98852	27873.77545	0	625878.5235	1126544.027	0	267249.3013	350617.0299	0	0.081516643
Winter	NOX_RUNEX	0.178715726	0.980578318	0	17937.98852	27873.77545	0	625878.5235	1126544.027	0	267249.3013	350617.0299	0	0.694192723
Winter	NOX_STREX	0.50935405	0	0	17937.98852	27873.77545	0	625878.5235	1126544.027	0	267249.3013	350617.0299	0	0.220313856
Winter	PM10_IDLEX	0	0.02828127	0	17937.98852	27873.77545	0	625878.5235	1126544.027	0	267249.3013	350617.0299	0	0.001275852
Winter	PM10_PMBW	0.089180026	0.089180026	0	17937.98852	27873.77545	0	625878.5235	1126544.027	0	267249.3013	350617.0299	0	0.089180026
Winter	PM10_PMTW	0.008000002	0.012000003	0	17937.98852	27873.77545	0	625878.5235	1126544.027	0	267249.3013	350617.0299	0	0.010571401
Winter	PM10_RUNEX	0.001221239	0.014296479	0	17937.98852	27873.77545	0	625878.5235	1126544.027	0	267249.3013	350617.0299	0	0.009626651
Winter	PM10_STREX	0.000351465	0	0	17937.98852	27873.77545	0	625878.5235	1126544.027	0	267249.3013	350617.0299	0	0.000152021
Winter	PM25_IDLEX	0	0.027057835	0	17937.98852	27873.77545	0	625878.5235	1126544.027	0	267249.3013	350617.0299	0	0.001220659
Winter	PM25_PMBW	0.038220011	0.038220011	0	17937.98852	27873.77545	0	625878.5235	1126544.027	0	267249.3013	350617.0299	0	0.038220011
Winter	PM25_PMTW	0.002000001	0.003000001	0	17937.98852	27873.77545	0	625878.5235	1126544.027	0	267249.3013	350617.0299	0	0.00264285
Winter	PM25_RUNEX	0.001122884	0.01367802	0	17937.98852	27873.77545	0	625878.5235	1126544.027	0	267249.3013	350617.0299	0	0.009193948
Winter	PM25_STREX	0.000323159	0	0	17937.98852	27873.77545	0	625878.5235	1126544.027	0	267249.3013	350617.0299	0	0.000139778
Winter	ROG_DIURN	0.050708152	0	0	17937.98852	27873.77545	0	625878.5235	1126544.027	0	267249.3013	350617.0299	0	0.001472167
Winter	ROG_HTSK	0.128776329	0	0	17937.98852	27873.77545	0	625878.5235	1126544.027	0	267249.3013	350617.0299	0	0.055700371
Winter	ROG_IDLEX	0.425146925	0.109759705	0	17937.98852	27873.77545	0	625878.5235	1126544.027	0	267249.3013	350617.0299	0	0.017294514
Winter	ROG_RESTL	0.03029191	0	0	17937.98852	27873.77545	0	625878.5235	1126544.027	0	267249.3013	350617.0299	0	0.000879439
Winter	ROG_RUNEX	0.021067867	0.060860602	0	17937.98852	27873.77545	0	625878.5235	1126544.027	0	267249.3013	350617.0299	0	0.046648608
Winter	ROG_RUNLS	0.794092325	0	0	17937.98852	27873.77545	0	625878.5235	1126544.027	0	267249.3013	350617.0299	0	0.343473351
Winter	ROG_STREX	0.115985298	0	0	17937.98852	27873.77545	0	625878.5235	1126544.027	0	267249.3013	350617.0299	0	0.050167792
Winter	SO2_IDLEX	0.001367488	0.001958011	0	17937.98852	27873.77545	0	625878.5235	1126544.027	0	267249.3013	350617.0299	0	0.000128033
Winter	SO2_RUNEX	0.009105015	0.00478605	0	17937.98852	27873.77545	0	625878.5235	1126544.027	0	267249.3013	350617.0299	0	0.00632857
Winter	SO2_STREX	0.000211072	0	0	17937.98852	27873.77545	0	625878.5235	1126544.027	0	267249.3013	350617.0299	0	9.12964E-05
Winter	TOG_DIURN	0.050708152	0	0	17937.98852	27873.77545	0	625878.5235	1126544.027	0	267249.3013	350617.0299	0	0.001472167
Winter	TOG_HTSK	0.128776329	0	0	17937.98852	27873.77545	0	625878.5235	1126544.027	0	267249.3013	350617.0299	0	0.055700371
Winter	TOG_IDLEX	0.620373395	0.124954127	0	17937.98852	27873.77545	0	625878.5235	1126544.027	0	267249.3013	350617.0299	0	0.023647824
Winter	TOG_RESTL	0.03029191	0	0	17937.98852	27873.77545	0	625878.5235	1126544.027	0	267249.3013	350617.0299	0	0.000879439
Winter	TOG_RUNEX	0.030742182	0.069285749	0	17937.98852	27873.77545	0	625878.5235	1126544.027	0	267249.3013	350617.0299	0	0.055519896
Winter	TOG_RUNLS	0.794092325	0	0	17937.98852	27873.77545	0	625878.5235	1126544.027	0	267249.3013	350617.0299	0	0.343473351
Winter	TOG_STREX	0.126989302	0	0	17937.98852	27873.77545	0	625878.5235	1126544.027	0	267249.3013	350617.0299	0	0.054927418
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## MHDT CalEEMod Emission Rate Worksheet

	MHDT CalEEMod				Vehicle Class:									
Season	Pollutant	Gas En	DSL	ELEC	MHDT Gas	Population MHDT DSL	MHDT Elec	MHDT Gas	VMT MHDT DSL	MHDT Elec	MHDT Gas	Trips MHDT DSL	MHDT Elec	_CalEEMod Emission Rate
Annual	CH4_IDLEX		0.003268913		14623.1082		0	797300.0842	4246866.5	0	292579.148	635166.6395	0	0.004429676
Annual	CH4_RUNEX		0.000367987		14623.1082		0	797300.0842	4246866.5	0	292579.148	635166.6395	0	0.002098437
Annual	CH4_STREX	0.038511582	0	0	14623.1082	64520.19017	0	797300.0842	4246866.5	0	292579.148	635166.6395	0	0.01214523
Annual	CO_IDLEX	14.38371975	2.521301546	0	14623.1082	64520.19017	0	797300.0842	4246866.5	0	292579.148	635166.6395	0	0.402060079
Annual	CO_RUNEX	1.364856851	0.07555287		14623.1082		0	797300.0842	4246866.5	0	292579.148	635166.6395	0	0.279345143
Annual	CO_STREX	4.358244436	0			64520.19017	0	797300.0842	4246866.5	0	292579.148	635166.6395	0	1.374440565
Annual	CO2_NBIO_IDLEX		807.4858769			64520.19017	0	797300.0842	4246866.5	0	292579.148	635166.6395	0	64.65459783
Annual Annual	CO2_NBIO_RUNEX CO2_NBIO_STREX	38.23286962	913.1853408 0			64520.19017 64520.19017	0 0	797300.0842 797300.0842	4246866.5 4246866.5	0 0	292579.148 292579.148	635166.6395 635166.6395	0 0	1030.640554 12.05733356
Annual	NOX_IDLEX		5.038788811		14623.1082		0	797300.0842	4246866.5	0	292579.148	635166.6395	0	0.351832613
Annual	NOX_RUNEX		1.214365146			64520.19017	0	797300.0842	4246866.5	0	292579.148	635166.6395	0	1.0837912
Annual	NOX_STREX	0.360066648	2.145417204	0	14623.1082	64520.19017	0	797300.0842	4246866.5	0	292579.148	635166.6395	0	1.582378976
Annual	PM10_IDLEX	0	0.004691843	0	14623.1082	64520.19017	0	797300.0842	4246866.5	0	292579.148	635166.6395	0	0.000326295
Annual	PM10_PMBW		0.130340037			64520.19017	0	797300.0842	4246866.5	0	292579.148	635166.6395	0	0.130340037
Annual	PM10_PMTW		0.012000003			64520.19017	0	797300.0842	4246866.5	0	292579.148	635166.6395	0	0.012000003
Annual	PM10_RUNEX		0.007072782		14623.1082		0	797300.0842	4246866.5	0	292579.148	635166.6395	0	0.006129862
Annual	PM10_STREX	0.00042701	0 0.004488876			64520.19017 64520.19017	0 0	797300.0842 797300.0842	4246866.5 4246866.5	0 0	292579.148 292579.148	635166.6395 635166.6395	0 0	0.000134664 0.000312179
Annual Annual	PM25_IDLEX PM25_PMBW		0.004488876			64520.19017	0	797300.0842	4246866.5	0	292579.148	635166.6395	0	0.055860016
Annual	PM25_PMTW		0.003000010			64520.19017	0	797300.0842	4246866.5	0	292579.148	635166.6395	0	0.00300001
Annual	PM25_RUNEX		0.006766816		14623.1082		0	797300.0842	4246866.5	0	292579.148	635166.6395	0	0.005858162
Annual	PM25_STREX	0.00039262	0			64520.19017	0	797300.0842	4246866.5	0	292579.148	635166.6395	0	0.000123819
Annual	ROG_DIURN	0.039507131	0	0	14623.1082	64520.19017	0	797300.0842	4246866.5	0	292579.148	635166.6395	0	0.000622711
Annual	ROG_HTSK	0.082797517	0	0	14623.1082	64520.19017	0	797300.0842	4246866.5	0	292579.148	635166.6395	0	0.026111492
Annual	ROG_IDLEX	1.005130495	0.070378811	0	14623.1082	64520.19017	0	797300.0842	4246866.5	0	292579.148	635166.6395	0	0.020737347
Annual	ROG_RESTL	0.026020512	0			64520.19017	0	797300.0842	4246866.5	0	292579.148	635166.6395	0	0.000410135
Annual	ROG_RUNEX		0.007922648			64520.19017	0	797300.0842	4246866.5	0	292579.148	635166.6395	0	0.015251681
Annual	ROG_RUNLS	0.43558088	0			64520.19017	0	797300.0842	4246866.5	0	292579.148	635166.6395	0	0.137367245
Annual Annual	ROG_STREX SO2_IDLEX	0.202953308	0 0.007628726			64520.19017 64520.19017	0 0	797300.0842 797300.0842	4246866.5 4246866.5	0 0	292579.148 292579.148	635166.6395 635166.6395	0 0	0.064004501 0.000614634
Annual	SO2_IDLEX SO2_RUNEX		0.007628726			64520.19017	0	797300.0842	4246866.5	0	292579.148	635166.6395	0	0.000814834
Annual	SO2_STREX	0.000378345	0.000027322			64520.19017	0	797300.0842	4246866.5	0	292579.148	635166.6395	0	0.000119317
Annual	TOG_DIURN	0.039507131	0			64520.19017	0	797300.0842	4246866.5	0	292579.148	635166.6395	0	0.000622711
Annual	TOG_HTSK	0.082797517	0	0	14623.1082	64520.19017	0	797300.0842	4246866.5	0	292579.148	635166.6395	0	0.026111492
Annual	TOG_IDLEX	1.466684059	0.080120919	0	14623.1082	64520.19017	0	797300.0842	4246866.5	0	292579.148	635166.6395	0	0.02868986
Annual	TOG_RESTL	0.026020512	0	0	14623.1082	64520.19017	0	797300.0842	4246866.5	0	292579.148	635166.6395	0	0.000410135
Annual	TOG_RUNEX		0.009019332			64520.19017	0	797300.0842	4246866.5	0	292579.148	635166.6395	0	0.02011554
Annual	TOG_RUNLS	0.43558088	0			64520.19017	0	797300.0842	4246866.5	0	292579.148	635166.6395	0	0.137367245
Annual	TOG_STREX	0.222208326	0 003403378			64520.19017	0	797300.0842	4246866.5	0	292579.148	635166.6395	0	0.070076872
Summer Summer	CH4_IDLEX CH4_RUNEX		0.003403378 0.000367987			64520.19017 64520.19017	0 0	797300.0842 797300.0842	4246866.5 4246866.5	0 0	292579.148 292579.148	635166.6395 635166.6395	0 0	0.004203641 0.002141288
Summer	CH4_KONEX CH4_STREX	0.037125461	0.000307387			64520.19017	0	797300.0842	4246866.5	0	292579.148	635166.6395	0	0.011708095
Summer	CO_IDLEX	10.4593189			14623.1082		0	797300.0842	4246866.5	0	292579.148	635166.6395	0	0.33614153
Summer	CO_RUNEX	1.394417867	0.07555287			64520.19017	0	797300.0842	4246866.5	0	292579.148	635166.6395	0	0.284017669
Summer	CO_STREX	4.139555967	0	0	14623.1082	64520.19017	0	797300.0842	4246866.5	0	292579.148	635166.6395	0	1.305473735
Summer	CO2_NBIO_IDLEX	561.8364366	803.388517	0	14623.1082	64520.19017	0	797300.0842	4246866.5	0	292579.148	635166.6395	0	64.72740237
Summer	CO2_NBIO_RUNEX	1656.325004	_			64520.19017	0	797300.0842	4246866.5	0	292579.148	635166.6395	0	1030.648812
Summer	CO2_NBIO_STREX	37.85947815	0			64520.19017	0	797300.0842	4246866.5	0	292579.148	635166.6395	0	11.93957872
Summer	NOX_IDLEX		4.929354276			64520.19017	0	797300.0842	4246866.5	0	292579.148 292579.148	635166.6395	0	0.344271757
Summer Summer	NOX_RUNEX NOX_STREX		1.147027438 2.145417204			64520.19017 64520.19017	0 0	797300.0842 797300.0842	4246866.5 4246866.5	0 0	292579.148	635166.6395 635166.6395	0 0	1.019443652 1.577426763
Summer	PM10_IDLEX		0.003994341			64520.19017	0	797300.0842	4246866.5	0	292579.148	635166.6395	0	0.000277787
Summer	PM10_PMBW		0.130340037			64520.19017	0	797300.0842	4246866.5	0	292579.148	635166.6395	0	0.130340037
Summer	PM10_PMTW		0.012000003			64520.19017	0	797300.0842	4246866.5	0	292579.148	635166.6395	0	0.012000003
Summer	PM10_RUNEX	0.001107341	0.007072782	0	14623.1082	64520.19017	0	797300.0842	4246866.5	0	292579.148	635166.6395	0	0.006129862
Summer	PM10_STREX	0.00042701	0	0	14623.1082	64520.19017	0	797300.0842	4246866.5	0	292579.148	635166.6395	0	0.000134664
Summer	PM25_IDLEX		0.003821548			64520.19017	0	797300.0842	4246866.5	0	292579.148	635166.6395	0	0.00026577
Summer	PM25_PMBW		0.055860016			64520.19017	0	797300.0842	4246866.5	0	292579.148	635166.6395	0	0.055860016
Summer	PM25_PMTW		0.003000001			64520.19017 64520.19017	0	797300.0842		0		635166.6395	0	0.003000001
Summer Summer	PM25_RUNEX PM25_STREX	0.001018159	0.006766816 0			64520.19017	0	797300.0842 797300.0842	4246866.5 4246866.5	0	292579.148 292579.148	635166.6395 635166.6395	0	0.005858162 0.000123819
Summer	ROG_DIURN	0.058669378	0			64520.19017	0	797300.0842	4246866.5	0	292579.148	635166.6395	0	0.000123819
Summer	ROG_HTSK	0.085301244	0			64520.19017	0	797300.0842	4246866.5	0	292579.148	635166.6395	0	0.026901082
Summer	ROG_IDLEX	0.944826376	0.0732738			64520.19017	0	797300.0842	4246866.5	0	292579.148	635166.6395	0	0.019988167
Summer	ROG_RESTL	0.036372135	0	0	14623.1082	64520.19017	0	797300.0842	4246866.5	0	292579.148	635166.6395	0	0.000573297
Summer	ROG_RUNEX	0.055540308	0.007922648	0	14623.1082	64520.19017	0	797300.0842	4246866.5	0	292579.148	635166.6395	0	0.015449276
Summer	ROG_RUNLS	0.419255348	0			64520.19017	0	797300.0842	4246866.5	0	292579.148	635166.6395	0	0.132218733
Summer	ROG_STREX	0.194982789	0			64520.19017	0	797300.0842	4246866.5	0	292579.148	635166.6395	0	0.061490873
Summer	SO2_IDLEX		0.007590016			64520.19017	0	797300.0842	4246866.5	0	292579.148	635166.6395	0	0.000615482
Summer	SO2_RUNEX		0.008627322			64520.19017	0	797300.0842	4246866.5	0	292579.148	635166.6395	0	0.009854428
Summer Summer	SO2_STREX TOG_DIURN	0.00037465 0.058669378	0			64520.19017 64520.19017	0 0	797300.0842 797300.0842	4246866.5 4246866.5	0 0	292579.148 292579.148	635166.6395 635166.6395	0 0	0.000118152 0.000924745
Summer	TOG_DIOKN TOG_HTSK	0.085301244	0			64520.19017	0	797300.0842	4246866.5	0	292579.148	635166.6395	0	0.000924745
Summer	TOG_ITISK TOG_IDLEX		0.083416643			64520.19017	0	797300.0842	4246866.5	0	292579.148	635166.6395	0	0.027532076
Summer	TOG_RESTL	0.036372135	0			64520.19017	0	797300.0842	4246866.5	0	292579.148	635166.6395	0	0.000573297
Summer	TOG_RUNEX		0.009019332			64520.19017	0	797300.0842	4246866.5	0	292579.148	635166.6395	0	0.02040387
Summer	TOG_RUNLS	0.419255348	0	0	14623.1082	64520.19017	0	797300.0842	4246866.5	0	292579.148	635166.6395	0	0.132218733
Summer	TOG_STREX	0.213481611	0	0	14623.1082	64520.19017	0	797300.0842	4246866.5	0	292579.148	635166.6395	0	0.067324766

Winter	CH4 IDLEX	0.288112355	0.003083224	0	14623.1082	64520.19017	0	797300.0842	4246866.5	0	292579.148	635166.6395	0	0.004755644
Winter	CH4_RUNEX	0.011229223	0.000367987	0	14623.1082	64520.19017	0	797300.0842	4246866.5	0	292579.148	635166.6395	0	0.002084755
Winter	CH4_STREX	0.038763388	0	0	14623.1082	64520.19017	0	797300.0842	4246866.5	0	292579.148	635166.6395	0	0.012224641
Winter	CO_IDLEX	19.87788094	2.601964977	0	14623.1082	64520.19017	0	797300.0842	4246866.5	0	292579.148	635166.6395	0	0.494268672
Winter	CO_RUNEX	1.356378543	0.07555287	0	14623.1082	64520.19017	0	797300.0842	4246866.5	0	292579.148	635166.6395	0	0.27800503
Winter	CO_STREX	4.40156754	0	0	14623.1082	64520.19017	0	797300.0842	4246866.5	0	292579.148	635166.6395	0	1.388103183
Winter	CO2_NBIO_IDLEX	507.3626751	813.1441359	0	14623.1082	64520.19017	0	797300.0842	4246866.5	0	292579.148	635166.6395	0	64.54724383
Winter	CO2_NBIO_RUNEX	1656.257755	913.1853408	0	14623.1082	64520.19017	0	797300.0842	4246866.5	0	292579.148	635166.6395	0	1030.638182
Winter	CO2_NBIO_STREX	38.30770133	0	0	14623.1082	64520.19017	0	797300.0842	4246866.5	0	292579.148	635166.6395	0	12.08093291
Winter	NOX_IDLEX	0.084999317	5.189912692	0	14623.1082	64520.19017	0	797300.0842	4246866.5	0	292579.148	635166.6395	0	0.362272847
Winter	NOX_RUNEX	0.379045169	1.191571828	0	14623.1082	64520.19017	0	797300.0842	4246866.5	0	292579.148	635166.6395	0	1.063140786
Winter	NOX_STREX	0.363801306	2.145417204	0	14623.1082	64520.19017	0	797300.0842	4246866.5	0	292579.148	635166.6395	0	1.583556759
Winter	PM10_IDLEX	0	0.005655059	0	14623.1082	64520.19017	0	797300.0842	4246866.5	0	292579.148	635166.6395	0	0.000393282
Winter	PM10_PMBW	0.130340037	0.130340037	0	14623.1082	64520.19017	0	797300.0842	4246866.5	0	292579.148	635166.6395	0	0.130340037
Winter	PM10_PMTW	0.012000003	0.012000003	0	14623.1082	64520.19017	0	797300.0842	4246866.5	0	292579.148	635166.6395	0	0.012000003
Winter	PM10_RUNEX	0.001107341	0.007072782	0	14623.1082	64520.19017	0	797300.0842	4246866.5	0	292579.148	635166.6395	0	0.006129862
Winter	PM10_STREX	0.00042701	0	0	14623.1082	64520.19017	0	797300.0842	4246866.5	0	292579.148	635166.6395	0	0.000134664
Winter	PM25_IDLEX	0	0.005410424	0	14623.1082	64520.19017	0	797300.0842	4246866.5	0	292579.148	635166.6395	0	0.000376269
Winter	PM25_PMBW	0.055860016	0.055860016	0	14623.1082	64520.19017	0	797300.0842	4246866.5	0	292579.148	635166.6395	0	0.055860016
Winter	PM25_PMTW	0.003000001	0.003000001	0	14623.1082	64520.19017	0	797300.0842	4246866.5	0	292579.148	635166.6395	0	0.003000001
Winter	PM25_RUNEX	0.001018159	0.006766816	0	14623.1082	64520.19017	0	797300.0842	4246866.5	0	292579.148	635166.6395	0	0.005858162
Winter	PM25_STREX	0.00039262	0	0	14623.1082	64520.19017	0	797300.0842	4246866.5	0	292579.148	635166.6395	0	0.000123819
Winter	ROG_DIURN	0.0405073	0	0	14623.1082	64520.19017	0	797300.0842	4246866.5	0	292579.148	635166.6395	0	0.000638475
Winter	ROG_HTSK	0.089166238	0	0	14623.1082	64520.19017	0	797300.0842	4246866.5	0	292579.148	635166.6395	0	0.028119968
Winter	ROG_IDLEX	1.089556261	0.06638097	0	14623.1082	64520.19017	0	797300.0842	4246866.5	0	292579.148	635166.6395	0	0.021790034
Winter	ROG_RESTL	0.025349809	0	0	14623.1082	64520.19017	0	797300.0842	4246866.5	0	292579.148	635166.6395	0	0.000399563
Winter	ROG_RUNEX	0.053927856	0.007922648	0	14623.1082	64520.19017	0	797300.0842	4246866.5	0	292579.148	635166.6395	0	0.015194406
Winter	ROG_RUNLS	0.478802338	0	0	14623.1082	64520.19017	0	797300.0842	4246866.5	0	292579.148	635166.6395	0	0.150997808
Winter	ROG_STREX	0.204788901	0	0	14623.1082	64520.19017	0	797300.0842	4246866.5	0	292579.148	635166.6395	0	0.064583384
Winter	SO2_IDLEX	0.005020765	0.007682183	0	14623.1082	64520.19017	0	797300.0842	4246866.5	0	292579.148	635166.6395	0	0.000613395
Winter	SO2_RUNEX	0.016390013	0.008627322	0	14623.1082	64520.19017	0	797300.0842	4246866.5	0	292579.148	635166.6395	0	0.009854323
Winter	SO2_STREX	0.000379086	0	0	14623.1082	64520.19017	0	797300.0842	4246866.5	0	292579.148	635166.6395	0	0.000119551
Winter	TOG_DIURN	0.0405073	0	0	14623.1082	64520.19017	0	797300.0842	4246866.5	0	292579.148	635166.6395	0	0.000638475
Winter	TOG_HTSK	0.089166238	0	0	14623.1082	64520.19017	0	797300.0842	4246866.5	0	292579.148	635166.6395	0	0.028119968
Winter	TOG_IDLEX	1.589877939	0.075569681	0	14623.1082	64520.19017	0	797300.0842	4246866.5	0	292579.148	635166.6395	0	0.030315123
Winter	TOG_RESTL	0.025349809	0	0	14623.1082	64520.19017	0	797300.0842	4246866.5	0	292579.148	635166.6395	0	0.000399563
Winter	TOG_RUNEX	0.078691401	0.009019332	0	14623.1082	64520.19017	0	797300.0842	4246866.5	0	292579.148	635166.6395	0	0.020031963
Winter	TOG_RUNLS	0.478802338	0	0	14623.1082	64520.19017	0	797300.0842	4246866.5	0	292579.148	635166.6395	0	0.150997808
Winter	TOG_STREX	0.224218069	0	0	14623.1082	64520.19017	0	797300.0842	4246866.5	0	292579.148	635166.6395	0	0.070710676

## **HHD CalEEMod Emission Rate Worksheet**

Season	Pollutant	ı	Emission Rates		Vehicle Class:	HHDT <b>Population</b>			VMT			Trips		CalEEMod Emission
<u> </u>	Tonutant	Gas	DSL	NG	HHDT Gas	HHDT DSL	HHDT NG	HHDT Gas	HHDT DSL	HHDT NG	HHDT Gas	HHDT DSL	HHDT NG	Rate
Annual	CH4_IDLEX	0	0.213854135	1.26981435	52.86814563	57613.01744	2795.817267	5904.510911	6949256.203	113851.643	1057.785858	573406.4887	10903.68734	0.027112777
Annual	CH4_RUNEX	0.095194328	0.000918918	4.955491409	52.86814563	57613.01744	2795.817267	5904.510911	6949256.203	113851.643	1057.785858	573406.4887	10903.68734	0.080794696
Annual	CH4_STREX	0.000297559	0		52.86814563				6949256.203		1057.785858		10903.68734	5.37702E-07
Annual	CO_IDLEX		67.20123172				2795.817267				1057.785858		10903.68734	6.711337612
Annual	CO_RUNEX		0.217220629				2795.817267		6949256.203				10903.68734	0.458958773
Annual	CO_STREX	5.281663147	11242 41266				2795.817267						10903.68734	0.009544199
Annual Annual	CO2_NBIO_IDLEX CO2_NBIO_RUNEX	2037.423945	11243.41266				2795.817267 2795.817267				1057.785858 1057.785858		10903.68734 10903.68734	1125.749118 1398.542104
Annual	CO2_NBIO_STREX	46.98858649	1303.80444				2795.817267						10903.68734	0.084910459
Annual	NOX_IDLEX		•						6949256.203				10903.68734	5.748731259
Annual	NOX_RUNEX						2795.817267						10903.68734	2.710419736
Annual	NOX_STREX	0.600210622	2.397861175	0	52.86814563	57613.01744	2795.817267	5904.510911	6949256.203	113851.643	1057.785858	573406.4887	10903.68734	2.349947623
Annual	PM10_IDLEX	0	0.030496735	0.039897382	52.86814563	57613.01744	2795.817267	5904.510911	6949256.203	113851.643	1057.785858	573406.4887	10903.68734	0.003192103
Annual	PM10_PMBW	0.061740018	0.061054154	0.061740018	52.86814563	57613.01744	2795.817267	5904.510911	6949256.203	113851.643	1057.785858	573406.4887	10903.68734	0.061065773
Annual	PM10_PMTW	0.020000006	0.03560009						6949256.203				10903.68734	0.0355935
Annual	PM10_RUNEX	0.001271173					2795.817267						10903.68734	0.018509047
Annual	PM10_STREX	0.000747817	0.02017746		52.86814563		2795.817267						10903.68734	1.35134E-06
Annual	PM25_IDLEX	0.036460009					2795.817267 2795.817267				1057.785858		10903.68734	0.003054014
Annual Annual	PM25_PMBW PM25_PMTW	0.026460008 0.005000001		0.026460008			2795.817267		6949256.203				10903.68734 10903.68734	0.026171045 0.008898375
Annual	PM25_RUNEX	0.003000001					2795.817267						10903.68734	0.017708314
Annual	PM25_STREX	0.00068759	0.017313733		52.86814563		2795.817267				1057.785858		10903.68734	1.24251E-06
Annual	ROG_DIURN	0.065309495	0		52.86814563						1057.785858		10903.68734	5.8985E-06
Annual	ROG_HTSK	0.126705067	0	0	52.86814563	57613.01744	2795.817267	5904.510911	6949256.203	113851.643	1057.785858	573406.4887	10903.68734	0.000228962
Annual	ROG_IDLEX	0	4.604220893	0.059875014	52.86814563	57613.01744	2795.817267	5904.510911	6949256.203	113851.643	1057.785858	573406.4887	10903.68734	0.453442066
Annual	ROG_RESTL	0.046207867	0				2795.817267		6949256.203				10903.68734	4.17331E-06
Annual	ROG_RUNEX	0.472041458					2795.817267							0.024845407
Annual	ROG_RUNLS	0.659734508	0	_			2795.817267							0.00119217
Annual	ROG_STREX	0.00156832	0	_	52.86814563		2795.817267						10903.68734	2.83402E-06
Annual	SO2_IDLEX	0.020161962	0.106222188 0.01290401	_	52.86814563 52.86814563	57613.01744 57613.01744					1057.785858 1057.785858		10903.68734 10903.68734	0.010454588 0.012702244
Annual Annual	SO2_RUNEX SO2_STREX	0.00046499	0.01290401	_	52.86814563	57613.01744	2795.817267				1057.785858		10903.68734	8.40258E-07
Annual	TOG DIURN	0.065309495	0	_	52.86814563		2795.817267				1057.785858		10903.68734	5.8985E-06
Annual	TOG_HTSK	0.126705067	0		52.86814563	57613.01744					1057.785858		10903.68734	0.000228962
Annual	TOG_IDLEX		5.241555008	1.343487169	52.86814563	57613.01744	2795.817267			113851.643	1057.785858	573406.4887	10903.68734	0.522300441
Annual	TOG_RESTL	0.046207867	0	0	52.86814563	57613.01744	2795.817267	5904.510911	6949256.203	113851.643	1057.785858	573406.4887	10903.68734	4.17331E-06
Annual	TOG_RUNEX	0.688801787	0.022522626	5.330647287	52.86814563	57613.01744	2795.817267	5904.510911	6949256.203	113851.643	1057.785858	573406.4887	10903.68734	0.108570399
Annual	TOG_RUNLS	0.659734508	0	0	52.86814563	57613.01744	2795.817267	5904.510911	6949256.203	113851.643	1057.785858	573406.4887	10903.68734	0.00119217
Annual	TOG_STREX	0.001717113	0		52.86814563		2795.817267				1057.785858		10903.68734	3.1029E-06
Summer	CH4_IDLEX	_	0.226217189								1057.785858		10903.68734	0.028511258
Summer	CH4_RUNEX		_	4.955491409			2795.817267				1057.785858		10903.68734	0.080796437
Summer	CH4_STREX CO_IDLEX	0.00028506	0 66.25849718		52.86814563		2795.817267 2795.817267				1057.785858 1057.785858		10903.68734 10903.68734	5.15116E-07 6.614680042
Summer Summer	CO_IDLEX CO_RUNEX		0.217220629		52.86814563		2795.817267				1057.785858		10903.68734	0.459580012
Summer	CO STREX	5.016669453	0.217220029		52.86814563		2795.817267		6949256.203				10903.68734	0.009065344
Summer	CO2_NBIO_IDLEX		11114.13157	_	52.86814563	57613.01744					1057.785858		10903.68734	1113.069069
Summer	CO2_NBIO_RUNEX	2038.656885	1365.86444	3359.982145	52.86814563	57613.01744	2795.817267	5904.510911	6949256.203	113851.643	1057.785858	573406.4887	10903.68734	1398.543134
Summer	CO2_NBIO_STREX	46.56834423	0	0	52.86814563	57613.01744	2795.817267	5904.510911	6949256.203	113851.643	1057.785858	573406.4887	10903.68734	0.084151062
Summer	NOX_IDLEX	0	54.77596626	22.31465425	52.86814563	57613.01744	2795.817267	5904.510911	6949256.203	113851.643	1057.785858	573406.4887	10903.68734	5.497732375
Summer	NOX_RUNEX			2.660132718			2795.817267		6949256.203				10903.68734	2.5644129
Summer	NOX_STREX	0.573516323			52.86814563		2795.817267				1057.785858		10903.68734	2.349899386
Summer	PM10_IDLEX			0.033914855			2795.817267				1057.785858		10903.68734	0.00277905
Summer	PM10_PMBW	0.061740018	0.061054154				2795.817267		6949256.203		1057.785858		10903.68734	0.061065773
Summer Summer	PM10_PMTW PM10_RUNEX	0.020000006 0.001271173	0.03560009 0.018725802		52.86814563 52.86814563		2795.817267 2795.817267		6949256.203		1057.785858 1057.785858		10903.68734 10903.68734	0.0355935 0.018509047
Summer	PM10_KONEX	0.001271173	0.018723802		52.86814563		2795.817267				1057.785858		10903.68734	1.35134E-06
Summer	PM25_IDLEX		0.025440008			57613.01744			6949256.203		1057.785858		10903.68734	0.002658829
Summer	PM25_PMBW	0.026460008	0.026166066	0.026460008	52.86814563	57613.01744	2795.817267	5904.510911	6949256.203	113851.643	1057.785858	573406.4887	10903.68734	0.026171045
Summer	PM25_PMTW	0.005000001	0.008900022	0.009000003	52.86814563	57613.01744	2795.817267	5904.510911	6949256.203	113851.643	1057.785858	573406.4887	10903.68734	0.008898375
Summer	PM25_RUNEX		0.017915733				2795.817267						10903.68734	0.017708314
Summer	PM25_STREX	0.00068759	0				2795.817267						10903.68734	1.24251E-06
Summer	ROG_DIURN	0.102164639	0				2795.817267						10903.68734	9.22711E-06
Summer	ROG_HTSK	0.129276775	4 970204042				2795.817267						10903.68734	0.000233609
Summer	ROG_IDLEX	0.069700495	4.870394043				2795.817267 2795.817267						10903.68734 10903.68734	0.479629877 6.29508E-06
Summer Summer	ROG_RESTL ROG_RUNEX	0.069700495					2795.817267						10903.68734	0.024855871
Summer	ROG_RUNLS	0.648972987	0.019784042				2795.817267						10903.68734	0.024833871
Summer	ROG_STREX	0.001506728	0				2795.817267						10903.68734	2.72272E-06
Summer	SO2_IDLEX		0.105000804				2795.817267						10903.68734	0.010334377
Summer	SO2_RUNEX	0.020174163	0.01290401				2795.817267						10903.68734	0.012702254
Summer	SO2_STREX	0.000460832	0	0	52.86814563	57613.01744	2795.817267	5904.510911	6949256.203	113851.643	1057.785858	573406.4887	10903.68734	8.32743E-07
Summer	TOG_DIURN	0.102164639	0				2795.817267						10903.68734	9.22711E-06
Summer	TOG_HTSK	0.129276775	0				2795.817267						10903.68734	0.000233609
Summer	TOG_IDLEX		_				2795.817267						10903.68734	0.552295727
Summer	TOG_RESTL	0.069700495	0 022522626				2795.817267						10903.68734	6.29508E-06
Summer	TOG_RUNEX	0.70708179 0.648972987	0.022522626				2795.817267 2795.817267						10903.68734	0.108585667
Summer Summer	TOG_RUNLS TOG_STREX	0.648972987	0				2795.817267						10903.68734 10903.68734	0.001172723 2.98104E-06
Jammel	.00_01/\L/\	5.551075076	0	0	52.00017303	5,015.01/44	_, 55.01/20/	555510511	00 10200.200	110001.040	1007.700000	5,5 100. <del>1</del> 00/	10000.00704	JJ107L-UU

Winter	CH4_IDLEX	0	0.196781347	0	52.86814563	57613.01744	2795.817267	5904.510911	6949256.203	113851.643	1057.785858	573406.4887	10903.68734	0.019367591
Winter	CH4_RUNEX	0.09458871	0.000918918	0	52.86814563	57613.01744	2795.817267	5904.510911	6949256.203	113851.643	1057.785858	573406.4887	10903.68734	0.000982357
Winter	CH4_STREX	0.000300502	0	0	52.86814563	57613.01744	2795.817267	5904.510911	6949256.203	113851.643	1057.785858	573406.4887	10903.68734	5.43021E-07
Winter	CO_IDLEX	0	68.50310322	0	52.86814563	57613.01744	2795.817267	5904.510911	6949256.203	113851.643	1057.785858	573406.4887	10903.68734	6.742204456
Winter	CO_RUNEX	32.3569768	0.217220629	0	52.86814563	57613.01744	2795.817267	5904.510911	6949256.203	113851.643	1057.785858	573406.4887	10903.68734	0.2405674
Winter	CO_STREX	5.334261428	0	0	52.86814563	57613.01744	2795.817267	5904.510911	6949256.203	113851.643	1057.785858	573406.4887	10903.68734	0.009639247
Winter	CO2_NBIO_IDLEX	0	11421.94369	0	52.86814563	57613.01744	2795.817267	5904.510911	6949256.203	113851.643	1057.785858	573406.4887	10903.68734	1124.169213
Winter	CO2_NBIO_RUNEX	2037.070288	1365.86444	0	52.86814563	57613.01744	2795.817267	5904.510911	6949256.203	113851.643	1057.785858	573406.4887	10903.68734	1344.426825
Winter	CO2_NBIO_STREX	47.07200645	0	0	52.86814563	57613.01744	2795.817267	5904.510911	6949256.203	113851.643	1057.785858	573406.4887	10903.68734	0.085061202
Winter	NOX_IDLEX	0	60.79740606	0	52.86814563	57613.01744	2795.817267	5904.510911	6949256.203	113851.643	1057.785858	573406.4887	10903.68734	5.983795226
Winter	NOX_RUNEX	3.758246644	2.66107065	0	52.86814563	57613.01744	2795.817267	5904.510911	6949256.203	113851.643	1057.785858	573406.4887	10903.68734	2.619128585
Winter	NOX_STREX	0.606556295	2.397861175	0	52.86814563	57613.01744	2795.817267	5904.510911	6949256.203	113851.643	1057.785858	573406.4887	10903.68734	2.34995909
Winter	PM10_IDLEX	0	0.035891348	0	52.86814563	57613.01744	2795.817267	5904.510911	6949256.203	113851.643	1057.785858	573406.4887	10903.68734	0.003532494
Winter	PM10_PMBW	0.061740018	0.061054154	0	52.86814563	57613.01744	2795.817267	5904.510911	6949256.203	113851.643	1057.785858	573406.4887	10903.68734	0.060071404
Winter	PM10_PMTW	0.020000006	0.03560009	0	52.86814563	57613.01744	2795.817267	5904.510911	6949256.203	113851.643	1057.785858	573406.4887	10903.68734	0.035013694
Winter	PM10_RUNEX	0.001271173	0.018725802	0	52.86814563	57613.01744	2795.817267	5904.510911	6949256.203	113851.643	1057.785858	573406.4887	10903.68734	0.01840963
Winter	PM10_STREX	0.000747817	0	0	52.86814563	57613.01744	2795.817267	5904.510911	6949256.203	113851.643	1057.785858	573406.4887	10903.68734	1.35134E-06
Winter	PM25_IDLEX	0	0.034338704	0	52.86814563	57613.01744	2795.817267	5904.510911	6949256.203	113851.643	1057.785858	573406.4887	10903.68734	0.00337968
Winter	PM25_PMBW	0.026460008	0.026166066	0	52.86814563	57613.01744	2795.817267	5904.510911	6949256.203	113851.643	1057.785858	573406.4887	10903.68734	0.025744888
Winter	PM25_PMTW	0.005000001	0.008900022	0	52.86814563	57613.01744	2795.817267	5904.510911	6949256.203	113851.643	1057.785858	573406.4887	10903.68734	0.008753423
Winter	PM25_RUNEX	0.001168797	0.017915733	0	52.86814563	57613.01744	2795.817267	5904.510911	6949256.203	113851.643	1057.785858	573406.4887	10903.68734	0.017613198
Winter	PM25_STREX	0.00068759	0	0	52.86814563	57613.01744	2795.817267	5904.510911	6949256.203	113851.643	1057.785858	573406.4887	10903.68734	1.24251E-06
Winter	ROG_DIURN	0.067867508	0	0	52.86814563	57613.01744	2795.817267	5904.510911	6949256.203	113851.643	1057.785858	573406.4887	10903.68734	6.12953E-06
Winter	ROG_HTSK	0.143415953	0	0	52.86814563	57613.01744	2795.817267	5904.510911	6949256.203	113851.643	1057.785858	573406.4887	10903.68734	0.000259159
Winter	ROG_IDLEX	0	4.236648449	0	52.86814563	57613.01744	2795.817267	5904.510911	6949256.203	113851.643	1057.785858	573406.4887	10903.68734	0.416978921
Winter	ROG_RESTL	0.046003226	0	0	52.86814563	57613.01744	2795.817267	5904.510911	6949256.203	113851.643	1057.785858	573406.4887	10903.68734	4.15483E-06
Winter	ROG_RUNEX	0.468408287	0.019784042	0	52.86814563	57613.01744	2795.817267	5904.510911	6949256.203	113851.643	1057.785858	573406.4887	10903.68734	0.019840127
Winter	ROG_RUNLS	0.701795982	0	0	52.86814563	57613.01744	2795.817267	5904.510911	6949256.203	113851.643	1057.785858	573406.4887	10903.68734	0.001268176
Winter	ROG_STREX	0.001582505	0	0	52.86814563	57613.01744	2795.817267	5904.510911	6949256.203	113851.643	1057.785858	573406.4887	10903.68734	2.85966E-06
Winter	SO2_IDLEX	0	0.10790886	0	52.86814563	57613.01744	2795.817267	5904.510911	6949256.203	113851.643	1057.785858	573406.4887	10903.68734	0.010620593
Winter	SO2_RUNEX	0.020158462	0.01290401	0	52.86814563	57613.01744	2795.817267	5904.510911	6949256.203	113851.643	1057.785858	573406.4887	10903.68734	0.012702241
Winter	SO2_STREX	0.000465816	0	0	52.86814563	57613.01744	2795.817267	5904.510911	6949256.203	113851.643	1057.785858	573406.4887	10903.68734	8.4175E-07
Winter	TOG_DIURN	0.067867508	0	0	52.86814563	57613.01744	2795.817267	5904.510911	6949256.203	113851.643	1057.785858	573406.4887	10903.68734	6.12953E-06
Winter	TOG_HTSK	0.143415953	0	0	52.86814563	57613.01744	2795.817267	5904.510911	6949256.203	113851.643	1057.785858	573406.4887	10903.68734	0.000259159
Winter	TOG_IDLEX	0	4.82310176	0	52.86814563	57613.01744	2795.817267	5904.510911	6949256.203	113851.643	1057.785858	573406.4887	10903.68734	0.47469876
Winter	TOG_RESTL	0.046003226	0	0	52.86814563	57613.01744	2795.817267	5904.510911	6949256.203	113851.643	1057.785858	573406.4887	10903.68734	4.15483E-06
Winter	TOG_RUNEX	0.683500272	0.022522626	0	52.86814563	57613.01744	2795.817267	5904.510911	6949256.203	113851.643	1057.785858	573406.4887	10903.68734	0.022711975
Winter	TOG_RUNLS	0.701795982	0	0	52.86814563	57613.01744	2795.817267	5904.510911	6949256.203	113851.643	1057.785858	573406.4887	10903.68734	0.001268176
Winter	TOG_STREX	0.001732644	0	0	52.86814563	57613.01744	2795.817267	5904.510911	6949256.203	113851.643	1057.785858	573406.4887	10903.68734	3.13096E-06

#### **OBUS CalEEMod Emission Rate Worksheet**

	OBUS CalEEMod	Emission Rate	e worksneet		Vehicle Class:	OBUS								
Season	Pollutant	En	nission Rates			Population			VMT			Trips		_CalEEMod Emission
A	CITA IDIEA	Gas	DSL	NG	OBUS Gas	OBUS DSL	OBUS NG	OBUS Gas	OBUS DSL	OBUS NG	OBUS Gas	OBUS DSL	OBUS NG	
Annual	CH4_IDLEX CH4_RUNEX	0.196811726 0.011635229	0.04155714 0.000516214			3071.453276 3071.453276	0 0	159342.8081 159342.8081		0 0	79350.83121 79350.83121		0 0	0.008314358 0.004940745
Annual Annual	CH4_KONEX CH4_STREX	0.029414804	0.000310214			3071.453276	0		241091.7355	0	79350.83121		0	0.021368337
Annual	CO_IDLEX		14.28876274			3071.453276	0	159342.8081		0	79350.83121		0	0.611007849
Annual	CO_RUNEX	1.364894047	0.11921052	0	3965.955178	3071.453276	0	159342.8081	241091.7355	0	79350.83121	29880.3719	0	0.614898803
Annual	CO_STREX	3.223361215	0			3071.453276	0	159342.8081		0	79350.83121		0	2.341605551
Annual	CO2_NBIO_IDLEX	375.5069578	2721.73628			3071.453276	0		241091.7355	0	79350.83121		0	90.1658985
Annual Annual	CO2_NBIO_RUNEX CO2_NBIO_STREX	26.1890482	1143.605491 0			3071.453276 3071.453276	0 0	159342.8081 159342.8081	241091.7355 241091.7355	0 0	79350.83121 79350.83121		0 0	1355.701185 19.02499179
Annual	NOX_IDLEX	0.064925814				3071.453276	0		241091.7355	0	79350.83121		0	0.349861167
Annual	NOX_RUNEX	0.436200337				3071.453276	0		241091.7355	0	79350.83121		0	1.164127306
Annual	NOX_STREX	0.320344071	2.209292637	0	3965.955178	3071.453276	0	159342.8081	241091.7355	0	79350.83121	29880.3719	0	0.837069
Annual	PM10_IDLEX		0.004202818			3071.453276	0		241091.7355	0	79350.83121		0	0.000118178
Annual	PM10_PMBW		0.130340037			3071.453276	0		241091.7355	0	79350.83121		0	0.130340037
Annual Annual	PM10_PMTW PM10_RUNEX		0.012000003 0.011112634			3071.453276 3071.453276	0 0	159342.8081 159342.8081		0 0	79350.83121 79350.83121		0 0	0.012000003 0.007087082
Annual	PM10_KONEX	0.00033325	0.011112034			3071.453276	0		241091.7355	0	79350.83121		0	0.000200009
Annual	PM25_IDLEX		0.004021006			3071.453276	0		241091.7355	0	79350.83121		0	0.000113066
Annual	PM25_PMBW	0.055860016	0.055860016	0	3965.955178	3071.453276	0	159342.8081	241091.7355	0	79350.83121	29880.3719	0	0.055860016
Annual	PM25_PMTW	0.003000001				3071.453276	0	159342.8081		0	79350.83121		0	0.003000001
Annual	PM25_RUNEX	0.000916033	0.010631906			3071.453276 3071.453276	0		241091.7355 241091.7355	0	79350.83121 79350.83121		0	0.00676572
Annual Annual	PM25_STREX ROG_DIURN	0.000253151 0.05067124	0			3071.453276	0 0		241091.7355	0 0	79350.83121		0 0	0.000183901 0.001839766
Annual	ROG_HTSK	0.030660525	0			3071.453276	0	159342.8081		0	79350.83121		0	0.022273289
Annual	ROG_IDLEX	0.744264948	0.894713829	0	3965.955178	3071.453276	0	159342.8081	241091.7355	0	79350.83121	29880.3719	0	0.052180998
Annual	ROG_RESTL	0.026177702	0			3071.453276	0	159342.8081	241091.7355	0	79350.83121		0	0.000950457
Annual	ROG_RUNEX	0.055727543	0.011113939		3965.955178		0		241091.7355	0	79350.83121		0	0.028866796
Annual Annual	ROG_RUNLS	0.367890515 0.154647095	0		3965.955178 3965.955178	30/1.4532/6 3071.453276	0 0		241091.7355 241091.7355	0 0	79350.83121 79350.83121		0	0.267253471 0.112343132
Annual	ROG_STREX SO2_IDLEX		0.025713615			3071.453276	0		241091.7355	0	79350.83121		0	0.000857955
Annual	SO2_RUNEX		0.010804218			3071.453276	0		241091.7355	0	79350.83121		0	0.013107087
Annual	SO2_STREX	0.000259162	0	0	3965.955178	3071.453276	0	159342.8081	241091.7355	0	79350.83121	29880.3719	0	0.000188268
Annual	TOG_DIURN	0.05067124	0			3071.453276	0		241091.7355	0	79350.83121		0	0.001839766
Annual	TOG_HTSK	0.030660525	0			3071.453276	0	159342.8081		0	79350.83121		0	0.022273289
Annual Annual	TOG_IDLEX TOG_RESTL	0.026177702	1.018563588			3071.453276 3071.453276	0 0		241091.7355 241091.7355	0 0	79350.83121 79350.83121		0 0	0.068072265 0.000950457
Annual	TOG_RUNEX		0.012652374			3071.453276	0		241091.7355	0	79350.83121		0	0.039975926
Annual	TOG_RUNLS	0.367890515	0	0	3965.955178	3071.453276	0	159342.8081	241091.7355	0	79350.83121	29880.3719	0	0.267253471
Annual	TOG_STREX	0.169319103	0			3071.453276	0	159342.8081	241091.7355	0	79350.83121	29880.3719	0	0.123001589
Summer	CH4_IDLEX		0.044049171			3071.453276	0		241091.7355	0	79350.83121		0	0.008401668
Summer Summer	CH4_RUNEX CH4_STREX	0.011904317	0.000516214			3071.453276 3071.453276	0 0		241091.7355 241091.7355	0 0	79350.83121 79350.83121		0 0	0.005047822 0.020552694
Summer	CO_IDLEX		14.10286204			3071.453276	0		241091.7355	0	79350.83121		0	0.60578054
Summer	CO_RUNEX	1.394501726	0.11921052			3071.453276	0	159342.8081	241091.7355	0	79350.83121		0	0.62668043
Summer	CO_STREX	3.048668703	0			3071.453276	0		241091.7355	0	79350.83121		0	2.214700458
Summer	CO2_NBIO_IDLEX		2685.104897			3071.453276	0		241091.7355	0	79350.83121		0	89.13586701
Summer Summer	CO2_NBIO_RUNEX CO2_NBIO_STREX	25.89135467	1143.605491 0			3071.453276 3071.453276	0 0		241091.7355 241091.7355	0 0	79350.83121 79350.83121		0 0	1355.722061 18.80873281
Summer	NOX_IDLEX		11.73964501			3071.453276	0	159342.8081		0	79350.83121		0	0.332462364
Summer	NOX_RUNEX		1.555479362	0	3965.955178	3071.453276	0		241091.7355	0	79350.83121		0	1.088447192
Summer	NOX_STREX	0.306346202	2.209292637	0	3965.955178	3071.453276	0	159342.8081	241091.7355	0	79350.83121	29880.3719	0	0.826900271
Summer	PM10_IDLEX		0.003734487			3071.453276	0		241091.7355	0	79350.83121		0	0.000105009
Summer	PM10_PMBW	0.130340037 0.012000003	0.130340037 0.012000003			3071.453276 3071.453276	0 0	159342.8081 159342.8081	241091.7355 241091.7355	0 0	79350.83121 79350.83121		0 0	0.130340037 0.012000003
Summer Summer	PM10_PMTW PM10_RUNEX		0.012000003			3071.453276	0		241091.7355	0	79350.83121		0	0.007087082
Summer	PM10_STREX	0.000275325	0			3071.453276	0		241091.7355	0	79350.83121		0	0.000200009
Summer	PM25_IDLEX	0	0.003572935	0	3965.955178	3071.453276	0	159342.8081	241091.7355	0	79350.83121	29880.3719	0	0.000100467
	PM25_PMBW		0.055860016			3071.453276	0		241091.7355	0	79350.83121		0	0.055860016
	PM25_PMTW		0.003000001			3071.453276	_		241091.7355	_	79350.83121		0	0.003000001
Summer Summer	PM25_RUNEX PM25_STREX	0.000916033	0.010631906			3071.453276 3071.453276	0 0		241091.7355 241091.7355	0	79350.83121 79350.83121		0 0	0.00676572 0.000183901
Summer	ROG_DIURN	0.07299337	0			3071.453276	0		241091.7355	0	79350.83121		0	0.002650236
Summer	ROG_HTSK	0.031289496	0	0	3965.955178	3071.453276	0		241091.7355	0	79350.83121		0	0.022730204
Summer	ROG_IDLEX	0.744264948	0.948366565	0	3965.955178	3071.453276	0	159342.8081	241091.7355	0	79350.83121	29880.3719	0	0.05368965
Summer	ROG_RESTL	0.0362261	0			3071.453276	0		241091.7355	0	79350.83121		0	0.001315293
Summer	ROG_RUNEX ROG_RUNLS	0.05701061 0.358226978	0.011113939			3071.453276 3071.453276	0		241091.7355 241091.7355	0	79350.83121 79350.83121		0 0	0.02937736 0.26023341
Summer Summer	ROG_STREX	0.358226978	0			3071.453276	0 0		241091.7355	0 0	79350.83121		0	0.26023341
Summer	SO2_IDLEX	0.003715946				3071.453276	0		241091.7355	0	79350.83121		0	0.000848224
Summer	SO2_RUNEX		0.010804218			3071.453276	0	159342.8081	241091.7355	0	79350.83121		0	0.013107293
Summer	SO2_STREX	0.000256216	0			3071.453276	0		241091.7355	0	79350.83121		0	0.000186128
Summer	TOG_DIURN	0.07299337	0			3071.453276	0		241091.7355	0	79350.83121		0	0.002650236
Summer Summer	TOG_HTSK TOG_IDLEX	0.031289496 1.086029665	0 1.079643144			3071.453276 3071.453276	0 0		241091.7355 241091.7355	0 0	79350.83121 79350.83121		0 0	0.022730204 0.069789751
Summer	TOG_IDLEX TOG_RESTL	0.0362261	1.079043144			3071.453276	0		241091.7355	0	79350.83121		0	0.003783731
Summer	TOG_RUNEX		0.012652374			3071.453276	0		241091.7355	0	79350.83121		0	0.04072094
Summer	TOG_RUNLS	0.358226978	0			3071.453276	0		241091.7355	0	79350.83121		0	0.26023341
Summer	TOG_STREX	0.162536801	0	0	3965.955178	3071.453276	0	159342.8081	241091.7355	0	79350.83121	29880.3719	0	0.118074597

Winter	CH4_IDLEX	0.196705383	0.038115764	0	3965.955178	3071.453276	0	159342.8081	241091.7355	0	79350.83121 29880	).3719 (	0.008213729
Winter	CH4_RUNEX	0.011558427	0.000516214	0	3965.955178	3071.453276	0	159342.8081	241091.7355	0	79350.83121 29880	).3719 (	0.004910183
Winter	CH4_STREX	0.029685943	0	0	3965.955178	3071.453276	0	159342.8081	241091.7355	0	79350.83121 29880	).3719 (	<b>0.021565305</b>
Winter	CO_IDLEX	5.762509755	14.54548275	0	3965.955178	3071.453276	0	159342.8081	241091.7355	0	79350.83121 29880	).3719 (	<b>0.618226515</b>
Winter	CO_RUNEX	1.356403394	0.11921052	0	3965.955178	3071.453276	0	159342.8081	241091.7355	0	79350.83121 29880	).3719 (	<b>0.611520162</b>
Winter	CO_STREX	3.259664251	0	0	3965.955178	3071.453276	0	159342.8081	241091.7355	0	79350.83121 29880	).3719 (	<b>2.367977834</b>
Winter	CO2_NBIO_IDLEX	375.5069578	2772.322474	0	3965.955178	3071.453276	0	159342.8081	241091.7355	0	79350.83121 29880	).3719 (	91.58832294
Winter	CO2_NBIO_RUNEX	1676.594982	1143.605491	0	3965.955178	3071.453276	0	159342.8081	241091.7355	0	79350.83121 29880	).3719 (	<b>1355.695191</b>
Winter	CO2_NBIO_STREX	26.2515976	0	0	3965.955178	3071.453276	0	159342.8081	241091.7355	0	79350.83121 29880	).3719 (	<b>19.07043071</b>
Winter	NOX_IDLEX	0.064925814	13.21288293	0	3965.955178	3071.453276	0	159342.8081	241091.7355	0	79350.83121 29880	).3719 (	0.373888086
Winter	NOX_RUNEX	0.425823091	1.615544285	0	3965.955178	3071.453276	0	159342.8081	241091.7355	0	79350.83121 29880	).3719 (	<b>1.142124799</b>
Winter	NOX_STREX	0.32370947	2.209292637	0	3965.955178	3071.453276	0	159342.8081	241091.7355	0	79350.83121 29880	).3719 (	<b>0.839513789</b>
Winter	PM10_IDLEX	0	0.004849561	0	3965.955178	3071.453276	0	159342.8081	241091.7355	0	79350.83121 29880	).3719 (	0.000136364
Winter	PM10_PMBW	0.130340037	0.130340037	0	3965.955178	3071.453276	0	159342.8081	241091.7355	0	79350.83121 29880	).3719 (	0.130340037
Winter	PM10_PMTW	0.012000003	0.012000003	0	3965.955178	3071.453276	0	159342.8081	241091.7355	0	79350.83121 29880	).3719 (	0.012000003
Winter	PM10_RUNEX	0.00099627	0.011112634	0	3965.955178	3071.453276	0	159342.8081	241091.7355	0	79350.83121 29880	).3719 (	0.007087082
Winter	PM10_STREX	0.000275325	0	0	3965.955178	3071.453276	0	159342.8081	241091.7355	0	79350.83121 29880	).3719 (	0.000200009
Winter	PM25_IDLEX	0	0.004639771	0	3965.955178	3071.453276	0	159342.8081	241091.7355	0	79350.83121 29880	).3719 (	0.000130465
Winter	PM25_PMBW	0.055860016	0.055860016	0	3965.955178	3071.453276	0	159342.8081	241091.7355	0	79350.83121 29880	).3719 (	0.055860016
Winter	PM25_PMTW	0.003000001	0.003000001	0	3965.955178	3071.453276	0	159342.8081	241091.7355	0	79350.83121 29880	).3719 (	0.003000001
Winter	PM25_RUNEX	0.000916033	0.010631906	0	3965.955178	3071.453276	0	159342.8081	241091.7355	0	79350.83121 29880	).3719 (	<b>0.00676572</b>
Winter	PM25_STREX	0.000253151	0	0	3965.955178	3071.453276	0	159342.8081	241091.7355	0	79350.83121 29880	).3719 (	0.000183901
Winter	ROG_DIURN	0.052670528	0	0	3965.955178	3071.453276	0	159342.8081	241091.7355	0	79350.83121 29880	).3719 (	0.001912356
Winter	ROG_HTSK	0.032469607	0	0	3965.955178	3071.453276	0	159342.8081	241091.7355	0	79350.83121 29880	).3719 (	0.023587494
Winter	ROG_IDLEX	0.744264948	0.820621955	0	3965.955178	3071.453276	0	159342.8081	241091.7355	0	79350.83121 29880	).3719 (	0.050097621
Winter	ROG_RESTL	0.02563537	0	0	3965.955178	3071.453276	0	159342.8081	241091.7355	0	79350.83121 29880	).3719 (	0.000930766
Winter	ROG_RUNEX	0.055355635	0.011113939	0	3965.955178	3071.453276	0	159342.8081	241091.7355	0	79350.83121 29880	).3719 (	0.028718804
Winter	ROG_RUNLS	0.394086768	0	0	3965.955178	3071.453276	0	159342.8081	241091.7355	0	79350.83121 29880	).3719 (	0.286283696
Winter	ROG_STREX	0.156138596	0	0	3965.955178	3071.453276	0	159342.8081	241091.7355	0	79350.83121 29880	).3719 (	0.113426631
Winter	SO2_IDLEX	0.003715946	0.026191528	0	3965.955178	3071.453276	0	159342.8081	241091.7355	0	79350.83121 29880	).3719 (	0.000871393
Winter	SO2_RUNEX	0.016591266	0.010804218	0	3965.955178	3071.453276	0	159342.8081	241091.7355	0	79350.83121 29880	).3719 (	<b>0.013107027</b>
Winter	SO2_STREX	0.000259781	0	0	3965.955178	3071.453276	0	159342.8081	241091.7355	0	79350.83121 29880	).3719 (	0.000188717
Winter	TOG_DIURN	0.052670528	0	0	3965.955178	3071.453276	0	159342.8081	241091.7355	0	79350.83121 29880	).3719 (	0.001912356
Winter	TOG_HTSK	0.032469607	0	0	3965.955178	3071.453276	0	159342.8081	241091.7355	0	79350.83121 29880	).3719 (	0.023587494
Winter	TOG_IDLEX	1.086029665	0.934215629	0	3965.955178	3071.453276	0	159342.8081	241091.7355	0	79350.83121 29880	).3719 (	0.0657005
Winter	TOG_RESTL	0.02563537	0	0	3965.955178	3071.453276	0	159342.8081	241091.7355	0	79350.83121 29880	).3719 (	0.000930766
Winter	TOG_RUNEX	0.080774813	0.012652374	0	3965.955178	3071.453276	0	159342.8081	241091.7355	0	79350.83121 29880	).3719 (	0.039759977
Winter	TOG_RUNLS	0.394086768	0	0	3965.955178	3071.453276	0	159342.8081	241091.7355	0	79350.83121 29880	).3719 (	0.286283696
Winter	TOG_STREX	0.17095211	0	0	3965.955178	3071.453276	0	159342.8081	241091.7355	0	79350.83121 29880	).3719 (	<b>0.124187884</b>

# **UBUS CalEEMod Emission Rate Worksheet**

Caa	Dallistant	F	scion Potos	Ve T	hicle Class:		nulation				/N/IT				Tring		Coleenad Carrier
Season	Pollutant	1	ELEC	NG	LIBLIS Gas		pulation	LIDLIS NG	UBUS Gas		/MT UBUS ELEC	UBUS NG	UBUS Gas	UBUS DSL	Trips		CalEEMod Emission
\nnual	CH4 IDLEX	Gas DSL	ם ה		UBUS Gas 463.323	10.1389	UBUS ELEC				1070.403311			40.5556	UBUS ELEC	UBUS NG 16615.3633	Rate 0
Annual	_	0.005935 0.08113529	0 0 6 2 1	6170605		10.1389	12							40.5556	48 40		5.84574037
Annual	CH4_RUNEX		3 0 6.31				12				1070.403311				48	16615.3633	
Annual	CH4_STREX	0.10703	0		463.323	10.1389	12				1070.403311			40.5556	48	16615.3633	0.01068898
Annual	CO_IDLEX	0 252420 0 42002720	0 10 0		463.323	10.1389	12				1070.403311			40.5556	48	16615.3633	0
Annual	CO_RUNEX	0.353128 0.13803729	3 0 49.0	5647108		10.1389	12				1070.403311			40.5556	48	16615.3633	45.42294998
Annual	CO_STREX	7.149494	0 -		463.323	10.1389	12				1070.403311			40.5556	48	16615.3633	0.71401354
Annual	CO2_NBIO_IDLEX	0	0		463.323	10.1389	12				1070.403311			40.5556	48	16615.3633	0
Annual	CO2_NBIO_RUNEX	1971.494 1797.11775	5 0 1994	4.586074		10.1389	12				1070.403311			40.5556	48	16615.3633	1987.989064
Annual	CO2_NBIO_STREX	84.30558	0 0		463.323	10.1389	12				1070.403311			40.5556	48	16615.3633	8.419522882
Annual	NOX_IDLEX	0	0 0	0	463.323	10.1389	12				1070.403311			40.5556	48	16615.3633	0
Annual	NOX_RUNEX	0.27315 0.83239174	4 0 0.48	3023705		10.1389	12	4153.840831	33183.97	1181.230112	1070.403311	439713.485	1853.292	40.5556	48	16615.3633	0.468146746
Annual	NOX_STREX	0.809746	0	0	463.323	10.1389	12	4153.840831	33183.97	1181.230112	1070.403311	439713.485	1853.292	40.5556	48	16615.3633	0.080868616
Annual	PM10_IDLEX	0	0 0	0	463.323	10.1389	12	4153.840831	33183.97	1181.230112	1070.403311	439713.485	1853.292	40.5556	48	16615.3633	0
Annual	PM10_PMBW	0.123562 0.06174003	7 0.130340079 0.06	8729498	463.323	10.1389	12	4153.840831	33183.97	1181.230112	1070.403311	439713.485	1853.292	40.5556	48	16615.3633	0.07268035
Annual	PM10_PMTW	0.011341 0.03600002	2 0.012000007 0.03	3462558	463.323	10.1389	12	4153.840831	33183.97	1181.230112	1070.403311	439713.485	1853.292	40.5556	48	16615.3633	0.031875586
Annual	PM10_RUNEX	0.001438 0.00613741	0 0.00	3340054	463.323	10.1389	12	4153.840831	33183.97	1181.230112	1070.403311	439713.485	1853.292	40.5556	48	16615.3633	0.003206676
Annual	PM10_STREX	0.000566	0	0	463.323	10.1389	12	4153.840831	33183.97	1181.230112	1070.403311	439713.485	1853.292	40.5556	48	16615.3633	5.65688E-05
Annual	PM25_IDLEX	0	0 0	0	463.323	10.1389	12	4153.840831	33183.97	1181.230112	1070.403311	439713.485	1853.292	40.5556	48	16615.3633	0
Annual	PM25 PMBW	0.052955 0.02646001	6 0.055860034 0.02	9455499	463.323	10.1389	12	4153.840831	33183.97	1181.230112	1070.403311	439713.485	1853.292	40.5556	48	16615.3633	0.031148721
Annual	PM25 PMTW	0.002835 0.00900000	5 0.003000002 0.00	8365639	463.323	10.1389	12	4153.840831	33183.97	1181.230112	1070.403311	439713.485	1853.292	40.5556	48	16615.3633	0.007968897
Annual	PM25 RUNEX	0.001323  0.00587191		3195565		10.1389	12				1070.403311			40.5556	48	16615.3633	0.003064211
Annual	PM25_STREX	0.000521	0 0.00		463.323	10.1389	12				1070.403311			40.5556	48	16615.3633	5.20129E-05
Annual	ROG_DIURN	0.021899	) n		463.323	10.1389	12				1070.403311			40.5556	48	16615.3633	0.000593315
	ROG_HTSK	0.074227	)		463.323	10.1389	12				1070.403311			40.5556	48 48	16615.3633	0.000393313
nnual	<del>-</del>	0.074227 A	0 n 0			10.1389									_		
Annual	ROG_IDLEX	U 0.017370	U 0		463.323		12				1070.403311			40.5556	48 40	16615.3633	0 000433016
nnual	ROG_RESTL	0.017379	U U		463.323	10.1389	12				1070.403311			40.5556	48	16615.3633	0.000433916
nnual	ROG_RUNEX	0.019732 0.00115926	0 0.09	0534841		10.1389	12				1070.403311			40.5556	48	16615.3633	0.08516391
Annual	ROG_RUNLS	0.471373	0		463.323	10.1389	12				1070.403311			40.5556	48	16615.3633	0.047075609
Annual	ROG_STREX	0.462747	0		463.323	10.1389	12				1070.403311			40.5556	48	16615.3633	0.046214101
Annual	SO2_IDLEX	0	0 0		463.323	10.1389	12				1070.403311			40.5556	48	16615.3633	0
nnual	SO2_RUNEX	0.01951 0.01698922	6 0	0	463.323	10.1389	12	4153.840831	33183.97	1181.230112	1070.403311	439713.485	1853.292	40.5556	48	16615.3633	0.001404763
nnual	SO2_STREX	0.000834	0	0	463.323	10.1389	12	4153.840831	33183.97	1181.230112	1070.403311	439713.485	1853.292	40.5556	48	16615.3633	8.3318E-05
nnual	TOG_DIURN	0.021899	0 0	0	463.323	10.1389	12	4153.840831	33183.97	1181.230112	1070.403311	439713.485	1853.292	40.5556	48	16615.3633	0.000593315
nnual	TOG_HTSK	0.074227	0 0	0	463.323	10.1389	12	4153.840831	33183.97	1181.230112	1070.403311	439713.485	1853.292	40.5556	48	16615.3633	0.007412956
nnual	TOG_IDLEX	0	0 0	0	463.323	10.1389	12	4153.840831	33183.97	1181.230112	1070.403311	439713.485	1853.292	40.5556	48	16615.3633	0
nnual	TOG RESTL	0.017379	0 0	0	463.323	10.1389	12	4153.840831	33183.97	1181.230112	1070.403311	439713.485	1853.292	40.5556	48	16615.3633	0.000433916
nnual	TOG RUNEX	0.028793 0.08280451	7 0 6.44	6431142	463.323	10.1389	12	4153.840831	33183.97	1181.230112	1070.403311	439713.485	1853.292	40.5556	48	16615.3633	5.967886883
nnual	TOG_RUNLS	0.471373	0		463.323	10.1389	12				1070.403311			40.5556	48	16615.3633	0.047075609
Annual	TOG_STREX	0.506649	0 0		463.323	10.1389	12				1070.403311			40.5556	48	16615.3633	0.050598624
Summer	CH4 IDLEX	0	0 0		463.323	10.1389	12				1070.403311			40.5556	48	16615.3633	0
Summer	CH4_IDEEX	0.006077 0.08113529	0 3 0 6 3 1	6170605		10.1389	12				1070.403311			40.5556	48	16615.3633	5.845750263
	_		0 0.31		463.323	10.1389					1070.403311			40.5556	48	16615.3633	0.009936739
Summer	CH4_STREX	0.099498	0				12										
Summer	CO_IDLEX	0.20007 0.42002720	0 40.0		463.323	10.1389	12				1070.403311			40.5556	48	16615.3633	0
Summer	CO_RUNEX	0.360097 0.13803729	0 49.0	5647108		10.1389	12				1070.403311			40.5556	48	16615.3633	45.42343671
Summer	CO_STREX	6.293354	0		463.323	10.1389	12				1070.403311			40.5556	48	16615.3633	0.628511654
Summer	CO2_NBIO_IDLEX	0	0		463.323	10.1389	12				1070.403311			40.5556	48	16615.3633	0
ummer	CO2_NBIO_RUNEX	1971.506 1797.11775	5 0 1994	4.586074		10.1389	12				1070.403311			40.5556	48	16615.3633	1987.989956
ummer	CO2_NBIO_STREX	82.83349	0 0		463.323	10.1389	12				1070.403311			40.5556	48	16615.3633	8.272506417
Summer	NOX_IDLEX	0	0 0	0	463.323	10.1389	12	4153.840831	33183.97	1181.230112	1070.403311	439713.485	1853.292	40.5556	48	16615.3633	0
ummer	NOX_RUNEX	0.240515  0.83239174	0 0.48	3010528	463.323	10.1389	12	4153.840831	33183.97	1181.230112	1070.403311	439713.485	1853.292	40.5556	48	16615.3633	0.465855355
ummer	NOX_STREX	0.774383	0 0	0	463.323	10.1389	12	4153.840831	33183.97	1181.230112	1070.403311	439713.485	1853.292	40.5556	48	16615.3633	0.077336951
Summer	PM10_IDLEX	0	0 0	0	463.323	10.1389	12	4153.840831	33183.97	1181.230112	1070.403311	439713.485	1853.292	40.5556	48	16615.3633	0
ummer	PM10_PMBW	0.123562  0.06174003	7 0.130340079 0.06	8729498	463.323	10.1389	12	4153.840831	33183.97	1181.230112	1070.403311	439713.485	1853.292	40.5556	48	16615.3633	0.07268035
ummer	PM10_PMTW	0.011341 0.03600002	2 0.012000007 0.03	3462558	463.323	10.1389	12	4153.840831	33183.97	1181.230112	1070.403311	439713.485	1853.292	40.5556	48	16615.3633	0.03187558
ummer	PM10_RUNEX	0.001438 0.00613741	0 0.00	3340054	463.323	10.1389	12	4153.840831	33183.97	1181.230112	1070.403311	439713.485	1853.292	40.5556	48	16615.3633	0.003206676
ummer	PM10_STREX	0.000566	0	0	463.323	10.1389	12	4153.840831	33183.97	1181.230112	1070.403311	439713.485	1853.292	40.5556	48	16615.3633	5.65688E-05
ummer	PM25_IDLEX	0	0 0		463.323	10.1389	12				1070.403311			40.5556	48	16615.3633	0
ummer	PM25_PMBW	0.052955 0.02646001	6 0.055860034 0.02			10.1389	12				1070.403311			40.5556	48	16615.3633	0.031148721
	PM25_PMTW	0.002835 0.009000000				10.1389	12				1070.403311			40.5556	48	16615.3633	0.00796889
ummer	PM25_RUNEX	0.001323 0.00587191		3195565		10.1389	12				1070.403311			40.5556	48	16615.3633	0.003064213
Summer	PM25_STREX	0.000521	) 0.50		463.323	10.1389	12				1070.403311			40.5556	48	16615.3633	5.20129E-05
ummer	ROG DIURN	0.031771	)		463.323	10.1389	12				1070.403311			40.5556	48 48	16615.3633	0.00086078
	ROG_HTSK	0.076682	) O		463.323	10.1389					1070.403311			40.5556	48 48	16615.3633	0.007658142
ummer	_		0 n o				12 12										_
ummer	ROG_IDLEX	0 024025	0 n o		463.323	10.1389	12				1070.403311			40.5556	48	16615.3633	0 00050084
ummer	ROG_RESTL	0.024025	U 0		463.323	10.1389	12				1070.403311			40.5556	48	16615.3633	0.00059984
ummer	ROG_RUNEX	0.020133 0.00115926	o 0.09	0534841		10.1389	12				1070.403311			40.5556	48	16615.3633	0.08519189
ummer	ROG_RUNLS	0.426835	U 0		463.323	10.1389	12				1070.403311			40.5556	48	16615.3633	0.04262766
ummer	ROG_STREX	0.428472	0		463.323	10.1389	12				1070.403311			40.5556	48	16615.3633	0.04279112
ummer	SO2_IDLEX	0	0 0		463.323	10.1389	12				1070.403311			40.5556	48	16615.3633	0
ummer	SO2_RUNEX	0.01951 0.01698922	6 0	0	463.323	10.1389	12	4153.840831	33183.97	1181.230112	1070.403311	439713.485	1853.292	40.5556	48	16615.3633	0.00140477
ummer	SO2_STREX	0.00082	0 0	0	463.323	10.1389	12	4153.840831	33183.97	1181.230112	1070.403311	439713.485	1853.292	40.5556	48	16615.3633	8.18632E-0
ummer	TOG_DIURN	0.031771	0 0	0	463.323	10.1389	12	4153.840831	33183.97	1181.230112	1070.403311	439713.485	1853.292	40.5556	48	16615.3633	0.00086078
ummer	TOG_HTSK	0.076682	0 0		463.323	10.1389	12				1070.403311			40.5556	48	16615.3633	0.00765814
Summer	TOG_IDLEX	0	0 0		463.323	10.1389	12				1070.403311			40.5556	48	16615.3633	0
Summer	TOG_RESTL	0.024025	0 0		463.323	10.1389	12				1070.403311			40.5556	48	16615.3633	0.00059984
Summer	TOG RUNEX	0.029378  0.08280451	7 N 6.44	6431142		10.1389	12				1070.403311			40.5556	48	16615.3633	5.967927724
Summer	TOG_RUNLS	0.426835	) 0. <del>11</del>		463.323	10.1389	12				1070.403311			40.5556	48	16615.3633	0.042627667
arrille(	TOG_KUNLS TOG_STREX	0.469123	0 n 0														0.04282788
Summer	1/1/- 61050	114091/3	0	U	463.323	10.1389	12	4133.64U831	აა⊥ბა.9/	1101.230112	1070.403311	4J7/13.485	1003.292	40.5556	48	16615.3633	U.U4085U8 <sup>C</sup>

Winter	CH4 IDLEX	0	0	0	0	463.323	10.1389	12	4153.840831	33183.97	1181.230112	1070.403311	439713.485	1853.292	40.5556	48	16615.3633	0
Winter	CH4 RUNEX	_	0.081135293	0	6.316170605		10.1389	12				1070.403311			40.5556	48	16615.3633	5.845737963
Winter	CH4 STREX	0.108732	0	0		463.323	10.1389	12				1070.403311			40.5556	48	16615.3633	0.010858959
Winter	CO IDLEX	0	0	0		463.323	10.1389	12				1070.403311			40.5556	48	16615.3633	0
Winter	CO RUNEX	0.351388	0.138037293	0	49.05647108		10.1389	12				1070.403311			40.5556	48	16615.3633	45.42282845
Winter	 CO_STREX	7.320135	0	0	0	463.323	10.1389	12	4153.840831	33183.97	1181.230112	1070.403311	439713.485	1853.292	40.5556	48	16615.3633	0.731055293
Winter	CO2_NBIO_IDLEX	0	0	0	0	463.323	10.1389	12	4153.840831	33183.97	1181.230112	1070.403311	439713.485	1853.292	40.5556	48	16615.3633	0
Winter	CO2_NBIO_RUNEX	1971.491	1797.117755	0	1994.586074	463.323	10.1389	12	4153.840831	33183.97	1181.230112	1070.403311	439713.485	1853.292	40.5556	48	16615.3633	1987.988841
Winter	CO2_NBIO_STREX	84.60211	0	0	0	463.323	10.1389	12	4153.840831	33183.97	1181.230112	1070.403311	439713.485	1853.292	40.5556	48	16615.3633	8.449136273
Winter	NOX_IDLEX	0	0	0	0	463.323	10.1389	12	4153.840831	33183.97	1181.230112	1070.403311	439713.485	1853.292	40.5556	48	16615.3633	0
Winter	NOX_RUNEX	0.266225	0.832391744	0	0.48301912	463.323	10.1389	12	4153.840831	33183.97	1181.230112	1070.403311	439713.485	1853.292	40.5556	48	16615.3633	0.467658858
Winter	NOX_STREX	0.817904	0	0	0	463.323	10.1389	12	4153.840831	33183.97	1181.230112	1070.403311	439713.485	1853.292	40.5556	48	16615.3633	0.081683312
Winter	PM10_IDLEX	0	0	0	0	463.323	10.1389	12	4153.840831	33183.97	1181.230112	1070.403311	439713.485	1853.292	40.5556	48	16615.3633	0
Winter	PM10_PMBW	0.123562	0.061740037	0.130340079	0.068729498	463.323	10.1389	12	4153.840831	33183.97	1181.230112	1070.403311	439713.485	1853.292	40.5556	48	16615.3633	0.07268035
Winter	PM10_PMTW	0.011341	0.036000022	0.012000007	0.033462558	463.323	10.1389	12	4153.840831	33183.97	1181.230112	1070.403311	439713.485	1853.292	40.5556	48	16615.3633	0.031875586
Winter	PM10_RUNEX	0.001438	0.006137414	0	0.003340054	463.323	10.1389	12	4153.840831	33183.97	1181.230112	1070.403311	439713.485	1853.292	40.5556	48	16615.3633	0.003206676
Winter	PM10_STREX	0.000566	0	0	0	463.323	10.1389	12	4153.840831	33183.97	1181.230112	1070.403311	439713.485	1853.292	40.5556	48	16615.3633	5.65688E-05
Winter	PM25_IDLEX	0	0	0	0	463.323	10.1389	12	4153.840831	33183.97	1181.230112	1070.403311	439713.485	1853.292	40.5556	48	16615.3633	0
Winter	PM25_PMBW	0.052955	0.026460016	0.055860034	0.029455499	463.323	10.1389	12	4153.840831	33183.97	1181.230112	1070.403311	439713.485	1853.292	40.5556	48	16615.3633	0.031148721
Winter	PM25_PMTW	0.002835	0.009000005	0.003000002	0.008365639	463.323	10.1389	12	4153.840831	33183.97	1181.230112	1070.403311	439713.485	1853.292	40.5556	48	16615.3633	0.007968897
Winter	PM25_RUNEX	0.001323	0.005871913	0	0.003195565	463.323	10.1389	12	4153.840831	33183.97	1181.230112	1070.403311	439713.485	1853.292	40.5556	48	16615.3633	0.003064211
Winter	PM25_STREX	0.000521	0	0	0	463.323	10.1389	12	4153.840831	33183.97	1181.230112	1070.403311	439713.485	1853.292	40.5556	48	16615.3633	5.20129E-05
Winter	ROG_DIURN	0.021523	0	0	0	463.323	10.1389	12	4153.840831	33183.97	1181.230112	1070.403311	439713.485	1853.292	40.5556	48	16615.3633	0.000583122
Winter	ROG_HTSK	0.079517	0	0	0	463.323	10.1389	12	4153.840831	33183.97	1181.230112	1070.403311	439713.485	1853.292	40.5556	48	16615.3633	0.00794126
Winter	ROG_IDLEX	0	0	0	0	463.323	10.1389	12	4153.840831	33183.97	1181.230112	1070.403311	439713.485	1853.292	40.5556	48	16615.3633	0
Winter	ROG_RESTL	0.016531	0	0	0	463.323	10.1389	12	4153.840831	33183.97	1181.230112	1070.403311	439713.485	1853.292	40.5556	48	16615.3633	0.000412734
Winter	ROG_RUNEX	0.019632	0.001159263	0	0.090534841	463.323	10.1389	12	4153.840831	33183.97	1181.230112	1070.403311	439713.485	1853.292	40.5556	48	16615.3633	0.085156923
Winter	ROG_RUNLS	0.575533	0	0	0	463.323	10.1389	12	4153.840831	33183.97	1181.230112	1070.403311	439713.485	1853.292	40.5556	48	16615.3633	0.057477914
Winter	ROG_STREX	0.470506	0	0	0	463.323	10.1389	12	4153.840831	33183.97	1181.230112	1070.403311	439713.485	1853.292	40.5556	48	16615.3633	0.046988976
Winter	SO2_IDLEX	0	0	0	0	463.323	10.1389	12	4153.840831	33183.97	1181.230112	1070.403311	439713.485	1853.292	40.5556	48	16615.3633	0
Winter	SO2_RUNEX	0.019509	0.016989226	0	0	463.323	10.1389	12	4153.840831	33183.97	1181.230112	1070.403311	439713.485	1853.292	40.5556	48	16615.3633	0.00140476
Winter	SO2_STREX	0.000837	0	0	0	463.323	10.1389	12	4153.840831	33183.97	1181.230112	1070.403311	439713.485	1853.292	40.5556	48	16615.3633	8.36111E-05
Winter	TOG_DIURN	0.021523	0	0	0	463.323	10.1389	12	4153.840831	33183.97	1181.230112	1070.403311	439713.485	1853.292	40.5556	48	16615.3633	0.000583122
Winter	TOG_HTSK	0.079517	0	0	0	463.323	10.1389	12	4153.840831	33183.97	1181.230112	1070.403311	439713.485	1853.292	40.5556	48	16615.3633	0.00794126
Winter	TOG_IDLEX	0	0	0	0	463.323	10.1389	12	4153.840831	33183.97	1181.230112	1070.403311	439713.485	1853.292	40.5556	48	16615.3633	0
Winter	TOG_RESTL	0.016531	0	0	0	463.323	10.1389	12	4153.840831	33183.97	1181.230112	1070.403311	439713.485	1853.292	40.5556	48	16615.3633	0.000412734
Winter	TOG_RUNEX	0.028647	0.082804517	0	6.446431142	463.323	10.1389	12	4153.840831	33183.97	1181.230112	1070.403311	439713.485	1853.292	40.5556	48	16615.3633	5.967876688
Winter	TOG_RUNLS	0.575533	0	0	0	463.323	10.1389	12	4153.840831	33183.97	1181.230112	1070.403311	439713.485	1853.292	40.5556	48	16615.3633	0.057477914
Winter	TOG_STREX	0.515144	0	0	0	463.323	10.1389	12	4153.840831	33183.97	1181.230112	1070.403311	439713.485	1853.292	40.5556	48	16615.3633	0.051447015

#### **MCY CalEEMod Emission Rate Worksheet**

Vehicle Class: MCY **Emission Rates Pollutant Population** VMT Trips **CalEEMod Emission** Season DSL NG MCY Gas MCY Gas MCY DSL MCY NG MCY Gas MCY DSL MCY NG Gas MCY DSL MCY NG Rate 0 0 CH4\_IDLEX 0 0 183955.3723 0 0 1265084.637 0 0 367910.7446 0 Annual 0 Annual CH4\_RUNEX 0.379382844 0 0 183955.3723 0 0 1265084.637 0 0 367910.7446 0 0 0.379382844 Annual CH4\_STREX 0.233318482 0 0 183955.3723 0 0 1265084.637 0 0 367910.7446 0 0.233318482 CO\_IDLEX 0 Annual 0 0 183955.3723 0 0 1265084.637 0 367910.7446 0 0 0 367910.7446 CO\_RUNEX 18.86091778 0 183955.3723 0 0 1265084.637 0 0 18.86091778 Annual 0 0 0 0 CO\_STREX 8.542730814 n 0 1265084.637 0 367910.7446 0 8.542730814 Annual 0 183955.3723 CO2\_NBIO\_IDLEX 0 0 1265084.637 0 367910.7446 0 0 0 183955.3723 0 0 Annual CO2\_NBIO\_RUNEX 0 0 223.6496781 Annual 223.6496781 0 0 183955.3723 0 1265084.637 0 367910.7446 0 CO2\_NBIO\_STREX 59.20770664 0 183955.3723 0 0 1265084.637 0 367910.7446 0 59.20770664 Annual Annual NOX\_IDLEX 0 0 183955.3723 0 0 1265084.637 0 0 367910.7446 0 0 0 NOX\_RUNEX 1.130902754 0 0 0 1.130902754 Annual 0 0 183955.3723 1265084.637 0 367910.7446 NOX\_STREX 0 0 0 0 0.263694617 0.263694617 0 0 183955.3723 1265084.637 0 367910.7446 0 Annual 0 PM10\_IDLEX 0 0 183955.3723 0 0 1265084.637 0 367910.7446 0 0 Annual PM10\_PMBW 0.011760003 0 0 183955.3723 0 0 1265084.637 0 367910.7446 0 0.011760003 Annual 0 Annual PM10 PMTW 0.004000001 0 0 183955.3723 0 0 1265084.637 0 367910.7446 0 0 0.004000001 0 PM10 RUNEX 0.002479827 0 0 183955.3723 0 0 1265084.637 0 367910.7446 0 0.002479827 Annual PM10 STREX 0 0 Annual 0.003154505 0 0 183955.3723 0 1265084.637 0 367910.7446 0 0 0.003154505 1265084.637 PM25\_IDLEX 0 0 183955.3723 0 0 0 0 367910.7446 0 0 Annual 0 PM25\_PMBW 0.005040001 0 0.005040001 Annual 0 0 183955.3723 0 0 1265084.637 0 367910.7446 0 0 PM25 PMTW 0.001 0 0 183955.3723 0 0 1265084.637 0 367910.7446 0 0.001 Annual 0 0 PM25\_RUNEX 0 0 0.002315976 Annual 0.002315976 0 0 183955.3723 1265084.637 0 367910.7446 0 PM25 STREX 0 0 1265084.637 0 0 0.002964598 0 0 183955.3723 0 367910.7446 0.002964598 Annual 0 Annual ROG\_DIURN 2.147617142 0 0 183955.3723 0 0 1265084.637 0 0 367910.7446 0 0 1.073808571 Annual ROG\_HTSK 0.636259398 0 0 183955.3723 0 0 1265084.637 0 0 367910.7446 0 0 0.636259398 0 183955.3723 367910.7446 ROG\_IDLEX 0 0 1265084.637 0 0 Annual 0 0 0 0 1265084.637 0 Annual ROG\_RESTL 1.306070834 0 0 183955.3723 0 0 367910.7446 0 0.653035417 2.59571644 0 183955.3723 0 0 1265084.637 0 367910.7446 ROG\_RUNEX 0 0 0 2.59571644 Annual 0 0 0 0 0 ROG\_RUNLS 0 0 183955.3723 1265084.637 0 367910.7446 0 1.884499023 Annual 1.884499023 ROG\_STREX 1.802173619 0 0 183955.3723 0 0 1265084.637 0 0 367910.7446 0 1.802173619 Annual 0 Annual SO2\_IDLEX 0 0 0 183955.3723 0 0 1265084.637 0 0 367910.7446 0 0 0 0 0 Annual SO2 RUNEX 0.002213195 0 0 183955.3723 0 1265084.637 0 367910.7446 0 0.002213195 SO2\_STREX 0 0 0 Annual 0.000585908 0 0 183955.3723 1265084.637 0 367910.7446 0 0 0.000585908 0 0 0 TOG\_DIURN 0 1265084.637 0 367910.7446 0 2.147617142 0 183955.3723 0 1.073808571 Annual TOG\_HTSK 0.636259398 0 183955.3723 0 0 1265084.637 0 367910.7446 0 0.636259398 Annual 0 0 0 0 0 Annual TOG\_IDLEX 0 0 0 183955.3723 0 1265084.637 0 367910.7446 0 0 TOG\_RESTL 1.306070834 0 183955.3723 0 0 1265084.637 0 367910.7446 0 0.653035417 Annual Annual TOG\_RUNEX 3.233020035 0 0 183955.3723 0 0 1265084.637 0 0 367910.7446 0 3.233020035 0 0 0 0 0 Annual TOG\_RUNLS 1.884499023 0 0 183955.3723 1265084.637 367910.7446 0 1.884499023 1.961864744 TOG\_STREX 0 1.961864744 0 0 183955.3723 0 0 1265084.637 0 367910.7446 0 Annual 0 CH4\_IDLEX 0 0 183955.3723 0 0 1265084.637 0 0 367910.7446 0 0 0 Summer 0 CH4\_RUNEX 0 1265084.637 0 0.372699289 Summer 0.372699289 0 0 183955.3723 0 367910.7446 0 CH4\_STREX 0 0.208745074 0 0 183955.3723 0 0 1265084.637 0 367910.7446 0 0 0.208745074 Summer CO\_IDLEX 0 0 0 0 0 0 0 Summer 0 183955.3723 1265084.637 367910.7446 0 18.14789314 0 18.14789314 CO\_RUNEX 0 0 183955.3723 0 0 1265084.637 0 367910.7446 0 0 Summer CO\_STREX 7.771761569 0 0 183955.3723 0 0 1265084.637 0 0 367910.7446 0 7.771761569 Summer 0 CO2\_NBIO\_IDLEX 0 0 Summer 0 0 183955.3723 0 1265084.637 0 367910.7446 0 0 CO2\_NBIO\_RUNEX 222.3036407 0 183955.3723 0 0 1265084.637 0 367910.7446 0 222.3036407 Summer 0 0 0 CO2\_NBIO\_STREX 57.31840101 0 0 1265084.637 0 57.31840101 Summer 0 0 183955.3723 0 367910.7446 0 NOX\_IDLEX 0 0 0 0 0 183955.3723 0 1265084.637 0 367910.7446 0 0 0 Summer NOX\_RUNEX 0.988257287 0 0 183955.3723 0 0 1265084.637 0 0 367910.7446 0 0 0.988257287 Summer 0 0 Summer NOX\_STREX 0.250023295 0 183955.3723 1265084.637 367910.7446 0.250023295 PM10\_IDLEX Summer 0 0 183955.3723 0 0 1265084.637 0 0 367910.7446 0 0 0 PM10 PMBW Summer 0.011760003 0 0 183955.3723 0 0 1265084.637 0 0 367910.7446 0 0 0.011760003 0.004000001 PM10\_PMTW 0 0 0.004000001 0 0 183955.3723 0 1265084.637 0 367910.7446 0 0 Summer PM10\_RUNEX 0.002479827 0 183955.3723 0 0 367910.7446 0 0.002479827 0 0 1265084.637 0 Summer PM10\_STREX 0.003154505 0 0 1265084.637 0 367910.7446 0 0.003154505 Summer 0 0 183955.3723 0 Summer PM25\_IDLEX 0 0 0 183955.3723 0 0 1265084.637 0 0 367910.7446 0 0 PM25 PMBW Summer 0.005040001 0 0 183955.3723 0 0 1265084.637 0 367910.7446 0 0.005040001 PM25 PMTW 0 183955.3723 0.001 0 1265084.637 0 367910.7446 0 0.001 Summer 0 0 0 0 PM25 RUNEX 0 0 0 367910.7446 0 0.002315976 Summer 0.002315976 0 0 183955.3723 1265084.637 0 PM25\_STREX 0 0 1265084.637 0 367910.7446 0 0.002964598 Summer 0.002964598 0 0 183955.3723 0 ROG\_DIURN 0 0 Summer 3.41252855 0 0 183955.3723 0 1265084.637 0 367910.7446 0 1.706264275 ROG\_HTSK 0.693490901 0 0 183955.3723 0 0 1265084.637 0 367910.7446 0 0.693490901 Summer Summer ROG\_IDLEX 0 0 183955.3723 0 0 1265084.637 0 0 367910.7446 0 0 0 1.050144214 0 0 0 367910.7446 0 Summer ROG RESTL 2.100288428 0 0 183955.3723 1265084.637 0 0 ROG\_RUNEX 2.535961312 0 0 0 1265084.637 0 367910.7446 0 2.535961312 Summer 0 183955.3723 1.762382991 ROG\_RUNLS 0 0 183955.3723 0 0 1265084.637 0 0 367910.7446 0 1.762382991 Summer ROG\_STREX 1.60149276 0 0 367910.7446 1.60149276 Summer 0 0 183955.3723 0 1265084.637 0 1265084.637 367910.7446 SO2\_IDLEX 0 0 183955.3723 0 0 0 0 0 0 0 Summer SO2\_RUNEX 0.002199875 0 0 1265084.637 0 367910.7446 0 0.002199875 Summer 0 0 183955.3723 0 Summer SO2\_STREX 0.000567212 0 0 183955.3723 0 0 1265084.637 0 0 367910.7446 0 0.000567212 Summer TOG\_DIURN 3.41252855 0 0 0 0 0 367910.7446 0 0 183955.3723 1265084.637 0 1.706264275 Summer TOG\_HTSK 0.693490901 0 0 183955.3723 0 0 1265084.637 0 0 367910.7446 0 0.693490901 TOG\_IDLEX 0 0 183955.3723 0 0 1265084.637 0 367910.7446 0 0 Summer 0 0 TOG\_RESTL 0 0 Summer 2.100288428 0 0 183955.3723 0 1265084.637 0 367910.7446 0 1.050144214 TOG\_RUNEX 0 0 3.160413432 0 0 183955.3723 0 1265084.637 0 367910.7446 0 3.160413432 Summer TOG\_RUNLS 1.762382991 0 0 183955.3723 0 0 1265084.637 0 0 367910.7446 0 1.762382991 Summer Summer TOG\_STREX 1.743464818 0 0 183955.3723 0 0 1265084.637 0 0 367910.7446 0 0 1.743464818 CH4\_IDLEX 0 0 Winter 0 0 0 183955.3723 0 1265084.637 0 367910.7446 0 0 0 0 Winter CH4 RUNEX 0.380859713 0 0 183955.3723 0 0 1265084.637 0 367910.7446 0 0 0.380859713 CH4\_STREX 0.238559736 0 0 1265084.637 0 367910.7446 0 0.238559736 Winter 0 0 183955.3723 0 0 0 0 0 CO\_IDLEX 0 0 1265084.637 0 367910.7446 0 Winter 0 0 183955.3723 0 CO\_RUNEX 19.00212809 0 0 183955.3723 0 0 1265084.637 0 367910.7446 0 19.00212809 Winter 0 0

Winter	CO_STREX	8.692586601	0	0 183955.3723	0	0	1265084.637	0	0	367910.7446	0	0	8.692586601
Winter	CO2_NBIO_IDLEX	0	0	0 183955.3723	0	0	1265084.637	0	0	367910.7446	0	0	0
Winter	CO2_NBIO_RUNEX	223.921164	0	0 183955.3723	0	0	1265084.637	0	0	367910.7446	0	0	223.921164
Winter	CO2_NBIO_STREX	59.58847849	0	0 183955.3723	0	0	1265084.637	0	0	367910.7446	0	0	59.58847849
Winter	NOX_IDLEX	0	0	0 183955.3723	0	0	1265084.637	0	0	367910.7446	0	0	0
Winter	NOX_RUNEX	1.104284242	0	0 183955.3723	0	0	1265084.637	0	0	367910.7446	0	0	1.104284242
Winter	NOX_STREX	0.266917699	0	0 183955.3723	0	0	1265084.637	0	0	367910.7446	0	0	0.266917699
Winter	PM10_IDLEX	0	0	0 183955.3723	0	0	1265084.637	0	0	367910.7446	0	0	0
Winter	PM10_PMBW	0.011760003	0	0 183955.3723	0	0	1265084.637	0	0	367910.7446	0	0	0.011760003
Winter	PM10_PMTW	0.004000001	0	0 183955.3723	0	0	1265084.637	0	0	367910.7446	0	0	0.004000001
Winter	PM10_RUNEX	0.002479827	0	0 183955.3723	0	0	1265084.637	0	0	367910.7446	0	0	0.002479827
Winter	PM10_STREX	0.003154505	0	0 183955.3723	0	0	1265084.637	0	0	367910.7446	0	0	0.003154505
Winter	PM25_IDLEX	0	0	0 183955.3723	0	0	1265084.637	0	0	367910.7446	0	0	0
Winter	PM25_PMBW	0.005040001	0	0 183955.3723	0	0	1265084.637	0	0	367910.7446	0	0	0.005040001
Winter	PM25_PMTW	0.001	0	0 183955.3723	0	0	1265084.637	0	0	367910.7446	0	0	0.001
Winter	PM25_RUNEX	0.002315976	0	0 183955.3723	0	0	1265084.637	0	0	367910.7446	0	0	0.002315976
Winter	PM25_STREX	0.002964598	0	0 183955.3723	0	0	1265084.637	0	0	367910.7446	0	0	0.002964598
Winter	ROG_DIURN	2.334534347	0	0 183955.3723	0	0	1265084.637	0	0	367910.7446	0	0	1.167267173
Winter	ROG_HTSK	0.817638614	0	0 183955.3723	0	0	1265084.637	0	0	367910.7446	0	0	0.817638614
Winter	ROG_IDLEX	0	0	0 183955.3723	0	0	1265084.637	0	0	367910.7446	0	0	0
Winter	ROG_RESTL	1.251031374	0	0 183955.3723	0	0	1265084.637	0	0	367910.7446	0	0	0.625515687
Winter	ROG_RUNEX	2.608940684	0	0 183955.3723	0	0	1265084.637	0	0	367910.7446	0	0	2.608940684
Winter	ROG_RUNLS	2.175463317	0	0 183955.3723	0	0	1265084.637	0	0	367910.7446	0	0	2.175463317
Winter	ROG_STREX	1.845249848	0	0 183955.3723	0	0	1265084.637	0	0	367910.7446	0	0	1.845249848
Winter	SO2_IDLEX	0	0	0 183955.3723	0	0	1265084.637	0	0	367910.7446	0	0	0
Winter	SO2_RUNEX	0.002215881	0	0 183955.3723	0	0	1265084.637	0	0	367910.7446	0	0	0.002215881
Winter	SO2_STREX	0.000589676	0	0 183955.3723	0	0	1265084.637	0	0	367910.7446	0	0	0.000589676
Winter	TOG_DIURN	2.334534347	0	0 183955.3723	0	0	1265084.637	0	0	367910.7446	0	0	1.167267173
Winter	TOG_HTSK	0.817638614	0	0 183955.3723	0	0	1265084.637	0	0	367910.7446	0	0	0.817638614
Winter	TOG_IDLEX	0	0	0 183955.3723	0	0	1265084.637	0	0	367910.7446	0	0	0
Winter	TOG_RESTL	1.251031374	0	0 183955.3723	0	0	1265084.637	0	0	367910.7446	0	0	0.625515687
Winter	TOG_RUNEX	3.249050099	0	0 183955.3723	0	0	1265084.637	0	0	367910.7446	0	0	3.249050099
Winter	TOG_RUNLS	2.175463317	0	0 183955.3723	0	0	1265084.637	0	0	367910.7446	0	0	2.175463317
Winter	TOG_STREX	2.008746725	0	0 183955.3723	0	0	1265084.637	0	0	367910.7446	0	0	2.008746725

#### **SBUS CalEEMod Emission Rate Worksheet**

	SBUS CalEEMod			•	Vehicle Class:									
Season	Pollutant		nission Rates	NC	CDLIC Coc	Population	CDLIC N.C.	CDLIC Coc	VMT	CDLIC N.C.	CDLIC Cos	Trips		CalEEMod Emission
Annual	CH4_IDLEX	Gas 2.404563496	DSL 0.01305249	NG 0	SBUS Gas 1481.565044	SBUS DSL 3497.078427	SBUS NG 0	SBUS Gas 58916.21473	SBUS DSL 110638.3688	SBUS NG 0	SBUS Gas 5926.260176	SBUS DSL 40355.80019	SBUS NG 0	Rate 0.077960289
Annual	CH4_RUNEX		0.004999617		1481.565044		0		110638.3688	0		40355.80019	0	0.006707515
Annual	_ CH4_STREX	0.055171134	0	0	1481.565044	3497.078427	0	58916.21473	110638.3688	0	5926.260176	40355.80019	0	0.007064476
Annual	CO_IDLEX	82.08125133	6.801096559	0	1481.565044	3497.078427	0	58916.21473	110638.3688	0	5926.260176	40355.80019	0	3.141447888
Annual	CO_RUNEX		0.317118446		1481.565044		0		110638.3688	0	5926.260176	40355.80019	0	0.567793163
Annual	CO_STREX	7.539489055	0		1481.565044		0		110638.3688	0		40355.80019	0	0.965405891
Annual	CO2_NBIO_IDLEX		3604.927876		1481.565044		0		110638.3688	0		40355.80019	0	354.4546289
Annual Annual	CO2_NBIO_RUNEX CO2_NBIO_STREX	46.63836122	1207.212602 0		1481.565044 1481.565044		0 0		110638.3688 110638.3688	0 0		40355.80019 40355.80019	0 0	1085.99193 5.971883286
Annual	NOX_IDLEX		39.72869674		1481.565044		0		110638.3688	0		40355.80019	0	3.03150761
Annual	NOX RUNEX		6.506548038		1481.565044		0		110638.3688	0		40355.80019	0	4.379202585
Annual	NOX_STREX	0.596979571	1.007353687	0	1481.565044	3497.078427	0	58916.21473	110638.3688	0	5926.260176	40355.80019	0	0.954806679
Annual	PM10_IDLEX	0	0.047463313	0	1481.565044	3497.078427	0	58916.21473	110638.3688	0	5926.260176	40355.80019	0	0.003586334
Annual	PM10_PMBW		0.744800213		1481.565044		0		110638.3688	0		40355.80019	0	0.74480021
Annual	PM10_PMTW		0.012000003		1481.565044		0		110638.3688	0	5926.260176		0	0.010610097
Annual	PM10_RUNEX		0.037856013		1481.565044		0		110638.3688	0		40355.80019	0	0.025098045
Annual Annual	PM10_STREX PM25_IDLEX	0.000470462 0	0 0.045410071		1481.565044 1481.565044		0 0		110638.3688 110638.3688	0 0	5926.260176 5926.260176	40355.80019	0 0	6.02411E-05 0.003431191
Annual	PM25_PMBW		0.319200091		1481.565044		0		110638.3688	0		40355.80019	0	0.31920009
Annual	PM25_PMTW		0.003000001		1481.565044		0		110638.3688	0	5926.260176		0	0.002652524
Annual	PM25_RUNEX		0.036218379		1481.565044		0		110638.3688	0		40355.80019	0	0.023997549
Annual	PM25_STREX	0.000432573	0	0	1481.565044	3497.078427	0	58916.21473	110638.3688	0	5926.260176	40355.80019	0	5.53894E-05
Annual	ROG_DIURN	0.032152238	0	0	1481.565044	3497.078427	0	58916.21473	110638.3688	0	5926.260176	40355.80019	0	0.001029246
Annual	ROG_HTSK	0.070085967	0	0	1481.565044	3497.078427	0	58916.21473	110638.3688	0	5926.260176	40355.80019	0	0.008974269
Annual	ROG_IDLEX		0.281016525		1481.565044		0		110638.3688	0	5926.260176		0	0.361044664
Annual	ROG_RESTL	0.017477756	0		1481.565044		0		110638.3688	0		40355.80019	0	0.000559492
Annual	ROG_RUNEX		0.107640383		1481.565044		0		110638.3688	0	5926.260176		0	0.087227292
Annual Annual	ROG_RUNLS	0.434634994 0.318496784	0		1481.565044 1481.565044		0		110638.3688 110638.3688	0		40355.80019 40355.80019	0	0.055653531 0.040782428
Annual	ROG_STREX SO2_IDLEX		0.034057571		1481.565044		0		110638.3688	0		40355.80019	0	0.003385502
Annual	SO2_RUNEX		0.011405146		1481.565044		0		110638.3688	0		40355.80019	0	0.010393624
Annual	SO2_STREX	0.000461524	0		1481.565044		0		110638.3688	0		40355.80019	0	5.90966E-05
Annual	TOG_DIURN	0.032152238	0	0	1481.565044	3497.078427	0	58916.21473	110638.3688	0	5926.260176	40355.80019	0	0.001029246
Annual	TOG_HTSK	0.070085967	0	0	1481.565044	3497.078427	0	58916.21473	110638.3688	0	5926.260176	40355.80019	0	0.008974269
Annual	TOG_IDLEX	15.4897191	0.319915922	0	1481.565044	3497.078427	0	58916.21473	110638.3688	0	5926.260176	40355.80019	0	0.52002433
Annual	TOG_RESTL	0.017477756	0		1481.565044		0		110638.3688	0		40355.80019	0	0.000559492
Annual	TOG_RUNEX		0.122540382		1481.565044		0		110638.3688	0		40355.80019	0	0.104751386
Annual	TOG_RUNLS	0.434634994 0.348713888	0		1481.565044 1481.565044		0 0		110638.3688 110638.3688	0 0		40355.80019 40355.80019	0 0	0.055653531 0.044651626
Annual Summer	TOG_STREX CH4_IDLEX		0.013002305		1481.565044		0		110638.3688	0		40355.80019	0	0.078022063
Summer	CH4_RUNEX		0.004999617		1481.565044		0		110638.3688	0		40355.80019	0	0.006784586
Summer	CH4_STREX	0.049231252	0		1481.565044		0		110638.3688	0		40355.80019	0	0.006303894
Summer	CO_IDLEX	82.08125133	6.344176172	0	1481.565044	3497.078427	0	58916.21473	110638.3688	0	5926.260176	40355.80019	0	3.106922925
Summer	CO_RUNEX	1.06157329	0.317118446	0	1481.565044	3497.078427	0	58916.21473	110638.3688	0	5926.260176	40355.80019	0	0.575798928
Summer	CO_STREX	6.151953402	0		1481.565044		0		110638.3688	0		40355.80019	0	0.787736677
Summer	CO2_NBIO_IDLEX	2563.623545	3698.3395		1481.565044		0		110638.3688	0		40355.80019	0	361.5128233
Summer	CO2_NBIO_RUNEX		1207.212602		1481.565044		0		110638.3688	0		40355.80019	0	1086.006291
Summer Summer	CO2_NBIO_STREX NOX_IDLEX	44.32325566 0 924731539	40.50080497		1481.565044 1481.565044		0 0		110638.3688 110638.3688	0 0		40355.80019 40355.80019	0 0	5.675441904 3.089848207
Summer	NOX_RUNEX		6.150675456		1481.565044		0		110638.3688	0		40355.80019	0	4.130505998
Summer	NOX_NONEX NOX_STREX		1.007353687		1481.565044		0		110638.3688	0		40355.80019	0	0.950833458
Summer	PM10_IDLEX		0.040115214		1481.565044		0		110638.3688	0		40355.80019	0	0.003031111
Summer	PM10_PMBW	0.744800204	0.744800213	0	1481.565044	3497.078427	0	58916.21473	110638.3688	0	5926.260176	40355.80019	0	0.74480021
Summer	PM10_PMTW		0.012000003		1481.565044		0		110638.3688	0		40355.80019	0	0.010610097
Summer	PM10_RUNEX		0.037856013		1481.565044		0		110638.3688	0		40355.80019	0	0.025098045
Summer	PM10_STREX	0.000470462	0 020270040		1481.565044		0		110638.3688	0		40355.80019	0	6.02411E-05
Summer	PM25_IDLEX		0.038379848 0.319200091		1481.565044 1481.565044		0 0		110638.3688 110638.3688	0 0		40355.80019 40355.80019	0 0	0.002899986 0.31920009
Summer Summer	PM25_PMBW PM25_PMTW		0.003000001			3497.078427	-		110638.3688	0		40355.80019	0	0.31920009
Summer	PM25_RUNEX		0.036218379		1481.565044		0		110638.3688	0		40355.80019	0	0.002032324
Summer	PM25_STREX	0.000432573	0		1481.565044		0		110638.3688	0		40355.80019	0	5.53894E-05
Summer	ROG_DIURN	0.046465746	0		1481.565044		0		110638.3688	0		40355.80019	0	0.001487445
Summer	ROG_HTSK	0.07119937	0	0	1481.565044	3497.078427	0	58916.21473	110638.3688	0	5926.260176	40355.80019	0	0.009116837
Summer	ROG_IDLEX		0.279936063		1481.565044		0		110638.3688	0		40355.80019	0	0.360963024
Summer	ROG_RESTL	0.024171867	0		1481.565044		0		110638.3688	0		40355.80019	0	0.000773781
Summer	ROG_RUNEX		0.107640383		1481.565044		0		110638.3688	0		40355.80019	0	0.087614764
Summer	ROG_RUNLS	0.389165599	0		1481.565044 1481.565044		0		110638.3688	0		40355.80019 40355.80019	0	0.049831329
Summer Summer	ROG_STREX SO2_IDLEX	0.284010581	0 0.034940078		1481.565044 1481.565044		0 0		110638.3688 110638.3688	0 0		40355.80019	0 0	0.036366587 0.003452185
Summer	SO2_IDLEX SO2_RUNEX		0.034940078		1481.565044		0		110638.3688	0		40355.80019	0	0.010393766
Summer	SO2_KONEX SO2_STREX	0.008494302	0.011-00140		1481.565044		0		110638.3688	0		40355.80019	0	5.61631E-05
Summer	TOG_DIURN	0.046465746	0		1481.565044		0		110638.3688	0		40355.80019	0	0.001487445
Summer	TOG_HTSK	0.07119937	0		1481.565044		0		110638.3688	0		40355.80019	0	0.009116837
Summer	TOG_IDLEX	15.4897191	0.318685899	0	1481.565044	3497.078427	0	58916.21473	110638.3688	0	5926.260176	40355.80019	0	0.519931389
Summer	TOG_RESTL	0.024171867	0		1481.565044		0		110638.3688	0		40355.80019	0	0.000773781
Summer	TOG_RUNEX		0.122540382		1481.565044		0		110638.3688	0		40355.80019	0	0.105316785
Summer	TOG_RUNLS	0.389165599	0		1481.565044		0		110638.3688	0		40355.80019	0	0.049831329
Summer	TOG_STREX	0.310955837	0	0	1481.565044	3497.078427	0	58916.21473	110638.3688	0	5926.260176	40355.80019	0	0.039816836

Winter	CH4_IDLEX	2.404136933	0.013121792	0	1481.565044	3497.078427	0	58916.21473	110638.3688	0	5926.260176	40355.80019	0	0.077951871
Winter	CH4_RUNEX	0.009847428	0.004999617	0	1481.565044	3497.078427	0	58916.21473	110638.3688	0	5926.260176	40355.80019	0	0.006684117
Winter	CH4_STREX	0.05653464	0	0	1481.565044	3497.078427	0	58916.21473	110638.3688	0	5926.260176	40355.80019	0	0.007239068
Winter	CO_IDLEX	82.08125133	7.432081857	0	1481.565044	3497.078427	0	58916.21473	110638.3688	0	5926.260176	40355.80019	0	3.189125218
Winter	CO_RUNEX	1.031461031	0.317118446	0	1481.565044	3497.078427	0	58916.21473	110638.3688	0	5926.260176	40355.80019	0	0.565335629
Winter	CO_STREX	7.802457795	0	0	1481.565044	3497.078427	0	58916.21473	110638.3688	0	5926.260176	40355.80019	0	0.999078142
Winter	CO2_NBIO_IDLEX	2563.623545	3475.93087	0	1481.565044	3497.078427	0	58916.21473	110638.3688	0	5926.260176	40355.80019	0	344.7075986
Winter	CO2_NBIO_RUNEX	858.3397467	1207.212602	0	1481.565044	3497.078427	0	58916.21473	110638.3688	0	5926.260176	40355.80019	0	1085.987522
Winter	CO2_NBIO_STREX	47.08174427	0	0	1481.565044	3497.078427	0	58916.21473	110638.3688	0	5926.260176	40355.80019	0	6.028656975
Winter	NOX_IDLEX	0.924731539	38.66245204	0	1481.565044	3497.078427	0	58916.21473	110638.3688	0	5926.260176	40355.80019	0	2.950942024
Winter	NOX_RUNEX	0.376703253	6.393438683	0	1481.565044	3497.078427	0	58916.21473	110638.3688	0	5926.260176	40355.80019	0	4.302765171
Winter	NOX_STREX	0.606051323	1.007353687	0	1481.565044	3497.078427	0	58916.21473	110638.3688	0	5926.260176	40355.80019	0	0.955968286
Winter	PM10_IDLEX	0	0.057610687	0	1481.565044	3497.078427	0	58916.21473	110638.3688	0	5926.260176	40355.80019	0	0.004353071
Winter	PM10_PMBW	0.744800204	0.744800213	0	1481.565044	3497.078427	0	58916.21473	110638.3688	0	5926.260176	40355.80019	0	0.74480021
Winter	PM10_PMTW	0.008000002	0.012000003	0	1481.565044	3497.078427	0	58916.21473	110638.3688	0	5926.260176	40355.80019	0	0.010610097
Winter	PM10_RUNEX	0.00113994	0.037856013	0	1481.565044	3497.078427	0	58916.21473	110638.3688	0	5926.260176	40355.80019	0	0.025098045
Winter	PM10_STREX	0.000470462	0	0	1481.565044	3497.078427	0	58916.21473	110638.3688	0	5926.260176	40355.80019	0	6.02411E-05
Winter	PM25_IDLEX	0	0.055118475	0	1481.565044	3497.078427	0	58916.21473	110638.3688	0	5926.260176	40355.80019	0	0.004164759
Winter	PM25_PMBW	0.319200087	0.319200091	0	1481.565044	3497.078427	0	58916.21473	110638.3688	0	5926.260176	40355.80019	0	0.31920009
Winter	PM25_PMTW	0.002000001	0.003000001	0	1481.565044	3497.078427	0	58916.21473	110638.3688	0	5926.260176	40355.80019	0	0.002652524
Winter	PM25_RUNEX	0.001048133	0.036218379	0	1481.565044	3497.078427	0		110638.3688	0	5926.260176	40355.80019	0	0.023997549
Winter	PM25_STREX	0.000432573	0	0	1481.565044	3497.078427	0	58916.21473	110638.3688	0	5926.260176	40355.80019	0	5.53894E-05
Winter	ROG_DIURN	0.032281586	0	0	1481.565044	3497.078427	0	58916.21473	110638.3688	0	5926.260176	40355.80019	0	0.001033387
Winter	ROG_HTSK	0.073015298	0	0	1481.565044	3497.078427	0	58916.21473	110638.3688	0	5926.260176	40355.80019	0	0.00934936
Winter	ROG_IDLEX	10.61523027	0.28250859	0	1481.565044	3497.078427	0	58916.21473	110638.3688	0	5926.260176	40355.80019	0	0.361157405
Winter	ROG_RESTL	0.016730138	0	0	1481.565044	3497.078427	0	58916.21473	110638.3688	0	5926.260176	40355.80019	0	0.000535559
Winter	ROG_RUNEX	0.048551008	0.107640383	0	1481.565044	3497.078427	0	58916.21473	110638.3688	0	5926.260176	40355.80019	0	0.08710822
Winter	ROG_RUNLS	0.534612608	0	0	1481.565044	3497.078427	0	58916.21473	110638.3688	0	5926.260176	40355.80019	0	0.068455323
Winter	ROG_STREX	0.326408883	0	0	1481.565044	3497.078427	0	58916.21473	110638.3688	0	5926.260176	40355.80019	0	0.041795546
Winter	SO2_IDLEX	0.025369133	0.032838871	0	1481.565044	3497.078427	0	58916.21473	110638.3688	0	5926.260176	40355.80019	0	0.003293417
Winter	SO2 RUNEX	0.008493968	0.011405146	0	1481.565044	3497.078427	0	58916.21473	110638.3688	0	5926.260176	40355.80019	0	0.01039358
Winter	SO2_STREX	0.000465912	0	0	1481.565044	3497.078427	0	58916.21473	110638.3688	0	5926.260176	40355.80019	0	5.96584E-05
Winter	TOG_DIURN	0.032281586	0	0	1481.565044	3497.078427	0	58916.21473	110638.3688	0	5926.260176	40355.80019	0	0.001033387
Winter	TOG_HTSK	0.073015298	0	0	1481.565044	3497.078427	0	58916.21473	110638.3688	0	5926.260176	40355.80019	0	0.00934936
Winter	TOG_IDLEX		0.321614525		1481.565044		0	58916.21473	110638.3688	0		40355.80019	0	0.520152676
Winter	TOG_RESTL	0.016730138	0		1481.565044		0		110638.3688	0		40355.80019	0	0.000535559
Winter	TOG_RUNEX		0.122540382		1481.565044		0		110638.3688	0		40355.80019	0	0.104577637
Winter	TOG_RUNLS	0.534612608	0		1481.565044		0		110638.3688	0		40355.80019	0	0.068455323
Winter	TOG_STREX	0.357376641	0		1481.565044		0		110638.3688	0		40355.80019	0	0.045760862
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## MH CalEEMod Emission Rate Worksheet

	MH CalEEMod Er				Vehicle Class:	МН								
Season	Pollutant		mission Rates	NC		Population	NAH NG	MH Cac	VMT	NAH NC	MH Cas	Trips	MH NC	_CalEEMod Emission
Annual	CH4 IDLEX	Gas 0	DSL 0	NG 0	MH Gas 18786.35518	MH DSL 6166.797629	MH NG 0	MH Gas 191391.548	MH DSL 64319.47927	MH NG 0	MH Gas 1879.386973	MH DSL 616.6797629	MH NG 0	Rate 0
Annual	CH4_RUNEX		0.002997334			6166.797629	0	191391.548	64319.47927	0		616.6797629	0	0.002997334
Annual	CH4_STREX	0		0	18786.35518	6166.797629	0	191391.548	64319.47927	0	1879.386973	616.6797629	0	0
Annual	CO_IDLEX	0	0	0	18786.35518	6166.797629	0	191391.548	64319.47927	0	1879.386973	616.6797629	0	0
Annual	CO_RUNEX	0.253648231	0.253648231			6166.797629	0	191391.548	64319.47927	0		616.6797629	0	0.253648231
Annual	CO_STREX	0	0			6166.797629	0	191391.548	64319.47927	0		616.6797629	0	0
Annual	CO2_NBIO_IDLEX	0	0			6166.797629	0	191391.548	64319.47927	0		616.6797629	0	0
Annual Annual	CO2_NBIO_RUNEX CO2_NBIO_STREX	953.6662397	953.6662397			6166.797629 6166.797629	0 0	191391.548 191391.548	64319.47927 64319.47927	0 0		616.6797629 616.6797629	0 0	953.6662397 0
Annual	NOX_IDLEX	0	0			6166.797629	0	191391.548	64319.47927	0		616.6797629	0	0
Annual	NOX_IDEEX	3.271549289	3.271549289			6166.797629	0	191391.548	64319.47927	0		616.6797629	0	3.271549289
Annual	NOX_STREX	0				6166.797629	0	191391.548	64319.47927	0	1879.386973	616.6797629	0	0
Annual	PM10_IDLEX	0	0	0	18786.35518	6166.797629	0	191391.548	64319.47927	0	1879.386973	616.6797629	0	0
Annual	PM10_PMBW		0.130340037			6166.797629	0	191391.548	64319.47927	0		616.6797629	0	0.130340037
Annual	PM10_PMTW		0.016000005			6166.797629	0	191391.548	64319.47927	0		616.6797629	0	0.016000005
Annual	PM10_RUNEX		0.068591969			6166.797629	0	191391.548	64319.47927	0		616.6797629	0	0.068591969
Annual Annual	PM10_STREX	0	0			6166.797629 6166.797629	0 0	191391.548 191391.548	64319.47927 64319.47927	0 0		616.6797629 616.6797629	0 0	0
Annual	PM25_IDLEX PM25_PMBW	0 055860016	0.055860016			6166.797629	0	191391.548	64319.47927	0		616.6797629	0	0.055860016
Annual	PM25_PMTW		0.004000001			6166.797629	0	191391.548	64319.47927	0		616.6797629	0	0.00400001
Annual	PM25_RUNEX		0.065624711			6166.797629	0	191391.548	64319.47927	0		616.6797629	0	0.065624711
Annual	PM25_STREX	0	0	0	18786.35518	6166.797629	0	191391.548	64319.47927	0	1879.386973	616.6797629	0	0
Annual	ROG_DIURN	0	0	0	18786.35518	6166.797629	0	191391.548	64319.47927	0	1879.386973	616.6797629	0	0
Annual	ROG_HTSK	0	0			6166.797629	0	191391.548	64319.47927	0		616.6797629	0	0
Annual	ROG_IDLEX	0	0			6166.797629	0	191391.548	64319.47927	0		616.6797629	0	0
Annual	ROG_RESTL	0	0			6166.797629	0	191391.548	64319.47927	0		616.6797629	0	0
Annual Annual	ROG_RUNEX ROG_RUNLS	0.064530845 n	0.064530845			6166.797629 6166.797629	0		64319.47927 64319.47927	0 0		616.6797629 616.6797629	0 0	0.064530845
Annual	ROG_STREX	0	0			6166.797629	0		64319.47927	0		616.6797629	0	0
Annual	SO2_IDLEX	0	0			6166.797629	0	191391.548	64319.47927	0		616.6797629	0	0
Annual	SO2_RUNEX	0.009015576	0.009015576			6166.797629	0			0		616.6797629	0	0.009015576
Annual	SO2_STREX	0	0	0	18786.35518	6166.797629	0	191391.548	64319.47927	0	1879.386973	616.6797629	0	0
Annual	TOG_DIURN	0	0	0	18786.35518	6166.797629	0	191391.548	64319.47927	0	1879.386973	616.6797629	0	0
Annual	TOG_HTSK	0	0	0	18786.35518	6166.797629	0	191391.548	64319.47927	0	1879.386973	616.6797629	0	0
Annual	TOG_IDLEX	0	0			6166.797629	0	191391.548	64319.47927	0		616.6797629	0	0
Annual	TOG_RESTL	0	0			6166.797629	0	191391.548	64319.47927	0		616.6797629	0	0
Annual	TOG_RUNEX	0.0/34640/6	0.073464076			6166.797629	0	191391.548	64319.47927	0		616.6797629	0	0.073464076
Annual Annual	TOG_RUNLS TOG_STREX	0	0			6166.797629 6166.797629	0 0	191391.548 191391.548	64319.47927 64319.47927	0 0		616.6797629 616.6797629	0 0	0
Summer	CH4 IDLEX	0	0			6166.797629	0	191391.548	64319.47927	0		616.6797629	0	0
Summer	CH4 RUNEX	0.002997334	0.002997334			6166.797629	0	191391.548	64319.47927	0		616.6797629	0	0.002997334
Summer	CH4_STREX	0	0			6166.797629	0	191391.548	64319.47927	0	1879.386973	616.6797629	0	0
Summer	CO_IDLEX	0	0	0	18786.35518	6166.797629	0	191391.548	64319.47927	0	1879.386973	616.6797629	0	0
Summer	CO_RUNEX	0.253648231	0.253648231			6166.797629	0	191391.548	64319.47927	0	1879.386973	616.6797629	0	0.253648231
Summer	CO_STREX	0	0			6166.797629	0	191391.548	64319.47927	0		616.6797629	0	0
Summer	CO2_NBIO_IDLEX	0	0			6166.797629	0	191391.548	64319.47927	0		616.6797629	0	0
Summer	CO2_NBIO_RUNEX	_	953.6662397			6166.797629	0	191391.548	64319.47927	0		616.6797629	0	953.6662397
Summer Summer	CO2_NBIO_STREX NOX_IDLEX	0	0			6166.797629 6166.797629	0 0	191391.548 191391.548	64319.47927 64319.47927	0 0		616.6797629 616.6797629	0 0	0
Summer	NOX_RUNEX	3.090147102	3.090147102			6166.797629	0	191391.548	64319.47927	0		616.6797629	0	3.090147102
Summer	NOX_STREX	0	0			6166.797629	0	191391.548	64319.47927	0		616.6797629	0	0
Summer	PM10_IDLEX	0	0			6166.797629	0	191391.548	64319.47927	0		616.6797629	0	0
Summer	PM10_PMBW	0.130340037	0.130340037	0	18786.35518	6166.797629	0	191391.548	64319.47927	0	1879.386973	616.6797629	0	0.130340037
Summer	PM10_PMTW	0.016000005	0.016000005	0	18786.35518	6166.797629	0	191391.548	64319.47927	0	1879.386973	616.6797629	0	0.016000005
Summer	PM10_RUNEX	0.068591969	0.068591969			6166.797629	0	191391.548	64319.47927	0		616.6797629	0	0.068591969
Summer	PM10_STREX	0	0			6166.797629	0	191391.548	64319.47927	0		616.6797629	0	0
Summer	PM25_IDLEX	0.055960016	0 0.055860016			6166.797629 6166.797629	0 0	191391.548 191391.548	64319.47927 64319.47927	0 0		616.6797629 616.6797629	0 0	0 0.055860016
Summer	PM25_PMBW PM25_PMTW		0.0033800010			6166.797629	0		64319.47927	0		616.6797629	0	0.00400001
Summer	PM25_RUNEX		0.065624711			6166.797629	0		64319.47927	0		616.6797629	0	0.065624711
Summer	PM25_STREX	0	0			6166.797629	0		64319.47927	0		616.6797629	0	0
Summer	ROG_DIURN	0	0	0	18786.35518	6166.797629	0	191391.548	64319.47927	0	1879.386973	616.6797629	0	0
Summer	ROG_HTSK	0	0	0	18786.35518	6166.797629	0	191391.548	64319.47927	0	1879.386973	616.6797629	0	0
Summer	ROG_IDLEX	0	0	0	18786.35518	6166.797629	0	191391.548	64319.47927	0	1879.386973	616.6797629	0	0
Summer	ROG_RESTL	0	0			6166.797629	0	191391.548	64319.47927	0		616.6797629	0	0
Summer	ROG_RUNEX	0.064530845	0.064530845			6166.797629	0			0		616.6797629	0	0.064530845
Summer	ROG_RUNLS	0	0			6166.797629 6166.797629	0	191391.548	64319.47927 64319.47927	0		616.6797629 616.6797629	0	0
Summer Summer	ROG_STREX SO2_IDLEX	0	0			6166.797629	0		64319.47927	0 0		616.6797629	0 0	0
Summer	SO2_RUNEX	0.009015576	0.009015576			6166.797629	0	191391.548	64319.47927	0		616.6797629	0	0.009015576
Summer	SO2_STREX	0	0			6166.797629	0	191391.548	64319.47927	0		616.6797629	0	0
Summer	TOG_DIURN	0	0			6166.797629	0	191391.548	64319.47927	0		616.6797629	0	0
Summer	TOG_HTSK	0	0	0	18786.35518	6166.797629	0	191391.548	64319.47927	0	1879.386973	616.6797629	0	0
Summer	TOG_IDLEX	0	0			6166.797629	0			0		616.6797629	0	0
Summer	TOG_RESTL	0	0			6166.797629	0	191391.548	64319.47927	0		616.6797629	0	0
Summer	TOG_RUNEX	0.073464076 -	0.073464076			6166.797629	0	191391.548	64319.47927	0		616.6797629	0	0.073464076
Summer	TOG_RUNLS	0	0			6166.797629	0	191391.548	64319.47927	0		616.6797629	0	0
Summer	TOG_STREX	0	0	U	10/00.35518	6166.797629	0	191391.548	64319.47927	0	10/3.3803/3	616.6797629	0	0

Winter	CH4_IDLEX	0	0	0	18786.35518	6166.797629	0	191391.548	64319.47927	0	1879.386973	616.6797629	0	0
Winter	CH4_RUNEX	0.002997334	0.002997334	0	18786.35518	6166.797629	0	191391.548	64319.47927	0	1879.386973	616.6797629	0	0.002997334
Winter	CH4_STREX	0	0	0	18786.35518	6166.797629	0	191391.548	64319.47927	0	1879.386973	616.6797629	0	0
Winter	CO_IDLEX	0	0	0	18786.35518	6166.797629	0	191391.548	64319.47927	0	1879.386973	616.6797629	0	0
Winter	CO_RUNEX	0.253648231	0.253648231	0	18786.35518	6166.797629	0	191391.548	64319.47927	0	1879.386973	616.6797629	0	0.253648231
Winter	CO_STREX	0	0	0	18786.35518	6166.797629	0	191391.548	64319.47927	0	1879.386973	616.6797629	0	0
Winter	CO2_NBIO_IDLEX	0	0	0	18786.35518	6166.797629	0	191391.548	64319.47927	0	1879.386973	616.6797629	0	0
Winter	CO2_NBIO_RUNEX	953.6662397	953.6662397	0	18786.35518	6166.797629	0	191391.548	64319.47927	0	1879.386973	616.6797629	0	953.6662397
Winter	CO2_NBIO_STREX	0	0	0	18786.35518	6166.797629	0	191391.548	64319.47927	0	1879.386973	616.6797629	0	0
Winter	NOX_IDLEX	0	0	0	18786.35518	6166.797629	0	191391.548	64319.47927	0	1879.386973	616.6797629	0	0
Winter	NOX_RUNEX	3.210262302	3.210262302	0	18786.35518	6166.797629	0	191391.548	64319.47927	0	1879.386973	616.6797629	0	3.210262302
Winter	NOX_STREX	0	0	0	18786.35518	6166.797629	0	191391.548	64319.47927	0	1879.386973	616.6797629	0	0
Winter	PM10_IDLEX	0	0	0	18786.35518	6166.797629	0	191391.548	64319.47927	0	1879.386973	616.6797629	0	0
Winter	PM10_PMBW	0.130340037	0.130340037	0	18786.35518	6166.797629	0	191391.548	64319.47927	0	1879.386973	616.6797629	0	0.130340037
Winter	PM10_PMTW	0.016000005	0.016000005	0	18786.35518	6166.797629	0	191391.548	64319.47927	0	1879.386973	616.6797629	0	0.016000005
Winter	PM10_RUNEX	0.068591969	0.068591969	0	18786.35518	6166.797629	0	191391.548	64319.47927	0	1879.386973	616.6797629	0	0.068591969
Winter	PM10_STREX	0	0	0	18786.35518	6166.797629	0	191391.548	64319.47927	0	1879.386973	616.6797629	0	0
Winter	PM25_IDLEX	0	0	0	18786.35518	6166.797629	0	191391.548	64319.47927	0	1879.386973	616.6797629	0	0
Winter	PM25_PMBW	0.055860016	0.055860016	0	18786.35518	6166.797629	0	191391.548	64319.47927	0	1879.386973	616.6797629	0	0.055860016
Winter	PM25_PMTW	0.004000001	0.004000001	0	18786.35518	6166.797629	0	191391.548	64319.47927	0	1879.386973	616.6797629	0	0.004000001
Winter	PM25_RUNEX	0.065624711	0.065624711	0	18786.35518	6166.797629	0	191391.548	64319.47927	0	1879.386973	616.6797629	0	0.065624711
Winter	PM25_STREX	0	0	0	18786.35518	6166.797629	0	191391.548	64319.47927	0	1879.386973	616.6797629	0	0
Winter	ROG_DIURN	0	0	0	18786.35518	6166.797629	0	191391.548	64319.47927	0	1879.386973	616.6797629	0	0
Winter	ROG_HTSK	0	0	0	18786.35518	6166.797629	0	191391.548	64319.47927	0	1879.386973	616.6797629	0	0
Winter	ROG_IDLEX	0	0	0	18786.35518	6166.797629	0	191391.548	64319.47927	0	1879.386973	616.6797629	0	0
Winter	ROG_RESTL	0	0	0	18786.35518	6166.797629	0	191391.548	64319.47927	0	1879.386973	616.6797629	0	0
Winter	ROG_RUNEX	0.064530845	0.064530845	0	18786.35518	6166.797629	0	191391.548	64319.47927	0	1879.386973	616.6797629	0	0.064530845
Winter	ROG_RUNLS	0	0	0	18786.35518	6166.797629	0	191391.548	64319.47927	0	1879.386973	616.6797629	0	0
Winter	ROG_STREX	0	0	0	18786.35518	6166.797629	0	191391.548	64319.47927	0	1879.386973	616.6797629	0	0
Winter	SO2_IDLEX	0	0	0	18786.35518	6166.797629	0	191391.548	64319.47927	0	1879.386973	616.6797629	0	0
Winter	SO2_RUNEX	0.009015576	0.009015576	0	18786.35518	6166.797629	0	191391.548	64319.47927	0	1879.386973	616.6797629	0	0.009015576
Winter	SO2_STREX	0	0	0	18786.35518	6166.797629	0	191391.548	64319.47927	0	1879.386973	616.6797629	0	0
Winter	TOG_DIURN	0	0	0	18786.35518	6166.797629	0	191391.548	64319.47927	0	1879.386973	616.6797629	0	0
Winter	TOG_HTSK	0	0	0	18786.35518	6166.797629	0	191391.548	64319.47927	0	1879.386973	616.6797629	0	0
Winter	TOG_IDLEX	0	0	0	18786.35518	6166.797629	0	191391.548	64319.47927	0	1879.386973	616.6797629	0	0
Winter	TOG_RESTL	0	0	0	18786.35518	6166.797629	0	191391.548	64319.47927	0	1879.386973	616.6797629	0	0
Winter	TOG_RUNEX	0.073464076	0.073464076	0	18786.35518	6166.797629	0	191391.548	64319.47927	0	1879.386973	616.6797629	0	0.073464076
Winter	TOG_RUNLS	0	0	0	18786.35518	6166.797629	0		64319.47927	0	1879.386973	616.6797629	0	0
Winter	TOG_STREX	0	0			6166.797629	0		64319.47927	0		616.6797629	0	0
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# 3. CalEEMod Output: Project

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CalEEMod Version: CalEEMod.2016.3.2

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Proposed Project - Los Angeles-South Coast County, Annual

### **Proposed Project**

Los Angeles-South Coast County, Annual

#### 1.0 Project Characteristics

#### 1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Non-Asphalt Surfaces	25.40	1000sqft	0.58	25,398.00	0
Unenclosed Parking with Elevator	99.92	1000sqft	0.43	99,915.00	0
Fast Food Restaurant w/o Drive Thru	2.00	1000sqft	0.05	2,000.00	0
Apartments Mid Rise	138.00	Dwelling Unit	0.00	156,525.00	395
Supermarket	23.00	1000sqft	0.53	23,000.00	0

#### 1.2 Other Project Characteristics

UrbanizationUrbanWind Speed (m/s)2.2Precipitation Freq (Days)33

Climate Zone 9 Operational Year 2023

Utility Company Southern California Edison

 CO2 Intensity
 531.44
 CH4 Intensity
 0.029
 N2O Intensity
 0.006

 (Ib/MWhr)
 (Ib/MWhr)
 (Ib/MWhr)
 (Ib/MWhr)

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

Project Characteristics - See assumptions file

Land Use - See assumptions file.

Off-road Equipment -

Trips and VMT - See assumptions file.

Demolition -

Architectural Coating - See assumptions file.

Woodstoves - No fireplaces or wood burning stoves.

Area Coating - See assumptions file.

Energy Use -

Water And Wastewater - Assumes 100% aerobic.

Construction Off-road Equipment Mitigation - Per Mid-Town Specific Plan Mitigation Measures AQ-1 and AQ-2

**Energy Mitigation -**

Water Mitigation -

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	ConstArea_Parking	7,519.00	5,995.00
tblArchitecturalCoating	EF_Nonresidential_Exterior	100.00	10.00
tblArchitecturalCoating	EF_Nonresidential_Interior	100.00	10.00
tblArchitecturalCoating	EF_Residential_Exterior	50.00	10.00
tblArchitecturalCoating	EF_Residential_Interior	50.00	10.00
tblAreaCoating	Area_EF_Nonresidential_Exterior	100	10
tblAreaCoating	Area_EF_Nonresidential_Interior	100	10
tblAreaCoating	Area_EF_Residential_Exterior	50	10
tblAreaCoating	Area_EF_Residential_Interior	50	10
tblAreaCoating	Area_Parking	7519	5995

tblConstDustMitigation	CleanPavedRoadPercentReduction	0	9
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	7.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim

tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblFireplaces	NumberGas	117.30	0.00
tblFireplaces	NumberNoFireplace	13.80	138.00
tblFireplaces	NumberWood	6.90	0.00
tblFleetMix	HHD	0.03	5.0000e-003
tblFleetMix	LDA	0.55	0.58
tblFleetMix	LDT1	0.04	0.05
tblFleetMix	LDT2	0.21	0.22
tblFleetMix	LHD1	0.02	0.02
tblFleetMix	LHD2	6.2270e-003	9.4600e-004
tblFleetMix	MCY	5.1840e-003	5.4850e-003
tblFleetMix	MDV	0.12	0.13
tblFleetMix	MH	8.6200e-004	1.3100e-004
tblFleetMix	MHD	0.02	3.1080e-003
tblFleetMix	OBUS	2.5460e-003	3.8700e-004
tblFleetMix	SBUS	6.9200e-004	1.0500e-004
tblFleetMix	UBUS	2.1330e-003	3.2400e-004
tblLandUse	LandUseSquareFeet	25,400.00	25,398.00
tblLandUse	LandUseSquareFeet	99,920.00	99,915.00
tblLandUse	LandUseSquareFeet	138,000.00	156,525.00
tblLandUse	LotAcreage	2.29	0.43
tblLandUse	LotAcreage	3.63	0.00
tblProjectCharacteristics	CO2IntensityFactor	702.44	531.44
tblTripsAndVMT	VendorTripNumber	0.00	4.00
tblTripsAndVMT	VendorTripNumber	0.00	4.00
tblTripsAndVMT	VendorTripNumber	0.00	4.00
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tblVehicleEF	HHD	0.09	0.08
tblVehicleEF	HHD	0.07	1.0000e-006
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tblVehicleEF	HHD	0.04	0.04
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tblVehicleEF	HHD	9.6000e-003	3.0540e-003
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tblVehicleEF	HHD	8.8400e-003	8.8980e-003
tblVehicleEF	HHD	6.0240e-003	0.02
tblVehicleEF	HHD	8.3000e-005	1.0000e-006
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tblVehicleEF	HHD	0.09	0.02
tblVehicleEF	HHD	3.7200e-004	1.1920e-003

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tblVehicleEF	HHD	0.01	0.01
tblVehicleEF	HHD	1.6200e-004	1.0000e-006
tblVehicleEF	HHD	1.0300e-004	6.0000e-006
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tblVehicleEF	HHD	3.7200e-004	1.1920e-003
tblVehicleEF	HHD	0.08	3.0000e-006
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tblVehicleEF	HHD	0.07	1.0000e-006
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tblVehicleEF	HHD	1,572.96	1,398.54
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tblVehicleEF	HHD	19.49	2.35
tblVehicleEF	HHD	8.4600e-003	2.7790e-003
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tblVehicleEF	HHD	0.04	0.04
tblVehicleEF	HHD	6.2960e-003	0.02

tblVehicleEF	HHD	9.1000e-005	1.0000e-006
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tblVehicleEF	HHD	8.8400e-003	8.8980e-003
tblVehicleEF	HHD	6.0240e-003	0.02
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tblVehicleEF	HHD	1.1200e-004	6.0000e-006
tblVehicleEF	HHD	0.09	0.02
tblVehicleEF	HHD	3.6000e-004	1.1730e-003
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tblVehicleEF	HHD	0.01	0.01
tblVehicleEF	HHD	1.5900e-004	1.0000e-006
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tblVehicleEF	HHD	9.1000e-005	1.0000e-006
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tblVehicleEF	HHD	8.8400e-003	8.7530e-003
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tblVehicleEF	HHD	7.6000e-005	4.0000e-006
tblVehicleEF	HHD	0.09	0.02
tblVehicleEF	HHD	4.0500e-004	1.2680e-003
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tblVehicleEF	HHD	0.04	0.01
tblVehicleEF	HHD	0.01	0.01

tblVehicleEF	HHD	1.6300e-004	1.0000e-006
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tblVehicleEF	HHD	0.20	0.02
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tblVehicleEF	LDA	0.06	0.17
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tblVehicleEF	LDA	2.2400e-003	1.7590e-003
tblVehicleEF	LDA	1.9520e-003	1.5750e-003
tblVehicleEF	LDA	2.0590e-003	1.6170e-003
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tblVehicleEF	LDA	0.10	0.09
tblVehicleEF	LDA	0.03	0.05
tblVehicleEF	LDA	0.01	0.01
tblVehicleEF	LDA	0.04	0.20
tblVehicleEF	LDA	0.06	0.20
tblVehicleEF	LDA	2.6360e-003	2.5940e-003

tblVehicleEF	LDA	5.6700e-004	5.1100e-004
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tblVehicleEF	LDA	0.10	0.09
tblVehicleEF	LDA	0.03	0.05
tblVehicleEF	LDA	0.02	0.01
tblVehicleEF	LDA	0.04	0.20
tblVehicleEF	LDA	0.07	0.22
tblVehicleEF	LDA	5.1340e-003	2.8290e-003
tblVehicleEF	LDA	4.2110e-003	0.04
tblVehicleEF	LDA	0.67	0.73
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tblVehicleEF	LDA	0.04	0.03
tblVehicleEF	LDA	0.06	0.16
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tblVehicleEF	LDA	2.2400e-003	1.7590e-003
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tblVehicleEF	LDA	2.0590e-003	1.6170e-003
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tblVehicleEF	LDA	0.10	0.10
tblVehicleEF	LDA	0.05	0.06
tblVehicleEF	LDA	0.01	0.01
tblVehicleEF	LDA	0.04	0.19
tblVehicleEF	LDA	0.06	0.18
tblVehicleEF	LDA	2.7590e-003	2.7080e-003
tblVehicleEF	LDA	5.6400e-004	5.0600e-004

tblVehicleEF	LDA	0.06	0.07
tblVehicleEF	LDA	0.10	0.10
tblVehicleEF	LDA	0.05	0.06
tblVehicleEF	LDA	0.02	0.02
tblVehicleEF	LDA	0.04	0.19
tblVehicleEF	LDA	0.06	0.20
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tblVehicleEF	LDA	0.06	0.17
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tblVehicleEF	LDA	2.2400e-003	1.7590e-003
tblVehicleEF	LDA	1.9520e-003	1.5750e-003
tblVehicleEF	LDA	2.0590e-003	1.6170e-003
tblVehicleEF	LDA	0.04	0.05
tblVehicleEF	LDA	0.10	0.10
tblVehicleEF	LDA	0.03	0.04
tblVehicleEF	LDA	0.01	0.01
tblVehicleEF	LDA	0.04	0.23
tblVehicleEF	LDA	0.07	0.21
tblVehicleEF	LDA	2.5910e-003	2.5520e-003
tblVehicleEF	LDA	5.6700e-004	5.1200e-004
tblVehicleEF	LDA	0.04	0.05

tblVehicleEF	LDA	0.10	0.10
tblVehicleEF	LDA	0.03	0.04
tblVehicleEF	LDA	0.02	0.01
tblVehicleEF	LDA	0.04	0.23
tblVehicleEF	LDA	0.07	0.23
tblVehicleEF	LDT1	0.01	6.7160e-003
tblVehicleEF	LDT1	0.01	0.06
tblVehicleEF	LDT1	1.52	1.30
tblVehicleEF	LDT1	2.49	2.19
tblVehicleEF	LDT1	330.49	313.30
tblVehicleEF	LDT1	67.47	62.20
tblVehicleEF	LDT1	0.14	0.10
tblVehicleEF	LDT1	0.14	0.24
tblVehicleEF	LDT1	3.3520e-003	2.5020e-003
tblVehicleEF	LDT1	3.2790e-003	2.4470e-003
tblVehicleEF	LDT1	3.0870e-003	2.3020e-003
tblVehicleEF	LDT1	3.0150e-003	2.2500e-003
tblVehicleEF	LDT1	0.12	0.12
tblVehicleEF	LDT1	0.25	0.18
tblVehicleEF	LDT1	0.10	0.10
tblVehicleEF	LDT1	0.03	0.03
tblVehicleEF	LDT1	0.16	0.64
tblVehicleEF	LDT1	0.17	0.32
tblVehicleEF	LDT1	3.3240e-003	3.0620e-003
tblVehicleEF	LDT1	7.1800e-004	6.0800e-004
tblVehicleEF	LDT1	0.12	0.12
tblVehicleEF	LDT1	0.25	0.18

tblVehicleEF	LDT1	0.10	0.10
tblVehicleEF	LDT1	0.05	0.04
tblVehicleEF	LDT1	0.16	0.64
tblVehicleEF	LDT1	0.18	0.35
tblVehicleEF	LDT1	0.01	7.1130e-003
tblVehicleEF	LDT1	0.01	0.06
tblVehicleEF	LDT1	1.65	1.41
tblVehicleEF	LDT1	2.11	1.86
tblVehicleEF	LDT1	344.92	325.13
tblVehicleEF	LDT1	67.47	61.56
tblVehicleEF	LDT1	0.12	0.09
tblVehicleEF	LDT1	0.13	0.22
tblVehicleEF	LDT1	3.3520e-003	2.5020e-003
tblVehicleEF	LDT1	3.2790e-003	2.4470e-003
tblVehicleEF	LDT1	3.0870e-003	2.3020e-003
tblVehicleEF	LDT1	3.0150e-003	2.2500e-003
tblVehicleEF	LDT1	0.19	0.18
tblVehicleEF	LDT1	0.26	0.19
tblVehicleEF	LDT1	0.14	0.14
tblVehicleEF	LDT1	0.04	0.03
tblVehicleEF	LDT1	0.15	0.59
tblVehicleEF	LDT1	0.15	0.28
tblVehicleEF	LDT1	3.4700e-003	3.1770e-003
tblVehicleEF	LDT1	7.1200e-004	6.0200e-004
tblVehicleEF	LDT1	0.19	0.18
tblVehicleEF	LDT1	0.26	0.19
tblVehicleEF	LDT1	0.14	0.14

tblVehicleEF	LDT1	0.05	0.05
tblVehicleEF	LDT1	0.15	0.59
tblVehicleEF	LDT1	0.16	0.31
tblVehicleEF	LDT1	0.01	6.5900e-003
tblVehicleEF	LDT1	0.01	0.07
tblVehicleEF	LDT1	1.47	1.26
tblVehicleEF	LDT1	2.57	2.26
tblVehicleEF	LDT1	325.20	308.93
tblVehicleEF	LDT1	67.47	62.34
tblVehicleEF	LDT1	0.14	0.10
tblVehicleEF	LDT1	0.15	0.24
tblVehicleEF	LDT1	3.3520e-003	2.5020e-003
tblVehicleEF	LDT1	3.2790e-003	2.4470e-003
tblVehicleEF	LDT1	3.0870e-003	2.3020e-003
tblVehicleEF	LDT1	3.0150e-003	2.2500e-003
tblVehicleEF	LDT1	0.12	0.12
tblVehicleEF	LDT1	0.28	0.20
tblVehicleEF	LDT1	0.10	0.10
tblVehicleEF	LDT1	0.03	0.03
tblVehicleEF	LDT1	0.19	0.76
tblVehicleEF	LDT1	0.17	0.33
tblVehicleEF	LDT1	3.2700e-003	3.0190e-003
tblVehicleEF	LDT1	7.1900e-004	6.0900e-004
tblVehicleEF	LDT1	0.12	0.12
tblVehicleEF	LDT1	0.28	0.20
tblVehicleEF	LDT1	0.10	0.10
tblVehicleEF	LDT1	0.05	0.04

tblVehicleEF	LDT1	0.19	0.76
tblVehicleEF	LDT1	0.19	0.36
tblVehicleEF	LDT2	6.6130e-003	4.4260e-003
tblVehicleEF	LDT2	5.6850e-003	0.06
tblVehicleEF	LDT2	0.79	0.94
tblVehicleEF	LDT2	1.23	2.55
tblVehicleEF	LDT2	368.32	332.67
tblVehicleEF	LDT2	75.43	66.53
tblVehicleEF	LDT2	0.07	0.07
tblVehicleEF	LDT2	0.09	0.25
tblVehicleEF	LDT2	2.1490e-003	1.8230e-003
tblVehicleEF	LDT2	2.3760e-003	1.8150e-003
tblVehicleEF	LDT2	1.9770e-003	1.6780e-003
tblVehicleEF	LDT2	2.1840e-003	1.6690e-003
tblVehicleEF	LDT2	0.04	0.07
tblVehicleEF	LDT2	0.09	0.12
tblVehicleEF	LDT2	0.04	0.07
tblVehicleEF	LDT2	0.02	0.02
tblVehicleEF	LDT2	0.06	0.39
tblVehicleEF	LDT2	0.08	0.29
tblVehicleEF	LDT2	3.6890e-003	3.2500e-003
tblVehicleEF	LDT2	7.7500e-004	6.5000e-004
tblVehicleEF	LDT2	0.04	0.07
tblVehicleEF	LDT2	0.09	0.12
tblVehicleEF	LDT2	0.04	0.07
tblVehicleEF	LDT2	0.02	0.03
tblVehicleEF	LDT2	0.06	0.39

tblVehicleEF	LDT2	0.08	0.31
tblVehicleEF	LDT2	7.0150e-003	4.7110e-003
tblVehicleEF	LDT2	5.0630e-003	0.06
tblVehicleEF	LDT2	0.87	1.03
tblVehicleEF	LDT2	1.06	2.18
tblVehicleEF	LDT2	384.82	344.13
tblVehicleEF	LDT2	75.43	65.83
tblVehicleEF	LDT2	0.06	0.07
tblVehicleEF	LDT2	0.09	0.24
tblVehicleEF	LDT2	2.1490e-003	1.8230e-003
tblVehicleEF	LDT2	2.3760e-003	1.8150e-003
tblVehicleEF	LDT2	1.9770e-003	1.6780e-003
tblVehicleEF	LDT2	2.1840e-003	1.6690e-003
tblVehicleEF	LDT2	0.07	0.11
tblVehicleEF	LDT2	0.10	0.12
tblVehicleEF	LDT2	0.06	0.10
tblVehicleEF	LDT2	0.02	0.02
tblVehicleEF	LDT2	0.06	0.36
tblVehicleEF	LDT2	0.07	0.26
tblVehicleEF	LDT2	3.8550e-003	3.3620e-003
tblVehicleEF	LDT2	7.7200e-004	6.4300e-004
tblVehicleEF	LDT2	0.07	0.11
tblVehicleEF	LDT2	0.10	0.12
tblVehicleEF	LDT2	0.06	0.10
tblVehicleEF	LDT2	0.03	0.03
tblVehicleEF	LDT2	0.06	0.36
tblVehicleEF	LDT2	0.07	0.28

tblVehicleEF	LDT2	6.4820e-003	4.3360e-003
tblVehicleEF	LDT2	5.8190e-003	0.06
tblVehicleEF	LDT2	0.76	0.91
tblVehicleEF	LDT2	1.27	2.64
tblVehicleEF	LDT2	362.26	328.44
tblVehicleEF	LDT2	75.43	66.69
tblVehicleEF	LDT2	0.07	0.07
tblVehicleEF	LDT2	0.09	0.26
tblVehicleEF	LDT2	2.1490e-003	1.8230e-003
tblVehicleEF	LDT2	2.3760e-003	1.8150e-003
tblVehicleEF	LDT2	1.9770e-003	1.6780e-003
tblVehicleEF	LDT2	2.1840e-003	1.6690e-003
tblVehicleEF	LDT2	0.04	0.07
tblVehicleEF	LDT2	0.10	0.13
tblVehicleEF	LDT2	0.04	0.07
tblVehicleEF	LDT2	0.02	0.02
tblVehicleEF	LDT2	0.07	0.46
tblVehicleEF	LDT2	0.08	0.29
tblVehicleEF	LDT2	3.6280e-003	3.2090e-003
tblVehicleEF	LDT2	7.7500e-004	6.5200e-004
tblVehicleEF	LDT2	0.04	0.07
tblVehicleEF	LDT2	0.10	0.13
tblVehicleEF	LDT2	0.04	0.07
tblVehicleEF	LDT2	0.02	0.03
tblVehicleEF	LDT2	0.07	0.46
tblVehicleEF	LDT2	0.09	0.32
tblVehicleEF	LHD1	5.2860e-003	5.3650e-003

tblVehicleEF	LHD1	0.01	4.9910e-003
tblVehicleEF	LHD1	0.02	0.01
tblVehicleEF	LHD1	0.15	0.19
tblVehicleEF	LHD1	0.75	0.57
tblVehicleEF	LHD1	2.58	1.08
tblVehicleEF	LHD1	8.94	8.81
tblVehicleEF	LHD1	595.21	652.98
tblVehicleEF	LHD1	32.17	12.06
tblVehicleEF	LHD1	0.07	0.05
tblVehicleEF	LHD1	0.86	0.55
tblVehicleEF	LHD1	0.95	0.32
tblVehicleEF	LHD1	8.3300e-004	7.8400e-004
tblVehicleEF	LHD1	0.01	9.7290e-003
tblVehicleEF	LHD1	8.8370e-003	5.9880e-003
tblVehicleEF	LHD1	9.4800e-004	2.6800e-004
tblVehicleEF	LHD1	7.9700e-004	7.5000e-004
tblVehicleEF	LHD1	2.5350e-003	2.4320e-003
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tblVehicleEF	LHD1	8.7200e-004	2.4700e-004
tblVehicleEF	LHD1	2.9730e-003	2.3520e-003
tblVehicleEF	LHD1	0.10	0.07
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	1.8290e-003	1.4550e-003
tblVehicleEF	LHD1	0.06	0.04
tblVehicleEF	LHD1	0.30	0.51
tblVehicleEF	LHD1	0.24	0.07
tblVehicleEF	LHD1	9.0000e-005	8.6000e-005

tblVehicleEF	LHD1	5.8400e-003	6.3740e-003
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tblVehicleEF	LHD1	2.9730e-003	2.3520e-003
tblVehicleEF	LHD1	0.10	0.07
tblVehicleEF	LHD1	0.02	0.03
tblVehicleEF	LHD1	1.8290e-003	1.4550e-003
tblVehicleEF	LHD1	0.07	0.06
tblVehicleEF	LHD1	0.30	0.51
tblVehicleEF	LHD1	0.27	0.08
tblVehicleEF	LHD1	5.2860e-003	5.3760e-003
tblVehicleEF	LHD1	0.01	5.0880e-003
tblVehicleEF	LHD1	0.02	0.01
tblVehicleEF	LHD1	0.15	0.19
tblVehicleEF	LHD1	0.76	0.58
tblVehicleEF	LHD1	2.46	1.03
tblVehicleEF	LHD1	8.94	8.81
tblVehicleEF	LHD1	595.21	653.00
tblVehicleEF	LHD1	32.17	11.97
tblVehicleEF	LHD1	0.07	0.05
tblVehicleEF	LHD1	0.81	0.52
tblVehicleEF	LHD1	0.91	0.30
tblVehicleEF	LHD1	8.3300e-004	7.8400e-004
tblVehicleEF	LHD1	0.01	9.7290e-003
tblVehicleEF	LHD1	8.8370e-003	5.9880e-003
tblVehicleEF	LHD1	9.4800e-004	2.6800e-004
tblVehicleEF	LHD1	7.9700e-004	7.5000e-004
tblVehicleEF	LHD1	2.5350e-003	2.4320e-003

tblVehicleEF	LHD1	8.4300e-003	5.7010e-003
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tblVehicleEF	LHD1	4.4450e-003	3.4570e-003
tblVehicleEF	LHD1	0.10	0.08
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	2.5600e-003	2.0040e-003
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tblVehicleEF	LHD1	0.29	0.50
tblVehicleEF	LHD1	0.23	0.07
tblVehicleEF	LHD1	9.0000e-005	8.6000e-005
tblVehicleEF	LHD1	5.8400e-003	6.3740e-003
tblVehicleEF	LHD1	3.6700e-004	1.1800e-004
tblVehicleEF	LHD1	4.4450e-003	3.4570e-003
tblVehicleEF	LHD1	0.10	0.08
tblVehicleEF	LHD1	0.02	0.03
tblVehicleEF	LHD1	2.5600e-003	2.0040e-003
tblVehicleEF	LHD1	0.08	0.06
tblVehicleEF	LHD1	0.29	0.50
tblVehicleEF	LHD1	0.26	0.08
tblVehicleEF	LHD1	5.2860e-003	5.3620e-003
tblVehicleEF	LHD1	0.01	4.9650e-003
tblVehicleEF	LHD1	0.02	0.01
tblVehicleEF	LHD1	0.15	0.19
tblVehicleEF	LHD1	0.74	0.56
tblVehicleEF	LHD1	2.59	1.09
tblVehicleEF	LHD1	8.94	8.81
tblVehicleEF	LHD1	595.21	652.97

tblVehicleEF	LHD1	32.17	12.07
tblVehicleEF	LHD1	0.07	0.05
tblVehicleEF	LHD1	0.85	0.54
tblVehicleEF	LHD1	0.95	0.32
tblVehicleEF	LHD1	8.3300e-004	7.8400e-004
tblVehicleEF	LHD1	0.01	9.7290e-003
tblVehicleEF	LHD1	8.8370e-003	5.9880e-003
tblVehicleEF	LHD1	9.4800e-004	2.6800e-004
tblVehicleEF	LHD1	7.9700e-004	7.5000e-004
tblVehicleEF	LHD1	2.5350e-003	2.4320e-003
tblVehicleEF	LHD1	8.4300e-003	5.7010e-003
tblVehicleEF	LHD1	8.7200e-004	2.4700e-004
tblVehicleEF	LHD1	3.1110e-003	2.4630e-003
tblVehicleEF	LHD1	0.11	0.09
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	1.7990e-003	1.4330e-003
tblVehicleEF	LHD1	0.06	0.04
tblVehicleEF	LHD1	0.32	0.56
tblVehicleEF	LHD1	0.25	0.07
tblVehicleEF	LHD1	9.0000e-005	8.6000e-005
tblVehicleEF	LHD1	5.8400e-003	6.3740e-003
tblVehicleEF	LHD1	3.7000e-004	1.1900e-004
tblVehicleEF	LHD1	3.1110e-003	2.4630e-003
tblVehicleEF	LHD1	0.11	0.09
tblVehicleEF	LHD1	0.02	0.03
tblVehicleEF	LHD1	1.7990e-003	1.4330e-003
tblVehicleEF	LHD1	0.07	0.06

tblVehicleEF	LHD1	0.32	0.56
tblVehicleEF	LHD1	0.27	0.08
tblVehicleEF	LHD2	3.7460e-003	3.7400e-003
tblVehicleEF	LHD2	3.7700e-003	3.5360e-003
tblVehicleEF	LHD2	7.4580e-003	0.01
tblVehicleEF	LHD2	0.13	0.15
tblVehicleEF	LHD2	0.31	0.39
tblVehicleEF	LHD2	1.26	0.72
tblVehicleEF	LHD2	13.57	13.36
tblVehicleEF	LHD2	610.80	654.07
tblVehicleEF	LHD2	26.97	9.22
tblVehicleEF	LHD2	0.09	0.08
tblVehicleEF	LHD2	0.55	0.71
tblVehicleEF	LHD2	0.50	0.22
tblVehicleEF	LHD2	1.1440e-003	1.2760e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	8.4330e-003	9.6270e-003
tblVehicleEF	LHD2	4.4100e-004	1.5200e-004
tblVehicleEF	LHD2	1.0950e-003	1.2210e-003
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tblVehicleEF	LHD2	4.0500e-004	1.4000e-004
tblVehicleEF	LHD2	1.0290e-003	1.4320e-003
tblVehicleEF	LHD2	0.03	0.05
tblVehicleEF	LHD2	0.01	0.02
tblVehicleEF	LHD2	6.8900e-004	9.0800e-004
tblVehicleEF	LHD2	0.04	0.05

tblVehicleEF	LHD2	0.07	0.32
tblVehicleEF	LHD2	0.10	0.05
tblVehicleEF	LHD2	1.3300e-004	1.2800e-004
tblVehicleEF	LHD2	5.9490e-003	6.3290e-003
tblVehicleEF	LHD2	2.9200e-004	9.1000e-005
tblVehicleEF	LHD2	1.0290e-003	1.4320e-003
tblVehicleEF	LHD2	0.03	0.05
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	6.8900e-004	9.0800e-004
tblVehicleEF	LHD2	0.05	0.06
tblVehicleEF	LHD2	0.07	0.32
tblVehicleEF	LHD2	0.11	0.05
tblVehicleEF	LHD2	3.7460e-003	3.7480e-003
tblVehicleEF	LHD2	3.8180e-003	3.5740e-003
tblVehicleEF	LHD2	7.2080e-003	9.7970e-003
tblVehicleEF	LHD2	0.13	0.15
tblVehicleEF	LHD2	0.31	0.39
tblVehicleEF	LHD2	1.20	0.69
tblVehicleEF	LHD2	13.57	13.36
tblVehicleEF	LHD2	610.80	654.07
tblVehicleEF	LHD2	26.97	9.16
tblVehicleEF	LHD2	0.09	0.08
tblVehicleEF	LHD2	0.52	0.67
tblVehicleEF	LHD2	0.49	0.21
tblVehicleEF	LHD2	1.1440e-003	1.2760e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	8.4330e-003	9.6270e-003

tblVehicleEF	LHD2	4.4100e-004	1.5200e-004
tblVehicleEF	LHD2	1.0950e-003	1.2210e-003
tblVehicleEF	LHD2	2.6630e-003	2.6430e-003
tblVehicleEF	LHD2	8.0540e-003	9.1940e-003
tblVehicleEF	LHD2	4.0500e-004	1.4000e-004
tblVehicleEF	LHD2	1.5320e-003	2.1080e-003
tblVehicleEF	LHD2	0.04	0.05
tblVehicleEF	LHD2	0.01	0.02
tblVehicleEF	LHD2	9.5700e-004	1.2530e-003
tblVehicleEF	LHD2	0.04	0.05
tblVehicleEF	LHD2	0.07	0.30
tblVehicleEF	LHD2	0.10	0.05
tblVehicleEF	LHD2	1.3300e-004	1.2800e-004
tblVehicleEF	LHD2	5.9490e-003	6.3290e-003
tblVehicleEF	LHD2	2.9100e-004	9.1000e-005
tblVehicleEF	LHD2	1.5320e-003	2.1080e-003
tblVehicleEF	LHD2	0.04	0.05
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	9.5700e-004	1.2530e-003
tblVehicleEF	LHD2	0.05	0.06
tblVehicleEF	LHD2	0.07	0.30
tblVehicleEF	LHD2	0.11	0.05
tblVehicleEF	LHD2	3.7460e-003	3.7380e-003
tblVehicleEF	LHD2	3.7580e-003	3.5260e-003
tblVehicleEF	LHD2	7.5080e-003	0.01
tblVehicleEF	LHD2	0.13	0.15
tblVehicleEF	LHD2	0.31	0.38

tblVehicleEF	LHD2	1.27	0.72
tblVehicleEF	LHD2	13.57	13.36
tblVehicleEF	LHD2	610.80	654.06
tblVehicleEF	LHD2	26.97	9.23
tblVehicleEF	LHD2	0.09	0.08
tblVehicleEF	LHD2	0.54	0.69
tblVehicleEF	LHD2	0.51	0.22
tblVehicleEF	LHD2	1.1440e-003	1.2760e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	8.4330e-003	9.6270e-003
tblVehicleEF	LHD2	4.4100e-004	1.5200e-004
tblVehicleEF	LHD2	1.0950e-003	1.2210e-003
tblVehicleEF	LHD2	2.6630e-003	2.6430e-003
tblVehicleEF	LHD2	8.0540e-003	9.1940e-003
tblVehicleEF	LHD2	4.0500e-004	1.4000e-004
tblVehicleEF	LHD2	1.0410e-003	1.4720e-003
tblVehicleEF	LHD2	0.04	0.06
tblVehicleEF	LHD2	0.01	0.02
tblVehicleEF	LHD2	6.6600e-004	8.7900e-004
tblVehicleEF	LHD2	0.04	0.05
tblVehicleEF	LHD2	0.08	0.34
tblVehicleEF	LHD2	0.10	0.05
tblVehicleEF	LHD2	1.3300e-004	1.2800e-004
tblVehicleEF	LHD2	5.9490e-003	6.3290e-003
tblVehicleEF	LHD2	2.9200e-004	9.1000e-005
tblVehicleEF	LHD2	1.0410e-003	1.4720e-003
tblVehicleEF	LHD2	0.04	0.06

tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	6.6600e-004	8.7900e-004
tblVehicleEF	LHD2	0.05	0.06
tblVehicleEF	LHD2	0.08	0.34
tblVehicleEF	LHD2	0.11	0.05
tblVehicleEF	MCY	0.54	0.38
tblVehicleEF	MCY	0.15	0.23
tblVehicleEF	MCY	18.72	18.86
tblVehicleEF	MCY	9.68	8.54
tblVehicleEF	MCY	189.29	223.65
tblVehicleEF	MCY	44.13	59.21
tblVehicleEF	MCY	1.13	1.13
tblVehicleEF	MCY	0.31	0.26
tblVehicleEF	MCY	2.4730e-003	2.4800e-003
tblVehicleEF	MCY	3.6800e-003	3.1550e-003
tblVehicleEF	MCY	2.3100e-003	2.3160e-003
tblVehicleEF	MCY	3.4590e-003	2.9650e-003
tblVehicleEF	MCY	1.06	1.07
tblVehicleEF	MCY	0.62	0.64
tblVehicleEF	MCY	0.64	0.65
tblVehicleEF	MCY	2.58	2.60
tblVehicleEF	MCY	0.58	1.88
tblVehicleEF	MCY	2.04	1.80
tblVehicleEF	MCY	2.2780e-003	2.2130e-003
tblVehicleEF	MCY	6.5900e-004	5.8600e-004
tblVehicleEF	MCY	1.06	1.07
tblVehicleEF	MCY	0.62	0.64

tblVehicleEF	MCY	0.64	0.65
tblVehicleEF	MCY	3.22	3.23
tblVehicleEF	MCY	0.58	1.88
tblVehicleEF	MCY	2.22	1.96
tblVehicleEF	MCY	0.53	0.37
tblVehicleEF	MCY	0.13	0.21
tblVehicleEF	MCY	18.05	18.15
tblVehicleEF	MCY	8.84	7.77
tblVehicleEF	MCY	189.29	222.30
tblVehicleEF	MCY	44.13	57.32
tblVehicleEF	MCY	0.99	0.99
tblVehicleEF	MCY	0.29	0.25
tblVehicleEF	MCY	2.4730e-003	2.4800e-003
tblVehicleEF	MCY	3.6800e-003	3.1550e-003
tblVehicleEF	MCY	2.3100e-003	2.3160e-003
tblVehicleEF	MCY	3.4590e-003	2.9650e-003
tblVehicleEF	MCY	1.72	1.71
tblVehicleEF	MCY	0.68	0.69
tblVehicleEF	MCY	1.06	1.05
tblVehicleEF	MCY	2.52	2.54
tblVehicleEF	MCY	0.54	1.76
tblVehicleEF	MCY	1.82	1.60
tblVehicleEF	MCY	2.2650e-003	2.2000e-003
tblVehicleEF	MCY	6.3900e-004	5.6700e-004
tblVehicleEF	MCY	1.72	1.71
tblVehicleEF	MCY	0.68	0.69
tblVehicleEF	MCY	1.06	1.05

tblVehicleEF	MCY	3.15	3.16
tblVehicleEF	MCY	0.54	1.76
tblVehicleEF	MCY	1.98	1.74
tblVehicleEF	MCY	0.54	0.38
tblVehicleEF	MCY	0.15	0.24
tblVehicleEF	MCY	18.82	19.00
tblVehicleEF	MCY	9.83	8.69
tblVehicleEF	MCY	189.29	223.92
tblVehicleEF	MCY	44.13	59.59
tblVehicleEF	MCY	1.10	1.10
tblVehicleEF	MCY	0.31	0.27
tblVehicleEF	MCY	2.4730e-003	2.4800e-003
tblVehicleEF	MCY	3.6800e-003	3.1550e-003
tblVehicleEF	MCY	2.3100e-003	2.3160e-003
tblVehicleEF	MCY	3.4590e-003	2.9650e-003
tblVehicleEF	MCY	1.15	1.17
tblVehicleEF	MCY	0.80	0.82
tblVehicleEF	MCY	0.61	0.63
tblVehicleEF	MCY	2.59	2.61
tblVehicleEF	MCY	0.67	2.18
tblVehicleEF	MCY	2.08	1.85
tblVehicleEF	MCY	2.2800e-003	2.2160e-003
tblVehicleEF	MCY	6.6300e-004	5.9000e-004
tblVehicleEF	MCY	1.15	1.17
tblVehicleEF	MCY	0.80	0.82
tblVehicleEF	MCY	0.61	0.63
tblVehicleEF	MCY	3.23	3.25

tblVehicleEF	MCY	0.67	2.18
tblVehicleEF	MCY	2.26	2.01
tblVehicleEF	MDV	0.01	5.6770e-003
tblVehicleEF	MDV	0.01	0.07
tblVehicleEF	MDV	1.21	1.09
tblVehicleEF	MDV	2.22	2.92
tblVehicleEF	MDV	495.22	408.75
tblVehicleEF	MDV	99.91	80.84
tblVehicleEF	MDV	0.13	0.10
tblVehicleEF	MDV	0.19	0.31
tblVehicleEF	MDV	2.2990e-003	1.9550e-003
tblVehicleEF	MDV	2.4650e-003	1.9340e-003
tblVehicleEF	MDV	2.1190e-003	1.8020e-003
tblVehicleEF	MDV	2.2660e-003	1.7790e-003
tblVehicleEF	MDV	0.06	0.08
tblVehicleEF	MDV	0.15	0.13
tblVehicleEF	MDV	0.07	0.09
tblVehicleEF	MDV	0.03	0.02
tblVehicleEF	MDV	0.09	0.41
tblVehicleEF	MDV	0.17	0.36
tblVehicleEF	MDV	4.9590e-003	3.9920e-003
tblVehicleEF	MDV	1.0380e-003	7.9000e-004
tblVehicleEF	MDV	0.06	0.08
tblVehicleEF	MDV	0.15	0.13
tblVehicleEF	MDV	0.07	0.09
tblVehicleEF	MDV	0.04	0.04
tblVehicleEF	MDV	0.09	0.41

tblVehicleEF	MDV	0.18	0.39
tblVehicleEF	MDV	0.01	6.0290e-003
tblVehicleEF	MDV	0.01	0.07
tblVehicleEF	MDV	1.32	1.19
tblVehicleEF	MDV	1.90	2.49
tblVehicleEF	MDV	516.89	420.70
tblVehicleEF	MDV	99.91	80.01
tblVehicleEF	MDV	0.11	0.08
tblVehicleEF	MDV	0.18	0.29
tblVehicleEF	MDV	2.2990e-003	1.9550e-003
tblVehicleEF	MDV	2.4650e-003	1.9340e-003
tblVehicleEF	MDV	2.1190e-003	1.8020e-003
tblVehicleEF	MDV	2.2660e-003	1.7790e-003
tblVehicleEF	MDV	0.10	0.12
tblVehicleEF	MDV	0.15	0.14
tblVehicleEF	MDV	0.09	0.12
tblVehicleEF	MDV	0.03	0.03
tblVehicleEF	MDV	0.08	0.38
tblVehicleEF	MDV	0.15	0.32
tblVehicleEF	MDV	5.1770e-003	4.1080e-003
tblVehicleEF	MDV	1.0320e-003	7.8200e-004
tblVehicleEF	MDV	0.10	0.12
tblVehicleEF	MDV	0.15	0.14
tblVehicleEF	MDV	0.09	0.12
tblVehicleEF	MDV	0.05	0.04
tblVehicleEF	MDV	0.08	0.38
tblVehicleEF	MDV	0.16	0.35

tblVehicleEF	MDV	0.01	5.5640e-003
tblVehicleEF	MDV	0.01	0.08
tblVehicleEF	MDV	1.17	1.05
tblVehicleEF	MDV	2.29	3.02
tblVehicleEF	MDV	487.26	404.33
tblVehicleEF	MDV	99.91	81.03
tblVehicleEF	MDV	0.13	0.09
tblVehicleEF	MDV	0.20	0.31
tblVehicleEF	MDV	2.2990e-003	1.9550e-003
tblVehicleEF	MDV	2.4650e-003	1.9340e-003
tblVehicleEF	MDV	2.1190e-003	1.8020e-003
tblVehicleEF	MDV	2.2660e-003	1.7790e-003
tblVehicleEF	MDV	0.06	0.08
tblVehicleEF	MDV	0.16	0.14
tblVehicleEF	MDV	0.06	0.08
tblVehicleEF	MDV	0.03	0.02
tblVehicleEF	MDV	0.10	0.48
tblVehicleEF	MDV	0.17	0.37
tblVehicleEF	MDV	4.8790e-003	3.9480e-003
tblVehicleEF	MDV	1.0390e-003	7.9200e-004
tblVehicleEF	MDV	0.06	0.08
tblVehicleEF	MDV	0.16	0.14
tblVehicleEF	MDV	0.06	0.08
tblVehicleEF	MDV	0.04	0.03
tblVehicleEF	MDV	0.10	0.48
tblVehicleEF	MDV	0.19	0.40
tblVehicleEF	MH	0.02	2.9970e-003

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tblVehicleEF	MH	5.23	0.00
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tblVehicleEF	MH	0.01	0.02
tblVehicleEF	MH	0.02	0.07
tblVehicleEF	MH	1.0430e-003	0.00
tblVehicleEF	MH	3.2050e-003	4.0000e-003
tblVehicleEF	MH	0.02	0.07
tblVehicleEF	MH	9.5900e-004	0.00
tblVehicleEF	MH	0.84	0.00
tblVehicleEF	MH	0.06	0.00
tblVehicleEF	MH	0.36	0.00
tblVehicleEF	MH	0.07	0.06
tblVehicleEF	MH	0.02	0.00
tblVehicleEF	MH	0.30	0.00
tblVehicleEF	MH	0.01	9.0160e-003
tblVehicleEF	MH	6.9000e-004	0.00
tblVehicleEF	MH	0.84	0.00
tblVehicleEF	MH	0.06	0.00
tblVehicleEF	MH	0.36	0.00
tblVehicleEF	MH	0.10	0.07
tblVehicleEF	MH	0.02	0.00
tblVehicleEF	MH	0.33	0.00

tblVehicleEF	MH	0.02	2.9970e-003
tblVehicleEF	MH	0.02	0.00
tblVehicleEF	MH	1.81	0.25
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tblVehicleEF	MH	0.02	0.07
tblVehicleEF	MH	1.0430e-003	0.00
tblVehicleEF	MH	3.2050e-003	4.0000e-003
tblVehicleEF	MH	0.02	0.07
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tblVehicleEF	MH	1.24	0.00
tblVehicleEF	MH	0.06	0.00
tblVehicleEF	MH	0.51	0.00
tblVehicleEF	MH	0.07	0.06
tblVehicleEF	MH	0.02	0.00
tblVehicleEF	MH	0.29	0.00
tblVehicleEF	MH	0.01	9.0160e-003
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tblVehicleEF	MH	0.06	0.00
tblVehicleEF	MH	0.51	0.00
tblVehicleEF	MH	0.10	0.07
tblVehicleEF	MH	0.02	0.00

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tblVehicleEF	MHD	1.0200e-004	3.2600e-004
tblVehicleEF	MHD	2.8420e-003	6.1300e-003
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tblVehicleEF	MHD	0.02	0.02
tblVehicleEF	MHD	7.0500e-004	4.1000e-004
tblVehicleEF	MHD	0.04	0.02
tblVehicleEF	MHD	0.02	0.14
tblVehicleEF	MHD	0.34	0.06

tblVehicleEF	MHD	1.2580e-003	6.1500e-004
tblVehicleEF	MHD	0.01	9.8540e-003
tblVehicleEF	MHD	7.2700e-004	1.1900e-004
tblVehicleEF	MHD	1.0540e-003	6.2300e-004
tblVehicleEF	MHD	0.04	0.03
tblVehicleEF	MHD	0.04	0.03
tblVehicleEF	MHD	7.0500e-004	4.1000e-004
tblVehicleEF	MHD	0.04	0.02
tblVehicleEF	MHD	0.02	0.14
tblVehicleEF	MHD	0.38	0.07
tblVehicleEF	MHD	0.01	4.2040e-003
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tblVehicleEF	MHD	0.32	0.28
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tblVehicleEF	MHD	0.71	1.02
tblVehicleEF	MHD	9.94	1.58
tblVehicleEF	MHD	8.6000e-005	2.7800e-004
tblVehicleEF	MHD	2.8420e-003	6.1300e-003
tblVehicleEF	MHD	8.1400e-004	1.3500e-004
tblVehicleEF	MHD	8.2000e-005	2.6600e-004
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tblVehicleEF	MHD	7.4900e-004	1.2400e-004
tblVehicleEF	MHD	1.5770e-003	9.2500e-004
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tblVehicleEF	MHD	0.02	0.02
tblVehicleEF	MHD	9.9000e-004	5.7300e-004
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tblVehicleEF	MHD	0.02	0.13
tblVehicleEF	MHD	0.33	0.06
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tblVehicleEF	MHD	2.8420e-003	6.1300e-003
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tblVehicleEF	MHD	0.03	0.02
tblVehicleEF	MHD	6.8500e-004	4.0000e-004
tblVehicleEF	MHD	0.04	0.02
tblVehicleEF	MHD	0.02	0.15
tblVehicleEF	MHD	0.35	0.06
tblVehicleEF	MHD	1.1580e-003	6.1300e-004
tblVehicleEF	MHD	0.01	9.8540e-003
tblVehicleEF	MHD	7.2800e-004	1.2000e-004
tblVehicleEF	MHD	1.0750e-003	6.3800e-004
tblVehicleEF	MHD	0.05	0.03
tblVehicleEF	MHD	0.04	0.03
tblVehicleEF	MHD	6.8500e-004	4.0000e-004
tblVehicleEF	MHD	0.04	0.02
tblVehicleEF	MHD	0.02	0.15
tblVehicleEF	MHD	0.38	0.07
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tblVehicleEF	OBUS	6.0280e-003	4.9410e-003
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tblVehicleEF	OBUS	0.25	0.61
tblVehicleEF	OBUS	0.45	0.61
tblVehicleEF	OBUS	5.18	2.34
tblVehicleEF	OBUS	101.82	90.17
tblVehicleEF	OBUS	1,246.68	1,355.70
tblVehicleEF	OBUS	67.80	19.02
tblVehicleEF	OBUS	0.22	0.35
tblVehicleEF	OBUS	0.69	1.16
tblVehicleEF	OBUS	2.52	0.84
tblVehicleEF	OBUS	2.0000e-005	1.1800e-004
tblVehicleEF	OBUS	2.6330e-003	7.0870e-003
tblVehicleEF	OBUS	8.2900e-004	2.0000e-004
tblVehicleEF	OBUS	1.9000e-005	1.1300e-004
tblVehicleEF	OBUS	2.5030e-003	6.7660e-003
tblVehicleEF	OBUS	7.6200e-004	1.8400e-004
tblVehicleEF	OBUS	1.4160e-003	1.8400e-003
tblVehicleEF	OBUS	0.02	0.02
tblVehicleEF	OBUS	0.03	0.05
tblVehicleEF	OBUS	7.6700e-004	9.5000e-004
tblVehicleEF	OBUS	0.04	0.03
tblVehicleEF	OBUS	0.04	0.27
tblVehicleEF	OBUS	0.32	0.11
tblVehicleEF	OBUS	9.8300e-004	8.5800e-004
tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	7.6900e-004	1.8800e-004

tblVehicleEF	OBUS	1.4160e-003	1.8400e-003
tblVehicleEF	OBUS	0.02	0.02
tblVehicleEF	OBUS	0.05	0.07
tblVehicleEF	OBUS	7.6700e-004	9.5000e-004
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tblVehicleEF	OBUS	0.35	0.12
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tblVehicleEF	OBUS	6.1370e-003	5.0480e-003
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tblVehicleEF	OBUS	0.45	0.63
tblVehicleEF	OBUS	4.89	2.21
tblVehicleEF	OBUS	106.89	89.14
tblVehicleEF	OBUS	1,246.68	1,355.72
tblVehicleEF	OBUS	67.80	18.81
tblVehicleEF	OBUS	0.22	0.33
tblVehicleEF	OBUS	0.64	1.09
tblVehicleEF	OBUS	2.49	0.83
tblVehicleEF	OBUS	1.7000e-005	1.0500e-004
tblVehicleEF	OBUS	2.6330e-003	7.0870e-003
tblVehicleEF	OBUS	8.2900e-004	2.0000e-004
tblVehicleEF	OBUS	1.6000e-005	1.0000e-004
tblVehicleEF	OBUS	2.5030e-003	6.7660e-003
tblVehicleEF	OBUS	7.6200e-004	1.8400e-004
tblVehicleEF	OBUS	2.0710e-003	2.6500e-003
tblVehicleEF	OBUS	0.02	0.02

tblVehicleEF	OBUS	0.03	0.05
tblVehicleEF	OBUS	1.0770e-003	1.3150e-003
tblVehicleEF	OBUS	0.04	0.03
tblVehicleEF	OBUS	0.04	0.26
tblVehicleEF	OBUS	0.31	0.11
tblVehicleEF	OBUS	1.0320e-003	8.4800e-004
tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	7.6400e-004	1.8600e-004
tblVehicleEF	OBUS	2.0710e-003	2.6500e-003
tblVehicleEF	OBUS	0.02	0.02
tblVehicleEF	OBUS	0.05	0.07
tblVehicleEF	OBUS	1.0770e-003	1.3150e-003
tblVehicleEF	OBUS	0.05	0.04
tblVehicleEF	OBUS	0.04	0.26
tblVehicleEF	OBUS	0.34	0.12
tblVehicleEF	OBUS	0.01	8.2140e-003
tblVehicleEF	OBUS	5.9990e-003	4.9100e-003
tblVehicleEF	OBUS	0.03	0.02
tblVehicleEF	OBUS	0.26	0.62
tblVehicleEF	OBUS	0.45	0.61
tblVehicleEF	OBUS	5.23	2.37
tblVehicleEF	OBUS	94.83	91.59
tblVehicleEF	OBUS	1,246.68	1,355.70
tblVehicleEF	OBUS	67.80	19.07
tblVehicleEF	OBUS	0.21	0.37
tblVehicleEF	OBUS	0.68	1.14
tblVehicleEF	OBUS	2.53	0.84

tblVehicleEF	OBUS	2.4000e-005	1.3600e-004
tblVehicleEF	OBUS	2.6330e-003	7.0870e-003
tblVehicleEF	OBUS	8.2900e-004	2.0000e-004
tblVehicleEF	OBUS	2.3000e-005	1.3000e-004
tblVehicleEF	OBUS	2.5030e-003	6.7660e-003
tblVehicleEF	OBUS	7.6200e-004	1.8400e-004
tblVehicleEF	OBUS	1.4400e-003	1.9120e-003
tblVehicleEF	OBUS	0.02	0.02
tblVehicleEF	OBUS	0.03	0.05
tblVehicleEF	OBUS	7.4400e-004	9.3100e-004
tblVehicleEF	OBUS	0.04	0.03
tblVehicleEF	OBUS	0.04	0.29
tblVehicleEF	OBUS	0.33	0.11
tblVehicleEF	OBUS	9.1700e-004	8.7100e-004
tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	7.7000e-004	1.8900e-004
tblVehicleEF	OBUS	1.4400e-003	1.9120e-003
tblVehicleEF	OBUS	0.02	0.02
tblVehicleEF	OBUS	0.05	0.07
tblVehicleEF	OBUS	7.4400e-004	9.3100e-004
tblVehicleEF	OBUS	0.05	0.04
tblVehicleEF	OBUS	0.04	0.29
tblVehicleEF	OBUS	0.36	0.12
tblVehicleEF	SBUS	0.84	0.08
tblVehicleEF	SBUS	0.01	6.7080e-003
tblVehicleEF	SBUS	0.06	7.0640e-003
tblVehicleEF	SBUS	8.28	3.14

tblVehicleEF	SBUS	0.67	0.57
tblVehicleEF	SBUS	7.16	0.97
tblVehicleEF	SBUS	1,105.31	354.45
tblVehicleEF	SBUS	1,070.53	1,085.99
tblVehicleEF	SBUS	56.44	5.97
tblVehicleEF	SBUS	8.50	3.03
tblVehicleEF	SBUS	3.81	4.38
tblVehicleEF	SBUS	11.84	0.95
tblVehicleEF	SBUS	8.1160e-003	3.5860e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.02	0.03
tblVehicleEF	SBUS	8.5300e-004	6.0000e-005
tblVehicleEF	SBUS	7.7650e-003	3.4310e-003
tblVehicleEF	SBUS	2.6580e-003	2.6530e-003
tblVehicleEF	SBUS	0.02	0.02
tblVehicleEF	SBUS	7.8400e-004	5.5000e-005
tblVehicleEF	SBUS	3.3720e-003	1.0290e-003
tblVehicleEF	SBUS	0.03	8.9740e-003
tblVehicleEF	SBUS	0.99	0.36
tblVehicleEF	SBUS	1.8240e-003	5.5900e-004
tblVehicleEF	SBUS	0.10	0.09
tblVehicleEF	SBUS	0.01	0.06
tblVehicleEF	SBUS	0.38	0.04
tblVehicleEF	SBUS	0.01	3.3860e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	6.8800e-004	5.9000e-005
tblVehicleEF	SBUS	3.3720e-003	1.0290e-003

tblVehicleEF	SBUS	0.03	8.9740e-003
tblVehicleEF	SBUS	1.43	0.52
tblVehicleEF	SBUS	1.8240e-003	5.5900e-004
tblVehicleEF	SBUS	0.12	0.10
tblVehicleEF	SBUS	0.01	0.06
tblVehicleEF	SBUS	0.41	0.04
tblVehicleEF	SBUS	0.84	0.08
tblVehicleEF	SBUS	0.01	6.7850e-003
tblVehicleEF	SBUS	0.05	6.3040e-003
tblVehicleEF	SBUS	8.18	3.11
tblVehicleEF	SBUS	0.68	0.58
tblVehicleEF	SBUS	5.81	0.79
tblVehicleEF	SBUS	1,154.44	361.51
tblVehicleEF	SBUS	1,070.53	1,086.01
tblVehicleEF	SBUS	56.44	5.68
tblVehicleEF	SBUS	8.77	3.09
tblVehicleEF	SBUS	3.59	4.13
tblVehicleEF	SBUS	11.81	0.95
tblVehicleEF	SBUS	6.8420e-003	3.0310e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.02	0.03
tblVehicleEF	SBUS	8.5300e-004	6.000e-005
tblVehicleEF	SBUS	6.5460e-003	2.9000e-003
tblVehicleEF	SBUS	2.6580e-003	2.6530e-003
tblVehicleEF	SBUS	0.02	0.02
tblVehicleEF	SBUS	7.8400e-004	5.5000e-005
tblVehicleEF	SBUS	4.9610e-003	1.4870e-003

tblVehicleEF	SBUS	0.03	9.1170e-003
tblVehicleEF	SBUS	0.98	0.36
tblVehicleEF	SBUS	2.5750e-003	7.7400e-004
tblVehicleEF	SBUS	0.10	0.09
tblVehicleEF	SBUS	0.01	0.05
tblVehicleEF	SBUS	0.34	0.04
tblVehicleEF	SBUS	0.01	3.4520e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	6.6600e-004	5.6000e-005
tblVehicleEF	SBUS	4.9610e-003	1.4870e-003
tblVehicleEF	SBUS	0.03	9.1170e-003
tblVehicleEF	SBUS	1.42	0.52
tblVehicleEF	SBUS	2.5750e-003	7.7400e-004
tblVehicleEF	SBUS	0.12	0.11
tblVehicleEF	SBUS	0.01	0.05
tblVehicleEF	SBUS	0.37	0.04
tblVehicleEF	SBUS	0.84	0.08
tblVehicleEF	SBUS	0.01	6.6840e-003
tblVehicleEF	SBUS	0.06	7.2390e-003
tblVehicleEF	SBUS	8.43	3.19
tblVehicleEF	SBUS	0.66	0.57
tblVehicleEF	SBUS	7.40	1.00
tblVehicleEF	SBUS	1,037.46	344.71
tblVehicleEF	SBUS	1,070.53	1,085.99
tblVehicleEF	SBUS	56.44	6.03
tblVehicleEF	SBUS	8.13	2.95
tblVehicleEF	SBUS	3.74	4.30

tblVehicleEF	SBUS	11.85	0.96
tblVehicleEF	SBUS	9.8760e-003	4.3530e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.02	0.03
tblVehicleEF	SBUS	8.5300e-004	6.0000e-005
tblVehicleEF	SBUS	9.4480e-003	4.1650e-003
tblVehicleEF	SBUS	2.6580e-003	2.6530e-003
tblVehicleEF	SBUS	0.02	0.02
tblVehicleEF	SBUS	7.8400e-004	5.5000e-005
tblVehicleEF	SBUS	3.3940e-003	1.0330e-003
tblVehicleEF	SBUS	0.03	9.3490e-003
tblVehicleEF	SBUS	0.99	0.36
tblVehicleEF	SBUS	1.7490e-003	5.3600e-004
tblVehicleEF	SBUS	0.10	0.09
tblVehicleEF	SBUS	0.02	0.07
tblVehicleEF	SBUS	0.39	0.04
tblVehicleEF	SBUS	0.01	3.2930e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	6.9200e-004	6.0000e-005
tblVehicleEF	SBUS	3.3940e-003	1.0330e-003
tblVehicleEF	SBUS	0.03	9.3490e-003
tblVehicleEF	SBUS	1.43	0.52
tblVehicleEF	SBUS	1.7490e-003	5.3600e-004
tblVehicleEF	SBUS	0.12	0.10
tblVehicleEF	SBUS	0.02	0.07
tblVehicleEF	SBUS	0.42	0.05
tblVehicleEF	UBUS	2.44	5.85

tblVehicleEF	UBUS	0.05	0.01
tblVehicleEF	UBUS	10.68	45.42
tblVehicleEF	UBUS	8.84	0.71
tblVehicleEF	UBUS	1,951.45	1,987.99
tblVehicleEF	UBUS	100.38	8.42
tblVehicleEF	UBUS	9.33	0.47
tblVehicleEF	UBUS	15.09	0.08
tblVehicleEF	UBUS	0.60	0.07
tblVehicleEF	UBUS	0.01	0.03
tblVehicleEF	UBUS	0.12	3.2070e-003
tblVehicleEF	UBUS	1.1360e-003	5.7000e-005
tblVehicleEF	UBUS	0.26	0.03
tblVehicleEF	UBUS	3.0000e-003	7.9690e-003
tblVehicleEF	UBUS	0.12	3.0640e-003
tblVehicleEF	UBUS	1.0450e-003	5.2000e-005
tblVehicleEF	UBUS	4.1100e-003	5.9300e-004
tblVehicleEF	UBUS	0.07	7.4130e-003
tblVehicleEF	UBUS	2.4100e-003	4.3400e-004
tblVehicleEF	UBUS	0.79	0.09
tblVehicleEF	UBUS	0.02	0.05
tblVehicleEF	UBUS	0.68	0.05
tblVehicleEF	UBUS	9.8060e-003	1.4050e-003
tblVehicleEF	UBUS	1.1630e-003	8.3000e-005
tblVehicleEF	UBUS	4.1100e-003	5.9300e-004
tblVehicleEF	UBUS	0.07	7.4130e-003
tblVehicleEF	UBUS	2.4100e-003	4.3400e-004
tblVehicleEF	UBUS	3.32	5.97

tblVehicleEF	UBUS	0.02	0.05
tblVehicleEF	UBUS	0.75	0.05
tblVehicleEF	UBUS	2.44	5.85
tblVehicleEF	UBUS	0.05	9.9370e-003
tblVehicleEF	UBUS	10.72	45.42
tblVehicleEF	UBUS	7.66	0.63
tblVehicleEF	UBUS	1,951.45	1,987.99
tblVehicleEF	UBUS	100.38	8.27
tblVehicleEF	UBUS	8.79	0.47
tblVehicleEF	UBUS	15.04	0.08
tblVehicleEF	UBUS	0.60	0.07
tblVehicleEF	UBUS	0.01	0.03
tblVehicleEF	UBUS	0.12	3.2070e-003
tblVehicleEF	UBUS	1.1360e-003	5.7000e-005
tblVehicleEF	UBUS	0.26	0.03
tblVehicleEF	UBUS	3.0000e-003	7.9690e-003
tblVehicleEF	UBUS	0.12	3.0640e-003
tblVehicleEF	UBUS	1.0450e-003	5.2000e-005
tblVehicleEF	UBUS	5.8640e-003	8.6100e-004
tblVehicleEF	UBUS	0.07	7.6580e-003
tblVehicleEF	UBUS	3.3120e-003	6.0000e-004
tblVehicleEF	UBUS	0.80	0.09
tblVehicleEF	UBUS	0.02	0.04
tblVehicleEF	UBUS	0.63	0.04
tblVehicleEF	UBUS	9.8070e-003	1.4050e-003
tblVehicleEF	UBUS	1.1430e-003	8.2000e-005
tblVehicleEF	UBUS	5.8640e-003	8.6100e-004

tblVehicleEF	UBUS	0.07	7.6580e-003
tblVehicleEF	UBUS	3.3120e-003	6.0000e-004
tblVehicleEF	UBUS	3.33	5.97
tblVehicleEF	UBUS	0.02	0.04
tblVehicleEF	UBUS	0.69	0.05
tblVehicleEF	UBUS	2.44	5.85
tblVehicleEF	UBUS	0.05	0.01
tblVehicleEF	UBUS	10.66	45.42
tblVehicleEF	UBUS	9.05	0.73
tblVehicleEF	UBUS	1,951.45	1,987.99
tblVehicleEF	UBUS	100.38	8.45
tblVehicleEF	UBUS	9.15	0.47
tblVehicleEF	UBUS	15.10	0.08
tblVehicleEF	UBUS	0.60	0.07
tblVehicleEF	UBUS	0.01	0.03
tblVehicleEF	UBUS	0.12	3.2070e-003
tblVehicleEF	UBUS	1.1360e-003	5.7000e-005
tblVehicleEF	UBUS	0.26	0.03
tblVehicleEF	UBUS	3.0000e-003	7.9690e-003
tblVehicleEF	UBUS	0.12	3.0640e-003
tblVehicleEF	UBUS	1.0450e-003	5.2000e-005
tblVehicleEF	UBUS	4.6290e-003	5.8300e-004
tblVehicleEF	UBUS	0.08	7.9410e-003
tblVehicleEF	UBUS	2.5090e-003	4.1300e-004
tblVehicleEF	UBUS	0.79	0.09
tblVehicleEF	UBUS	0.03	0.06
tblVehicleEF	UBUS	0.70	0.05

tblVehicleEF	UBUS	9.8060e-003	1.4050e-003
tblVehicleEF	UBUS	1.1670e-003	8.4000e-005
tblVehicleEF	UBUS	4.6290e-003	5.8300e-004
tblVehicleEF	UBUS	0.08	7.9410e-003
tblVehicleEF	UBUS	2.5090e-003	4.1300e-004
tblVehicleEF	UBUS	3.31	5.97
tblVehicleEF	UBUS	0.03	0.06
tblVehicleEF	UBUS	0.76	0.05
tblVehicleTrips	ST_TR	6.39	4.52
tblVehicleTrips	ST_TR	696.00	293.13
tblVehicleTrips	ST_TR	177.59	163.41
tblVehicleTrips	SU_TR	5.86	3.76
tblVehicleTrips	SU_TR	500.00	388.07
tblVehicleTrips	SU_TR	166.44	153.15
tblVehicleTrips	WD_TR	6.65	5.00
tblVehicleTrips	WD_TR	716.00	289.96
tblVehicleTrips	WD_TR	102.24	98.24
tblWater	AerobicPercent	87.46	100.00
tblWater	AerobicPercent	87.46	100.00
tblWater	AerobicPercent	87.46	100.00
tblWater	AnaerobicandFacultativeLagoonsPerce	2.21	0.00
tblWater	nt AnaerobicandFacultativeLagoonsPerce	2.21	0.00
tblWater	AnaerobicandFacultativeLagoonsPerce	2.21	0.00
tblWater	nt SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWoodstoves	NumberCatalytic	6.90	0.00
tblWoodstoves	NumberNoncatalytic	6.90	0.00

# 2.0 Emissions Summary

# 2.1 Overall Construction

## **Unmitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year					tons	s/yr							MT	/yr		
2020	0.1623	1.1927	1.1514	2.6900e- 003	0.1237	0.0524	0.1761	0.0356	0.0501	0.0857	0.0000	237.6970	237.6970	0.0281	0.0000	238.3986
2021	0.2696	1.0112	1.1315	2.7500e- 003	0.1094	0.0404	0.1498	0.0294	0.0389	0.0682	0.0000	242.5950	242.5950	0.0250	0.0000	243.2201
Maximum	0.2696	1.1927	1.1514	2.7500e- 003	0.1237	0.0524	0.1761	0.0356	0.0501	0.0857	0.0000	242.5950	242.5950	0.0281	0.0000	243.2201

## **Mitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	? Total CO2	CH4	N2O	CO2e
Year					ton	s/yr							M	Γ/yr		
2020	0.0664	0.8106	1.1779	2.6900e- 003	0.0989	9.6700e- 003	0.1086	0.0276	9.5700e- 003	0.0372	0.0000	237.6968	237.6968	0.0281	0.0000	238.3985
2021	0.1905	0.8038	1.1676	2.7500e- 003	0.1011	9.9900e- 003	0.1111	0.0273	9.9100e- 003	0.0372	0.0000	242.5948	242.5948	0.0250	0.0000	243.2199
Maximum	0.1905	0.8106	1.1779	2.7500e- 003	0.1011	9.9900e- 003	0.1111	0.0276	9.9100e- 003	0.0372	0.0000	242.5948	242.5948	0.0281	0.0000	243.2199
	ROG	NOx	СО	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	40.53	26.75	-2.74	0.00	14.21	78.81	32.61	15.46	78.11	51.68	0.00	0.00	0.00	0.00	0.00	0.00

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	7-18-2020	10-17-2020	0.7505	0.4393
2	10-18-2020	1-17-2021	0.7282	0.5254
3	1-18-2021	4-17-2021	0.6626	0.5001
4	4-18-2021	7-17-2021	0.4987	0.4031
		Highest	0.7505	0.5254

# 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	0.7194	0.0164	1.4254	8.0000e- 005		7.8900e- 003	7.8900e- 003		7.8900e- 003	7.8900e- 003	0.0000	2.3284	2.3284	2.2500e- 003	0.0000	2.3846		
Energy	0.0152	0.1327	0.0762	8.3000e- 004		0.0105	0.0105		0.0105	0.0105	0.0000	560.0097	560.0097	0.0252	7.3800e- 003	562.8403		
Mobile	1.4411	1.8878	10.9664	0.0267	2.5802	0.0211	2.6013	0.6890	0.0196	0.7086	0.0000	2,514.065 8	2,514.0658	0.1872	0.0000	2,518.745 0		
Waste						0.0000	0.0000		0.0000	0.0000	43.8948	0.0000	43.8948	2.5941	0.0000	108.7474		
Water						0.0000	0.0000		0.0000	0.0000	4.3990	54.5457	58.9447	0.0181	0.0102	62.4319		
Total	2.1757	2.0369	12.4680	0.0276	2.5802	0.0395	2.6197	0.6890	0.0380	0.7270	48.2938	3,130.949 6	3,179.2434	2.8269	0.0176	3,255.149		

## **Mitigated Operational**

	ROG	NOx	СО	SO2	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	0.7194	0.0164	1.4254	8.0000e- 005		7.8900e- 003	7.8900e- 003		7.8900e- 003	7.8900e- 003	0.0000	2.3284	2.3284	2.2500e- 003	0.0000	2.3846
Energy	0.0131	0.1147	0.0666	7.2000e- 004		9.0700e- 003	9.0700e- 003		9.0700e- 003	9.0700e- 003	0.0000	528.4764	528.4764	0.0242	6.8800e- 003	531.1330
Mobile	1.4411	1.8878	10.9664	0.0267	2.5802	0.0211	2.6013	0.6890	0.0196	0.7086	0.0000	2,514.065 8	2,514.0658	0.1872	0.0000	2,518.745 0
Waste		0	D	0	O	0.0000	0.0000		0.0000	0.0000	43.8948	0.0000	43.8948	2.5941	0.0000	108.7474
Water			Tunning			0.0000	0.0000		0.0000	0.0000	3.5192	45.7938	49.3130	0.0146	8.1700e- 003	52.1129
Total	2.1737	2.0189	12.4584	0.0275	2.5802	0.0381	2.6182	0.6890	0.0366	0.7256	47.4140	3,090.664 4	3,138.0783	2.8224	0.0151	3,213.123 0

	ROG	NOx	со	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.10	0.88	0.08	0.40	0.00	3.62	0.05	0.00	3.76	0.20	1.82	1.29	1.29	0.16	14.29	1.29

## 3.0 Construction Detail

#### **Construction Phase**

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	7/18/2020	8/14/2020	5	20	
2	Site Preparation	Site Preparation	8/15/2020	8/18/2020	5	2	
3	Grading	Grading	8/19/2020	8/24/2020	5	4	
4	Building Construction	Building Construction	8/25/2020	5/31/2021	5	200	
5	Paving	Paving	6/1/2021	6/14/2021	5	10	
6	Architectural Coating	Architectural Coating	6/15/2021	6/28/2021	5	10	

Acres of Grading (Site Preparation Phase): 1

Acres of Grading (Grading Phase): 1.5

Acres of Paving: 1.01

Residential Indoor: 316,963; Residential Outdoor: 105,654; Non-Residential Indoor: 37,500; Non-Residential Outdoor: 12,500; Striped

#### OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Rubber Tired Dozers	1	8.00	247	0.40
Demolition	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Site Preparation	Graders	1	8.00	187	0.41
Site Preparation	Rubber Tired Dozers	1	7.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Grading	Graders	1	6.00	187	0.41
Grading	Rubber Tired Dozers	1	6.00	247	0.40
Grading	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Building Construction	Cranes	1	6.00	231	0.29
Building Construction	Forklifts	1	6.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Building Construction	Welders	3	8.00	46	0.45
Paving	Cement and Mortar Mixers	1	6.00	9	0.56
Paving	Pavers	1	6.00	130	0.42
Paving	Paving Equipment	1	8.00	132	0.36
Paving	Rollers	1	7.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48

#### **Trips and VMT**

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	5	13.00	4.00	112.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	3	8.00	4.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	3	8.00	4.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	7	160.00	39.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	5	13.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	32.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

## **3.1 Mitigation Measures Construction**

Use Cleaner Engines for Construction Equipment

Replace Ground Cover

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

Clean Paved Roads

#### 3.2 Demolition - 2020

	ROG	NOx	СО	SO2	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	s/yr							MT.	/yr		
Fugitive Dust					0.0121	0.0000	0.0121	1.8400e- 003	0.0000	1.8400e- 003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0213	0.2095	0.1466	2.4000e- 004		0.0115	0.0115		0.0108	0.0108	0.0000	21.0677	21.0677	5.4200e- 003	0.0000	21.2031
Total	0.0213	0.2095	0.1466	2.4000e- 004	0.0121	0.0115	0.0237	1.8400e- 003	0.0108	0.0126	0.0000	21.0677	21.0677	5.4200e- 003	0.0000	21.2031

	ROG	NOx	CO	SO2	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	s/yr							MT	/yr		
Hauling	4.9000e- 004	0.0166	3.6700e- 003	4.0000e- 005	9.6000e- 004	5.0000e- 005	1.0100e- 003	2.6000e- 004	5.0000e- 005	3.1000e- 004	0.0000	4.3164	4.3164	3.0000e- 004	0.0000	4.3239
Vendor	1.5000e- 004	4.3300e- 003	1.1700e- 003	1.0000e- 005	2.5000e- 004	2.0000e- 005	2.7000e- 004	7.0000e- 005	2.0000e- 005	9.0000e- 005	0.0000	0.9937	0.9937	6.0000e- 005	0.0000	0.9953
Worker	6.0000e- 004	4.8000e- 004	5.3500e- 003	1.0000e- 005	1.4200e- 003	1.0000e- 005	1.4400e- 003	3.8000e- 004	1.0000e- 005	3.9000e- 004	0.0000	1.3278	1.3278	4.0000e- 005	0.0000	1.3288
Total	1.2400e- 003	0.0214	0.0102	6.0000e- 005	2.6300e- 003	8.0000e- 005	2.7200e- 003	7.1000e- 004	8.0000e- 005	7.9000e- 004	0.0000	6.6378	6.6378	4.0000e- 004	0.0000	6.6480

	ROG	NOx	CO	SO2	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	s/yr							MT	/yr		
Fugitive Dust					4.5000e- 003	0.0000	4.5000e- 003	6.8000e- 004	0.0000	6.8000e- 004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	4.6300e- 003	0.0854	0.1542	2.4000e- 004		3.7000e- 004	3.7000e- 004		3.7000e- 004	3.7000e- 004	0.0000	21.0676	21.0676	5.4200e- 003	0.0000	21.2030
Total	4.6300e- 003	0.0854	0.1542	2.4000e- 004	4.5000e- 003	3.7000e- 004	4.8700e- 003	6.8000e- 004	3.7000e- 004	1.0500e- 003	0.0000	21.0676	21.0676	5.4200e- 003	0.0000	21.2030

	ROG	NOx	СО	SO2	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	s/yr							МТ	/yr		
Hauling	4.9000e- 004	0.0166	3.6700e- 003	4.0000e- 005	9.0000e- 004	5.0000e- 005	9.5000e- 004	2.5000e- 004	5.0000e- 005	3.0000e- 004	0.0000	4.3164	4.3164	3.0000e- 004	0.0000	4.3239
Vendor	1.5000e- 004	4.3300e- 003	1.1700e- 003	1.0000e- 005	2.4000e- 004	2.0000e- 005	2.6000e- 004	7.0000e- 005	2.0000e- 005	9.0000e- 005	0.0000	0.9937	0.9937	6.0000e- 005	0.0000	0.9953
Worker	6.0000e- 004	4.8000e- 004	5.3500e- 003	1.0000e- 005	1.3100e- 003	1.0000e- 005	1.3300e- 003	3.5000e- 004	1.0000e- 005	3.6000e- 004	0.0000	1.3278	1.3278	4.0000e- 005	0.0000	1.3288
Total	1.2400e- 003	0.0214	0.0102	6.0000e- 005	2.4500e- 003	8.0000e- 005	2.5400e- 003	6.7000e- 004	8.0000e- 005	7.5000e- 004	0.0000	6.6378	6.6378	4.0000e- 004	0.0000	6.6480

## 3.3 Site Preparation - 2020

	ROG	NOx	CO	SO2	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	s/yr							MT	/yr		
Fugitive Dust					5.8000e- 003	0.0000	5.8000e- 003	2.9500e- 003	0.0000	2.9500e- 003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.6300e- 003	0.0184	7.7100e- 003	2.0000e- 005		8.2000e- 004	8.2000e- 004		7.6000e- 004	7.6000e- 004	0.0000	1.5127	1.5127	4.9000e- 004	0.0000	1.5249
Total	1.6300e- 003	0.0184	7.7100e- 003	2.0000e- 005	5.8000e- 003	8.2000e- 004	6.6200e- 003	2.9500e- 003	7.6000e- 004	3.7100e- 003	0.0000	1.5127	1.5127	4.9000e- 004	0.0000	1.5249

	ROG	NOx	СО	SO2	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	s/yr							MT	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.0000e- 005	4.3000e- 004	1.2000e- 004	0.0000	3.0000e- 005	0.0000	3.0000e- 005	1.0000e- 005	0.0000	1.0000e- 005	0.0000	0.0994	0.0994	1.0000e- 005	0.0000	0.0995
Worker	4.0000e- 005	3.0000e- 005	3.3000e- 004	0.0000	9.0000e- 005	0.0000	9.0000e- 005	2.0000e- 005	0.0000	2.0000e- 005	0.0000	0.0817	0.0817	0.0000	0.0000	0.0818
Total	5.0000e- 005	4.6000e- 004	4.5000e- 004	0.0000	1.2000e- 004	0.0000	1.2000e- 004	3.0000e- 005	0.0000	3.0000e- 005	0.0000	0.1811	0.1811	1.0000e- 005	0.0000	0.1813

	ROG	NOx	CO	SO2	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	s/yr							MT	/yr		
Fugitive Dust					2.1500e- 003	0.0000	2.1500e- 003	1.0900e- 003	0.0000	1.0900e- 003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.0000e- 004	5.0700e- 003	9.8200e- 003	2.0000e- 005		3.0000e- 005	3.0000e- 005		3.0000e- 005	3.0000e- 005	0.0000	1.5127	1.5127	4.9000e- 004	0.0000	1.5249
Total	3.0000e- 004	5.0700e- 003	9.8200e- 003	2.0000e- 005	2.1500e- 003	3.0000e- 005	2.1800e- 003	1.0900e- 003	3.0000e- 005	1.1200e- 003	0.0000	1.5127	1.5127	4.9000e- 004	0.0000	1.5249

	ROG	NOx	СО	SO2	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	s/yr							MT	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.0000e- 005	4.3000e- 004	1.2000e- 004	0.0000	2.0000e- 005	0.0000	3.0000e- 005	1.0000e- 005	0.0000	1.0000e- 005	0.0000	0.0994	0.0994	1.0000e- 005	0.0000	0.0995
Worker	4.0000e- 005	3.0000e- 005	3.3000e- 004	0.0000	8.0000e- 005	0.0000	8.0000e- 005	2.0000e- 005	0.0000	2.0000e- 005	0.0000	0.0817	0.0817	0.0000	0.0000	0.0818
Total	5.0000e- 005	4.6000e- 004	4.5000e- 004	0.0000	1.0000e- 004	0.0000	1.1000e- 004	3.0000e- 005	0.0000	3.0000e- 005	0.0000	0.1811	0.1811	1.0000e- 005	0.0000	0.1813

3.4 Grading - 2020

	ROG	NOx	СО	SO2	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	s/yr							MT	/yr		
Fugitive Dust					9.8300e- 003	0.0000	9.8300e- 003	5.0500e- 003	0.0000	5.0500e- 003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.7000e- 003	0.0302	0.0129	3.0000e- 005		1.3700e- 003	1.3700e- 003		1.2600e- 003	1.2600e- 003	0.0000	2.4779	2.4779	8.0000e- 004	0.0000	2.4980
Total	2.7000e- 003	0.0302	0.0129	3.0000e- 005	9.8300e- 003	1.3700e- 003	0.0112	5.0500e- 003	1.2600e- 003	6.3100e- 003	0.0000	2.4779	2.4779	8.0000e- 004	0.0000	2.4980

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					tons	:/yr							MT	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	3.0000e- 005	8.7000e- 004	2.3000e- 004	0.0000	5.0000e- 005	0.0000	5.0000e- 005	1.0000e- 005	0.0000	2.0000e- 005	0.0000	0.1987	0.1987	1.0000e- 005	0.0000	0.1991
Worker	7.0000e- 005	6.0000e- 005	6.6000e- 004	0.0000	1.8000e- 004	0.0000	1.8000e- 004	5.0000e- 005	0.0000	5.0000e- 005	0.0000	0.1634	0.1634	1.0000e- 005	0.0000	0.1635
Total	1.0000e- 004	9.3000e- 004	8.9000e- 004	0.0000	2.3000e- 004	0.0000	2.3000e- 004	6.0000e- 005	0.0000	7.0000e- 005	0.0000	0.3622	0.3622	2.0000e- 005	0.0000	0.3626

	ROG	NOx	СО	SO2	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	s/yr							MT	/yr		
Fugitive Dust					3.6400e- 003	0.0000	3.6400e- 003	1.8700e- 003	0.0000	1.8700e- 003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	4.9000e- 004	8.3600e- 003	0.0162	3.0000e- 005		5.0000e- 005	5.0000e- 005		5.0000e- 005	5.0000e- 005	0.0000	2.4779	2.4779	8.0000e- 004	0.0000	2.4980
Total	4.9000e- 004	8.3600e- 003	0.0162	3.0000e- 005	3.6400e- 003	5.0000e- 005	3.6900e- 003	1.8700e- 003	5.0000e- 005	1.9200e- 003	0.0000	2.4779	2.4779	8.0000e- 004	0.0000	2.4980

	ROG	NOx	CO	SO2	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	s/yr							МТ	-/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	3.0000e- 005	8.7000e- 004	2.3000e- 004	0.0000	5.0000e- 005	0.0000	5.0000e- 005	1.0000e- 005	0.0000	2.0000e- 005	0.0000	0.1987	0.1987	1.0000e- 005	0.0000	0.1991
Worker	7.0000e- 005	6.0000e- 005	6.6000e- 004	0.0000	1.6000e- 004	0.0000	1.6000e- 004	4.0000e- 005	0.0000	4.0000e- 005	0.0000	0.1634	0.1634	1.0000e- 005	0.0000	0.1635
Total	1.0000e- 004	9.3000e- 004	8.9000e- 004	0.0000	2.1000e- 004	0.0000	2.1000e- 004	5.0000e- 005	0.0000	6.0000e- 005	0.0000	0.3622	0.3622	2.0000e- 005	0.0000	0.3626

# 3.5 Building Construction - 2020

	ROG	NOx	CO	SO2	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	s/yr							MT	/yr		
Off-Road	0.0944	0.6877	0.6133	1.0300e- 003		0.0370	0.0370		0.0358	0.0358	0.0000	84.4171	84.4171	0.0157	0.0000	84.8089
Total	0.0944	0.6877	0.6133	1.0300e- 003		0.0370	0.0370		0.0358	0.0358	0.0000	84.4171	84.4171	0.0157	0.0000	84.8089

	ROG	NOx	СО	SO2	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	s/yr							MT	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	6.5800e- 003	0.1965	0.0532	4.7000e- 004	0.0114	9.1000e- 004	0.0123	3.3000e- 003	8.7000e- 004	4.1700e- 003	0.0000	45.0521	45.0521	2.8600e- 003	0.0000	45.1237
Worker	0.0343	0.0277	0.3063	8.4000e- 004	0.0815	7.0000e- 004	0.0822	0.0217	6.4000e- 004	0.0223	0.0000	75.9885	75.9885	2.3900e- 003	0.0000	76.0484
Total	0.0409	0.2242	0.3595	1.3100e- 003	0.0930	1.6100e- 003	0.0946	0.0250	1.5100e- 003	0.0265	0.0000	121.0406	121.0406	5.2500e- 003	0.0000	121.1720

	ROG	NOx	CO	SO2	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	s/yr							MT	/yr		
Off-Road	0.0187	0.4647	0.6268	1.0300e- 003		7.5200e- 003	7.5200e- 003		7.5200e- 003	7.5200e- 003	0.0000	84.4170	84.4170	0.0157	0.0000	84.8088
Total	0.0187	0.4647	0.6268	1.0300e- 003		7.5200e- 003	7.5200e- 003		7.5200e- 003	7.5200e- 003	0.0000	84.4170	84.4170	0.0157	0.0000	84.8088

	ROG	NOx	СО	SO2	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	s/yr							МТ	-/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	6.5800e- 003	0.1965	0.0532	4.7000e- 004	0.0107	9.1000e- 004	0.0116	3.1200e- 003	8.7000e- 004	3.9900e- 003	0.0000	45.0521	45.0521	2.8600e- 003	0.0000	45.1237
Worker	0.0343	0.0277	0.3063	8.4000e- 004	0.0752	7.0000e- 004	0.0759	0.0201	6.4000e- 004	0.0207	0.0000	75.9885	75.9885	2.3900e- 003	0.0000	76.0484
Total	0.0409	0.2242	0.3595	1.3100e- 003	0.0859	1.6100e- 003	0.0875	0.0232	1.5100e- 003	0.0247	0.0000	121.0406	121.0406	5.2500e- 003	0.0000	121.1720

## 3.5 Building Construction - 2021

	ROG	NOx	CO	SO2	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	s/yr							MT	/yr		
Off-Road	0.0970	0.7295	0.6901	1.1800e- 003		0.0366	0.0366		0.0354	0.0354	0.0000	97.1280	97.1280	0.0173	0.0000	97.5615
Total	0.0970	0.7295	0.6901	1.1800e- 003		0.0366	0.0366		0.0354	0.0354	0.0000	97.1280	97.1280	0.0173	0.0000	97.5615

	ROG	NOx	СО	SO2	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	s/yr							МТ	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	6.4800e- 003	0.2059	0.0558	5.3000e- 004	0.0131	4.2000e- 004	0.0136	3.7900e- 003	4.0000e- 004	4.1900e- 003	0.0000	51.4315	51.4315	3.1500e- 003	0.0000	51.5104
Worker	0.0368	0.0287	0.3237	9.4000e- 004	0.0938	7.7000e- 004	0.0946	0.0249	7.1000e- 004	0.0256	0.0000	84.6513	84.6513	2.4900e- 003	0.0000	84.7136
Total	0.0433	0.2346	0.3795	1.4700e- 003	0.1069	1.1900e- 003	0.1081	0.0287	1.1100e- 003	0.0298	0.0000	136.0828	136.0828	5.6400e- 003	0.0000	136.2240

	ROG	NOx	CO	SO2	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	s/yr							MT	/yr		
Off-Road	0.0215	0.5346	0.7211	1.1800e- 003		8.6500e- 003	8.6500e- 003		8.6500e- 003	8.6500e- 003	0.0000	97.1279	97.1279	0.0173	0.0000	97.5614
Total	0.0215	0.5346	0.7211	1.1800e- 003		8.6500e- 003	8.6500e- 003		8.6500e- 003	8.6500e- 003	0.0000	97.1279	97.1279	0.0173	0.0000	97.5614

	ROG	NOx	СО	SO2	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	s/yr							МТ	-/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	6.4800e- 003	0.2059	0.0558	5.3000e- 004	0.0123	4.2000e- 004	0.0127	3.5900e- 003	4.0000e- 004	3.9900e- 003	0.0000	51.4315	51.4315	3.1500e- 003	0.0000	51.5104
Worker	0.0368	0.0287	0.3237	9.4000e- 004	0.0865	7.7000e- 004	0.0873	0.0231	7.1000e- 004	0.0238	0.0000	84.6513	84.6513	2.4900e- 003	0.0000	84.7136
Total	0.0433	0.2346	0.3795	1.4700e- 003	0.0988	1.1900e- 003	0.1000	0.0267	1.1100e- 003	0.0278	0.0000	136.0828	136.0828	5.6400e- 003	0.0000	136.2240

3.6 Paving - 2021
<u>Unmitigated Construction On-Site</u>

	ROG	NOx	CO	SO2	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	s/yr							MT	/yr		
Off-Road	3.8700e- 003	0.0387	0.0443	7.0000e- 005		2.0800e- 003	2.0800e- 003		1.9100e- 003	1.9100e- 003	0.0000	5.8825	5.8825	1.8600e- 003	0.0000	5.9291
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	3.8700e- 003	0.0387	0.0443	7.0000e- 005		2.0800e- 003	2.0800e- 003		1.9100e- 003	1.9100e- 003	0.0000	5.8825	5.8825	1.8600e- 003	0.0000	5.9291

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e			
Category	tons/yr											MT/yr							
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			
Worker	2.8000e- 004	2.2000e- 004	2.4600e- 003	1.0000e- 005	7.1000e- 004	1.0000e- 005	7.2000e- 004	1.9000e- 004	1.0000e- 005	1.9000e- 004	0.0000	0.6428	0.6428	2.0000e- 005	0.0000	0.6433			
Total	2.8000e- 004	2.2000e- 004	2.4600e- 003	1.0000e- 005	7.1000e- 004	1.0000e- 005	7.2000e- 004	1.9000e- 004	1.0000e- 005	1.9000e- 004	0.0000	0.6428	0.6428	2.0000e- 005	0.0000	0.6433			

	ROG	NOx	СО	SO2	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	s/yr							MT	/yr		
Off-Road	1.0700e- 003	0.0286	0.0493	7.0000e- 005		1.1000e- 004	1.1000e- 004		1.1000e- 004	1.1000e- 004	0.0000	5.8825	5.8825	1.8600e- 003	0.0000	5.9291
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	1.0700e- 003	0.0286	0.0493	7.0000e- 005		1.1000e- 004	1.1000e- 004		1.1000e- 004	1.1000e- 004	0.0000	5.8825	5.8825	1.8600e- 003	0.0000	5.9291

	ROG	NOx	СО	SO2	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	s/yr							МТ	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.8000e- 004	2.2000e- 004	2.4600e- 003	1.0000e- 005	6.6000e- 004	1.0000e- 005	6.6000e- 004	1.8000e- 004	1.0000e- 005	1.8000e- 004	0.0000	0.6428	0.6428	2.0000e- 005	0.0000	0.6433
Total	2.8000e- 004	2.2000e- 004	2.4600e- 003	1.0000e- 005	6.6000e- 004	1.0000e- 005	6.6000e- 004	1.8000e- 004	1.0000e- 005	1.8000e- 004	0.0000	0.6428	0.6428	2.0000e- 005	0.0000	0.6433

## 3.7 Architectural Coating - 2021 <u>Unmitigated Construction On-Site</u>

	ROG	NOx	CO	SO2	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	s/yr							MT	/yr		
Archit. Coating	0.1234					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.0900e- 003	7.6300e- 003	9.0900e- 003	1.0000e- 005		4.7000e- 004	4.7000e- 004		4.7000e- 004	4.7000e- 004	0.0000	1.2766	1.2766	9.0000e- 005	0.0000	1.2788
Total	0.1245	7.6300e- 003	9.0900e- 003	1.0000e- 005		4.7000e- 004	4.7000e- 004		4.7000e- 004	4.7000e- 004	0.0000	1.2766	1.2766	9.0000e- 005	0.0000	1.2788

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e			
Category	tons/yr											MT/yr							
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			
Worker	6.9000e- 004	5.4000e- 004	6.0500e- 003	2.0000e- 005	1.7500e- 003	1.0000e- 005	1.7700e- 003	4.7000e- 004	1.0000e- 005	4.8000e- 004	0.0000	1.5823	1.5823	5.0000e- 005	0.0000	1.5834			
Total	6.9000e- 004	5.4000e- 004	6.0500e- 003	2.0000e- 005	1.7500e- 003	1.0000e- 005	1.7700e- 003	4.7000e- 004	1.0000e- 005	4.8000e- 004	0.0000	1.5823	1.5823	5.0000e- 005	0.0000	1.5834			

	ROG	NOx	СО	SO2	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	s/yr							MT	/yr		
Archit. Coating	0.1234					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.7000e- 004	5.3000e- 003	9.1600e- 003	1.0000e- 005		2.0000e- 005	2.0000e- 005		2.0000e- 005	2.0000e- 005	0.0000	1.2766	1.2766	9.0000e- 005	0.0000	1.2788
Total	0.1237	5.3000e- 003	9.1600e- 003	1.0000e- 005		2.0000e- 005	2.0000e- 005		2.0000e- 005	2.0000e- 005	0.0000	1.2766	1.2766	9.0000e- 005	0.0000	1.2788

#### **Mitigated Construction Off-Site**

	ROG	NOx	СО	SO2	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	s/yr							MT	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.9000e- 004	5.4000e- 004	6.0500e- 003	2.0000e- 005	1.6200e- 003	1.0000e- 005	1.6300e- 003	4.3000e- 004	1.0000e- 005	4.5000e- 004	0.0000	1.5823	1.5823	5.0000e- 005	0.0000	1.5834
Total	6.9000e- 004	5.4000e- 004	6.0500e- 003	2.0000e- 005	1.6200e- 003	1.0000e- 005	1.6300e- 003	4.3000e- 004	1.0000e- 005	4.5000e- 004	0.0000	1.5823	1.5823	5.0000e- 005	0.0000	1.5834

# 4.0 Operational Detail - Mobile

#### **4.1 Mitigation Measures Mobile**

	ROG	NOx	СО	SO2	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	s/yr							MT	/yr		
Mitigated	1.4411	1.8878	10.9664	0.0267	2.5802	0.0211	2.6013	0.6890	0.0196	0.7086	0.0000	2,514.065	2,514.0658	0.1872	0.0000	2,518.745
												8				0
Unmitigated	1.4411	1.8878	10.9664	0.0267	2.5802	0.0211	2.6013	0.6890	0.0196	0.7086	0.0000	2,514.065	2,514.0658	0.1872	0.0000	2,518.745
												ď				U

# **4.2 Trip Summary Information**

	Aver	age Daily Trip F	Rate	Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Mid Rise	690.00	623.76	518.88	2,241,964	2,241,964
Fast Food Restaurant w/o Drive Thru	579.92	586.26	776.14	1,102,667	1,102,667
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Supermarket	2,259.52	3,758.43	3522.45	3,501,966	3,501,966
Unenclosed Parking with Elevator	0.00	0.00	0.00		
Total	3,529.44	4,968.45	4,817.47	6,846,597	6,846,597

# **4.3 Trip Type Information**

		Miles			Trip %			Trip Purpos	e %
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
Apartments Mid Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
Fast Food Restaurant w/o Drive Thru	16.60	8.40	6.90	1.50	79.50	19.00	51	37	12
Other Non-Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Supermarket	16.60	8.40	6.90	6.50	74.50	19.00	34	30	36
Unenclosed Parking with	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0

#### 4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Mid Rise	0.577488	0.047363	0.217190	0.126235	0.016240	0.000946	0.003108	0.005000	0.000387	0.000324	0.005485	0.000105	0.000131
Fast Food Restaurant w/o Drive Thru	0.545842	0.044768	0.205288	0.119317	0.015350	0.006227	0.020460	0.031333	0.002546	0.002133	0.005184	0.000692	0.000862
Other Non-Asphalt Surfaces	0.545842	0.044768	0.205288	0.119317	0.015350	0.006227	0.020460	0.031333	0.002546	0.002133	0.005184	0.000692	0.000862
Supermarket	0.545842	0.044768	0.205288	0.119317	0.015350	0.006227	0.020460	0.031333	0.002546	0.002133	0.005184	0.000692	0.000862
Unenclosed Parking with	0.545842	0.044768	0.205288	0.119317	0.015350	0.006227	0.020460	0.031333	0.002546	0.002133	0.005184	0.000692	0.000862

# 5.0 Energy Detail

Historical Energy Use: N

# **5.1 Mitigation Measures Energy**

Exceed Title 24

	ROG	NOx	СО	SO2	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	s/yr							MT.	/yr		
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	398.5951	398.5951	0.0218	4.5000e- 003	400.4799
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	409.6411	409.6411	0.0224	4.6200e- 003	411.5781
NaturalGas Mitigated	0.0131	0.1147	0.0666	7.2000e- 004		9.0700e- 003	9.0700e- 003		9.0700e- 003	9.0700e- 003	0.0000	129.8813	129.8813	2.4900e- 003	2.3800e- 003	130.6531
NaturalGas Unmitigated	0.0152	0.1327	0.0762	8.3000e- 004		0.0105	0.0105		0.0105	0.0105	0.0000	150.3686	150.3686	2.8800e- 003	2.7600e- 003	151.2622

# 5.2 Energy by Land Use - NaturalGas <u>Unmitigated</u>

	NaturalGa s Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr					ton	s/yr							MT	/yr		
Apartments Mid Rise	1.84867e+ 006	9.9700e- 003	0.0852	0.0363	5.4000e- 004		6.8900e- 003	6.8900e- 003		6.8900e- 003	6.8900e- 003	0.0000	98.6522	98.6522	1.8900e- 003	1.8100e- 003	99.2384
Fast Food Restaurant w/o	461520	2.4900e- 003	0.0226	0.0190	1.4000e- 004		1.7200e- 003	1.7200e- 003		1.7200e- 003	1.7200e- 003	0.0000	24.6285	24.6285	4.7000e- 004	4.5000e- 004	24.7748
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Supermarket	507610	2.7400e- 003	0.0249	0.0209	1.5000e- 004		1.8900e- 003	1.8900e- 003		1.8900e- 003	1.8900e- 003	0.0000	27.0880	27.0880	5.2000e- 004	5.0000e- 004	27.2490
Unenclosed Parking with	0	0.0000	0.0000	0.0000	0.0000	D	0.0000	0.0000	D	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0152	0.1327	0.0762	8.3000e- 004		0.0105	0.0105		0.0105	0.0105	0.0000	150.3686	150.3686	2.8800e- 003	2.7600e- 003	151.2622

#### **Mitigated**

	NaturalGa s Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr					ton	s/yr							МТ	/yr		
Apartments Mid Rise	1.55837e+ 006	8.4000e- 003	0.0718	0.0306	4.6000e- 004		5.8100e- 003	5.8100e- 003		5.8100e- 003	5.8100e- 003	0.0000	83.1604	83.1604	1.5900e- 003	1.5200e- 003	83.6546
Fast Food Restaurant w/o	435732	2.3500e- 003	0.0214	0.0179	1.3000e- 004		1.6200e- 003	1.6200e- 003		1.6200e- 003	1.6200e- 003	0.0000	23.2523	23.2523	4.5000e- 004	4.3000e- 004	23.3905
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Supermarket	439783	2.3700e- 003	0.0216	0.0181	1.3000e- 004	D	1.6400e- 003	1.6400e- 003	D	1.6400e- 003	1.6400e- 003	0.0000	23.4685	23.4685	4.5000e- 004	4.3000e- 004	23.6080
Unenclosed Parking with	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0131	0.1147	0.0666	7.2000e- 004		9.0700e- 003	9.0700e- 003		9.0700e- 003	9.0700e- 003	0.0000	129.8813	129.8813	2.4900e- 003	2.3800e- 003	130.6531

# 5.3 Energy by Land Use - Electricity <u>Unmitigated</u>

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr		M	Γ/yr	
Apartments Mid Rise	558647	134.6660	7.3500e- 003	1.5200e- 003	135.3027
Fast Food Restaurant w/o	88280	21.2805	1.1600e- 003	2.4000e- 004	21.3812
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Supermarket	858590	206.9692	0.0113	2.3400e- 003	207.9479
Unenclosed Parking with	193835	46.7253	2.5500e- 003	5.3000e- 004	46.9463
Total		409.6410	0.0224	4.6300e- 003	411.5781

#### **Mitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr		M	Γ/yr	
Apartments Mid Rise	548189	132.1448	7.2100e- 003	1.4900e- 003	132.7696
Fast Food Restaurant w/o Drive Thru	83414	20.1075	1.1000e- 003	2.3000e- 004	20.2026
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Supermarket	828092	199.6175	0.0109	2.2500e- 003	200.5614
Unenclosed Parking with	193835	46.7253	2.5500e- 003	5.3000e- 004	46.9463
Total		398.5951	0.0218	4.5000e- 003	400.4799

#### 6.0 Area Detail

# **6.1 Mitigation Measures Area**

	ROG	NOx	СО	SO2	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	s/yr							MT	/yr		
Mitigated	0.7194	0.0164	1.4254	8.0000e- 005		7.8900e- 003	7.8900e- 003		7.8900e- 003	7.8900e- 003	0.0000	2.3284	2.3284	2.2500e- 003	0.0000	2.3846
Unmitigated	0.7194	0.0164	1.4254	8.0000e- 005		7.8900e- 003	7.8900e- 003		7.8900e- 003	7.8900e- 003	0.0000	2.3284	2.3284	2.2500e- 003	0.0000	2.3846

# 6.2 Area by SubCategory

#### <u>Unmitigated</u>

	ROG	NOx	CO	SO2	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	s/yr							MT	/yr		
Architectural Coating	0.0123					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.6640					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0431	0.0164	1.4254	8.0000e- 005		7.8900e- 003	7.8900e- 003		7.8900e- 003	7.8900e- 003	0.0000	2.3284	2.3284	2.2500e- 003	0.0000	2.3846
Total	0.7194	0.0164	1.4254	8.0000e- 005		7.8900e- 003	7.8900e- 003		7.8900e- 003	7.8900e- 003	0.0000	2.3284	2.3284	2.2500e- 003	0.0000	2.3846

#### **Mitigated**

	ROG	NOx	СО	SO2	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	s/yr							MT	/yr		
Architectural Coating	0.0123					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.6640					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0431	0.0164	1.4254	8.0000e- 005		7.8900e- 003	7.8900e- 003		7.8900e- 003	7.8900e- 003	0.0000	2.3284	2.3284	2.2500e- 003	0.0000	2.3846
Total	0.7194	0.0164	1.4254	8.0000e- 005		7.8900e- 003	7.8900e- 003		7.8900e- 003	7.8900e- 003	0.0000	2.3284	2.3284	2.2500e- 003	0.0000	2.3846

#### 7.0 Water Detail

#### 7.1 Mitigation Measures Water

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

	Total CO2	CH4	N2O	CO2e
Category		MT	/yr	
		0.0146	8.1700e- 003	
	58.9447	0.0181	0.0102	62.4319

# 7.2 Water by Land Use <u>Unmitigated</u>

	Indoor/Out door Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal		M	Γ/yr	
Apartments Mid Rise	8.99126 / 5.6684	46.5837	0.0133	7.4100e- 003	49.1242
Fast Food Restaurant w/o	0.607067 / 0.038749	2.2240	8.5000e- 004	4.9000e- 004	2.3912
Other Non-Asphalt Surfaces	0/0	0.0000	0.0000	0.0000	0.0000
Supermarket	2.83517 / 0.0876856	10.1370	3.9500e- 003	2.2800e- 003	10.9165
Unenclosed Parking with	0/0	0.0000	0.0000	0.0000	0.0000
Total		58.9447	0.0181	0.0102	62.4319

#### **Mitigated**

	Indoor/Out door Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal		M	Γ/yr	
Apartments Mid Rise	7.193 / 5.32263	39.3771	0.0108	5.9500e- 003	41.4195
	0.485654 / 0.0363853	1.7936	6.8000e- 004	3.9000e- 004	1.9275
Other Non-Asphalt Surfaces	0/0	0.0000	0.0000	0.0000	0.0000
Supermarket	2.26814 / 0.0823368	8.1422	3.1600e- 003	1.8300e- 003	8.7660
Unenclosed Parking with	0/0	0.0000	0.0000	0.0000	0.0000
Total		49.3130	0.0146	8.1700e- 003	52.1129

#### 8.0 Waste Detail

# 8.1 Mitigation Measures Waste

#### Category/Year

	Total CO2	CH4	N2O	CO2e
		MT	/yr	
Mitigated	43.8948	2.5941	0.0000	
Unmitigated	43.8948	2.5941	0.0000	

# 8.2 Waste by Land Use <u>Unmitigated</u>

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons		M	Γ/yr	
Apartments Mid Rise	63.48	12.8859	0.7615	0.0000	31.9242
Fast Food Restaurant w/o	23.04	4.6769	0.2764	0.0000	11.5869
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Supermarket	129.72	26.3320	1.5562	0.0000	65.2364
Unenclosed Parking with	0	0.0000	0.0000	0.0000	0.0000
Total		43.8948	2.5941	0.0000	108.7474

#### **Mitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons		MT	Γ/yr	
Apartments Mid Rise	63.48	12.8859	0.7615	0.0000	31.9242
Fast Food Restaurant w/o	23.04	4.6769	0.2764	0.0000	11.5869
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Supermarket	129.72	26.3320	1.5562	0.0000	65.2364
Unenclosed Parking with	0	0.0000	0.0000	0.0000	0.0000
Total		43.8948	2.5941	0.0000	108.7474

# 9.0 Operational Offroad

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

# **Fire Pumps and Emergency Generators**

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

#### **Boilers**

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

Equipment Type	Number
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# 11.0 Vegetation

CalEEMod Version: CalEEMod.2016.3.2

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Proposed Project - Los Angeles-South Coast County, Summer

# Proposed Project Los Angeles-South Coast County, Summer

#### 1.0 Project Characteristics

#### 1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Non-Asphalt Surfaces	25.40	1000sqft	0.58	25,398.00	0
Unenclosed Parking with Elevator	99.92	1000sqft	0.43	99,915.00	0
Fast Food Restaurant w/o Drive Thru	2.00	1000sqft	0.05	2,000.00	0
Apartments Mid Rise	138.00	Dwelling Unit	0.00	156,525.00	395
Supermarket	23.00	1000sqft	0.53	23,000.00	0

#### 1.2 Other Project Characteristics

UrbanizationUrbanWind Speed (m/s)2.2Precipitation Freq (Days)33Climate Zone9Operational Year2023

**Utility Company** Southern California Edison

 CO2 Intensity
 531.44
 CH4 Intensity
 0.029
 N20 Intensity
 0.006

 (lb/MWhr)
 (lb/MWhr)
 (lb/MWhr)
 (lb/MWhr)

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

Project Characteristics - See assumptions file

Land Use - See assumptions file.

Off-road Equipment -

Trips and VMT - See assumptions file.

Demolition -

Architectural Coating - See assumptions file.

Woodstoves - No fireplaces or wood burning stoves.

Area Coating - See assumptions file.

Energy Use -

Water And Wastewater - Assumes 100% aerobic.

Construction Off-road Equipment Mitigation - Per Mid-Town Specific Plan Mitigation Measures AQ-1 and AQ-2

Energy Mitigation -

Water Mitigation -

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	ConstArea_Parking	7,519.00	5,995.00
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tblArchitecturalCoating	EF_Nonresidential_Interior	100.00	10.00
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tblArchitecturalCoating	EF_Residential_Interior	50.00	10.00
tblAreaCoating	Area_EF_Nonresidential_Exterior	100	10
tblAreaCoating	Area_EF_Nonresidential_Interior	100	10
tblAreaCoating	Area_EF_Residential_Exterior	50	10
tblAreaCoating	Area_EF_Residential_Interior	50	10
tblAreaCoating	Area_Parking	7519	5995
tblConstDustMitigation	CleanPavedRoadPercentReduction	O	9

tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
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tblLandUse	LandUseSquareFeet	25,400.00	25,398.00
tblLandUse	LandUseSquareFeet	99,920.00	99,915.00
tblLandUse	LandUseSquareFeet	138,000.00	156,525.00
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tblVehicleEF	LDA	2.1170e-003	1.7100e-003
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tblVehicleEF	LDA	1.9520e-003	1.5750e-003
tblVehicleEF	LDA	2.0590e-003	1.6170e-003
tblVehicleEF	LDA	0.06	0.07
tblVehicleEF	LDA	0.10	0.10
tblVehicleEF	LDA	0.05	0.06
tblVehicleEF	LDA	0.01	0.01
tblVehicleEF	LDA	0.04	0.19
tblVehicleEF	LDA	0.06	0.18
tblVehicleEF	LDA	2.7590e-003	2.7080e-003
tblVehicleEF	LDA	5.6400e-004	5.0600e-004
tblVehicleEF	LDA	0.06	0.07

tblVehicleEF	LDA	0.10	0.10
tblVehicleEF	LDA	0.05	0.06
tblVehicleEF	LDA	0.02	0.02
tblVehicleEF	LDA	0.04	0.19
tblVehicleEF	LDA	0.06	0.20
tblVehicleEF	LDA	4.7330e-003	2.5920e-003
tblVehicleEF	LDA	4.8460e-003	0.05
tblVehicleEF	LDA	0.59	0.64
tblVehicleEF	LDA	1.08	2.10
tblVehicleEF	LDA	258.68	261.25
tblVehicleEF	LDA	54.94	52.42
tblVehicleEF	LDA	0.05	0.03
tblVehicleEF	LDA	0.06	0.17
tblVehicleEF	LDA	2.1170e-003	1.7100e-003
tblVehicleEF	LDA	2.2400e-003	1.7590e-003
tblVehicleEF	LDA	1.9520e-003	1.5750e-003
tblVehicleEF	LDA	2.0590e-003	1.6170e-003
tblVehicleEF	LDA	0.04	0.05
tblVehicleEF	LDA	0.10	0.10
tblVehicleEF	LDA	0.03	0.04
tblVehicleEF	LDA	0.01	0.01
tblVehicleEF	LDA	0.04	0.23
tblVehicleEF	LDA	0.07	0.21
tblVehicleEF	LDA	2.5910e-003	2.5520e-003
tblVehicleEF	LDA	5.6700e-004	5.1200e-004
tblVehicleEF	LDA	0.04	0.05
tblVehicleEF	LDA	0.10	0.10

tblVehicleEF	LDA	0.03	0.04
tblVehicleEF	LDA	0.02	0.01
tblVehicleEF	LDA	0.04	0.23
tblVehicleEF	LDA	0.07	0.23
tblVehicleEF	LDT1	0.01	6.7160e-003
tblVehicleEF	LDT1	0.01	0.06
tblVehicleEF	LDT1	1.52	1.30
tblVehicleEF	LDT1	2.49	2.19
tblVehicleEF	LDT1	330.49	313.30
tblVehicleEF	LDT1	67.47	62.20
tblVehicleEF	LDT1	0.14	0.10
tblVehicleEF	LDT1	0.14	0.24
tblVehicleEF	LDT1	3.3520e-003	2.5020e-003
tblVehicleEF	LDT1	3.2790e-003	2.4470e-003
tblVehicleEF	LDT1	3.0870e-003	2.3020e-003
tblVehicleEF	LDT1	3.0150e-003	2.2500e-003
tblVehicleEF	LDT1	0.12	0.12
tblVehicleEF	LDT1	0.25	0.18
tblVehicleEF	LDT1	0.10	0.10
tblVehicleEF	LDT1	0.03	0.03
tblVehicleEF	LDT1	0.16	0.64
tblVehicleEF	LDT1	0.17	0.32
tblVehicleEF	LDT1	3.3240e-003	3.0620e-003
tblVehicleEF	LDT1	7.1800e-004	6.0800e-004
tblVehicleEF	LDT1	0.12	0.12
tblVehicleEF	LDT1	0.25	0.18
tblVehicleEF	LDT1	0.10	0.10

tblVehicleEF	LDT1	0.05	0.04
tblVehicleEF	LDT1	0.16	0.64
tblVehicleEF	LDT1	0.18	0.35
tblVehicleEF	LDT1	0.01	7.1130e-003
tblVehicleEF	LDT1	0.01	0.06
tblVehicleEF	LDT1	1.65	1.41
tblVehicleEF	LDT1	2.11	1.86
tblVehicleEF	LDT1	344.92	325.13
tblVehicleEF	LDT1	67.47	61.56
tblVehicleEF	LDT1	0.12	0.09
tblVehicleEF	LDT1	0.13	0.22
tblVehicleEF	LDT1	3.3520e-003	2.5020e-003
tblVehicleEF	LDT1	3.2790e-003	2.4470e-003
tblVehicleEF	LDT1	3.0870e-003	2.3020e-003
tblVehicleEF	LDT1	3.0150e-003	2.2500e-003
tblVehicleEF	LDT1	0.19	0.18
tblVehicleEF	LDT1	0.26	0.19
tblVehicleEF	LDT1	0.14	0.14
tblVehicleEF	LDT1	0.04	0.03
tblVehicleEF	LDT1	0.15	0.59
tblVehicleEF	LDT1	0.15	0.28
tblVehicleEF	LDT1	3.4700e-003	3.1770e-003
tblVehicleEF	LDT1	7.1200e-004	6.0200e-004
tblVehicleEF	LDT1	0.19	0.18
tblVehicleEF	LDT1	0.26	0.19
tblVehicleEF	LDT1	0.14	0.14
tblVehicleEF	LDT1	0.05	0.05

tblVehicleEF	LDT1	0.15	0.59
tblVehicleEF	LDT1	0.16	0.31
tblVehicleEF	LDT1	0.01	6.5900e-003
tblVehicleEF	LDT1	0.01	0.07
tblVehicleEF	LDT1	1.47	1.26
tblVehicleEF	LDT1	2.57	2.26
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tblVehicleEF	LDT1	67.47	62.34
tblVehicleEF	LDT1	0.14	0.10
tblVehicleEF	LDT1	0.15	0.24
tblVehicleEF	LDT1	3.3520e-003	2.5020e-003
tblVehicleEF	LDT1	3.2790e-003	2.4470e-003
tblVehicleEF	LDT1	3.0870e-003	2.3020e-003
tblVehicleEF	LDT1	3.0150e-003	2.2500e-003
tblVehicleEF	LDT1	0.12	0.12
tblVehicleEF	LDT1	0.28	0.20
tblVehicleEF	LDT1	0.10	0.10
tblVehicleEF	LDT1	0.03	0.03
tblVehicleEF	LDT1	0.19	0.76
tblVehicleEF	LDT1	0.17	0.33
tblVehicleEF	LDT1	3.2700e-003	3.0190e-003
tblVehicleEF	LDT1	7.1900e-004	6.0900e-004
tblVehicleEF	LDT1	0.12	0.12
tblVehicleEF	LDT1	0.28	0.20
tblVehicleEF	LDT1	0.10	0.10
tblVehicleEF	LDT1	0.05	0.04
tblVehicleEF	LDT1	0.19	0.76

tblVehicleEF	LDT1	0.19	0.36
tblVehicleEF	LDT2	6.6130e-003	4.4260e-003
tblVehicleEF	LDT2	5.6850e-003	0.06
tblVehicleEF	LDT2	0.79	0.94
tblVehicleEF	LDT2	1.23	2.55
tblVehicleEF	LDT2	368.32	332.67
tblVehicleEF	LDT2	75.43	66.53
tblVehicleEF	LDT2	0.07	0.07
tblVehicleEF	LDT2	0.09	0.25
tblVehicleEF	LDT2	2.1490e-003	1.8230e-003
tblVehicleEF	LDT2	2.3760e-003	1.8150e-003
tblVehicleEF	LDT2	1.9770e-003	1.6780e-003
tblVehicleEF	LDT2	2.1840e-003	1.6690e-003
tblVehicleEF	LDT2	0.04	0.07
tblVehicleEF	LDT2	0.09	0.12
tblVehicleEF	LDT2	0.04	0.07
tblVehicleEF	LDT2	0.02	0.02
tblVehicleEF	LDT2	0.06	0.39
tblVehicleEF	LDT2	0.08	0.29
tblVehicleEF	LDT2	3.6890e-003	3.2500e-003
tblVehicleEF	LDT2	7.7500e-004	6.5000e-004
tblVehicleEF	LDT2	0.04	0.07
tblVehicleEF	LDT2	0.09	0.12
tblVehicleEF	LDT2	0.04	0.07
tblVehicleEF	LDT2	0.02	0.03
tblVehicleEF	LDT2	0.06	0.39
tblVehicleEF	LDT2	0.08	0.31

tblVehicleEF	LDT2	7.0150e-003	4.7110e-003
tblVehicleEF	LDT2	5.0630e-003	0.06
tblVehicleEF	LDT2	0.87	1.03
tblVehicleEF	LDT2	1.06	2.18
tblVehicleEF	LDT2	384.82	344.13
tblVehicleEF	LDT2	75.43	65.83
tblVehicleEF	LDT2	0.06	0.07
tblVehicleEF	LDT2	0.09	0.24
tblVehicleEF	LDT2	2.1490e-003	1.8230e-003
tblVehicleEF	LDT2	2.3760e-003	1.8150e-003
tblVehicleEF	LDT2	1.9770e-003	1.6780e-003
tblVehicleEF	LDT2	2.1840e-003	1.6690e-003
tblVehicleEF	LDT2	0.07	0.11
tblVehicleEF	LDT2	0.10	0.12
tblVehicleEF	LDT2	0.06	0.10
tblVehicleEF	LDT2	0.02	0.02
tblVehicleEF	LDT2	0.06	0.36
tblVehicleEF	LDT2	0.07	0.26
tblVehicleEF	LDT2	3.8550e-003	3.3620e-003
tblVehicleEF	LDT2	7.7200e-004	6.4300e-004
tblVehicleEF	LDT2	0.07	0.11
tblVehicleEF	LDT2	0.10	0.12
tblVehicleEF	LDT2	0.06	0.10
tblVehicleEF	LDT2	0.03	0.03
tbIVehicleEF	LDT2	0.06	0.36
tblVehicleEF	LDT2	0.07	0.28
tblVehicleEF	LDT2	6.4820e-003	4.3360e-003

tblVehicleEF	LDT2	5.8190e-003	0.06
tblVehicleEF	LDT2	0.76	0.91
tblVehicleEF	LDT2	1.27	2.64
tblVehicleEF	LDT2	362.26	328.44
tblVehicleEF	LDT2	75.43	66.69
tblVehicleEF	LDT2	0.07	0.07
tblVehicleEF	LDT2	0.09	0.26
tblVehicleEF	LDT2	2.1490e-003	1.8230e-003
tblVehicleEF	LDT2	2.3760e-003	1.8150e-003
tblVehicleEF	LDT2	1.9770e-003	1.6780e-003
tblVehicleEF	LDT2	2.1840e-003	1.6690e-003
tblVehicleEF	LDT2	0.04	0.07
tblVehicleEF	LDT2	0.10	0.13
tblVehicleEF	LDT2	0.04	0.07
tblVehicleEF	LDT2	0.02	0.02
tblVehicleEF	LDT2	0.07	0.46
tblVehicleEF	LDT2	0.08	0.29
tblVehicleEF	LDT2	3.6280e-003	3.2090e-003
tblVehicleEF	LDT2	7.7500e-004	6.5200e-004
tblVehicleEF	LDT2	0.04	0.07
tblVehicleEF	LDT2	0.10	0.13
tblVehicleEF	LDT2	0.04	0.07
tblVehicleEF	LDT2	0.02	0.03
tblVehicleEF	LDT2	0.07	0.46
tblVehicleEF	LDT2	0.09	0.32
tblVehicleEF	LHD1	5.2860e-003	5.3650e-003
tblVehicleEF	LHD1	0.01	4.9910e-003

tblVehicleEF	LHD1	0.02	0.01
tblVehicleEF	LHD1	0.15	0.19
tblVehicleEF	LHD1	0.75	0.57
tblVehicleEF	LHD1	2.58	1.08
tblVehicleEF	LHD1	8.94	8.81
tblVehicleEF	LHD1	595.21	652.98
tblVehicleEF	LHD1	32.17	12.06
tblVehicleEF	LHD1	0.07	0.05
tblVehicleEF	LHD1	0.86	0.55
tblVehicleEF	LHD1	0.95	0.32
tblVehicleEF	LHD1	8.3300e-004	7.8400e-004
tblVehicleEF	LHD1	0.01	9.7290e-003
tblVehicleEF	LHD1	8.8370e-003	5.9880e-003
tblVehicleEF	LHD1	9.4800e-004	2.6800e-004
tblVehicleEF	LHD1	7.9700e-004	7.5000e-004
tblVehicleEF	LHD1	2.5350e-003	2.4320e-003
tblVehicleEF	LHD1	8.4300e-003	5.7010e-003
tblVehicleEF	LHD1	8.7200e-004	2.4700e-004
tblVehicleEF	LHD1	2.9730e-003	2.3520e-003
tblVehicleEF	LHD1	0.10	0.07
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	1.8290e-003	1.4550e-003
tblVehicleEF	LHD1	0.06	0.04
tblVehicleEF	LHD1	0.30	0.51
tblVehicleEF	LHD1	0.24	0.07
tblVehicleEF	LHD1	9.0000e-005	8.6000e-005
tblVehicleEF	LHD1	5.8400e-003	6.3740e-003

tblVehicleEF	LHD1	3.7000e-004	1.1900e-004
tblVehicleEF	LHD1	2.9730e-003	2.3520e-003
tblVehicleEF	LHD1	0.10	0.07
tblVehicleEF	LHD1	0.02	0.03
tblVehicleEF	LHD1	1.8290e-003	1.4550e-003
tblVehicleEF	LHD1	0.07	0.06
tblVehicleEF	LHD1	0.30	0.51
tblVehicleEF	LHD1	0.27	0.08
tblVehicleEF	LHD1	5.2860e-003	5.3760e-003
tblVehicleEF	LHD1	0.01	5.0880e-003
tblVehicleEF	LHD1	0.02	0.01
tblVehicleEF	LHD1	0.15	0.19
tblVehicleEF	LHD1	0.76	0.58
tblVehicleEF	LHD1	2.46	1.03
tblVehicleEF	LHD1	8.94	8.81
tblVehicleEF	LHD1	595.21	653.00
tblVehicleEF	LHD1	32.17	11.97
tblVehicleEF	LHD1	0.07	0.05
tblVehicleEF	LHD1	0.81	0.52
tblVehicleEF	LHD1	0.91	0.30
tblVehicleEF	LHD1	8.3300e-004	7.8400e-004
tblVehicleEF	LHD1	0.01	9.7290e-003
tblVehicleEF	LHD1	8.8370e-003	5.9880e-003
tblVehicleEF	LHD1	9.4800e-004	2.6800e-004
tblVehicleEF	LHD1	7.9700e-004	7.5000e-004
tblVehicleEF	LHD1	2.5350e-003	2.4320e-003
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tblVehicleEF	LHD1	8.7200e-004	2.4700e-004
tblVehicleEF	LHD1	4.4450e-003	3.4570e-003
tblVehicleEF	LHD1	0.10	0.08
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	2.5600e-003	2.0040e-003
tblVehicleEF	LHD1	0.06	0.05
tblVehicleEF	LHD1	0.29	0.50
tblVehicleEF	LHD1	0.23	0.07
tblVehicleEF	LHD1	9.0000e-005	8.6000e-005
tblVehicleEF	LHD1	5.8400e-003	6.3740e-003
tblVehicleEF	LHD1	3.6700e-004	1.1800e-004
tblVehicleEF	LHD1	4.4450e-003	3.4570e-003
tblVehicleEF	LHD1	0.10	0.08
tblVehicleEF	LHD1	0.02	0.03
tblVehicleEF	LHD1	2.5600e-003	2.0040e-003
tblVehicleEF	LHD1	0.08	0.06
tblVehicleEF	LHD1	0.29	0.50
tblVehicleEF	LHD1	0.26	0.08
tblVehicleEF	LHD1	5.2860e-003	5.3620e-003
tblVehicleEF	LHD1	0.01	4.9650e-003
tblVehicleEF	LHD1	0.02	0.01
tblVehicleEF	LHD1	0.15	0.19
tblVehicleEF	LHD1	0.74	0.56
tblVehicleEF	LHD1	2.59	1.09
tblVehicleEF	LHD1	8.94	8.81
tblVehicleEF	LHD1	595.21	652.97
tblVehicleEF	LHD1	32.17	12.07

tblVehicleEF	LHD1	0.07	0.05
tblVehicleEF	LHD1	0.85	0.54
tblVehicleEF	LHD1	0.95	0.32
tblVehicleEF	LHD1	8.3300e-004	7.8400e-004
tblVehicleEF	LHD1	0.01	9.7290e-003
tblVehicleEF	LHD1	8.8370e-003	5.9880e-003
tblVehicleEF	LHD1	9.4800e-004	2.6800e-004
tblVehicleEF	LHD1	7.9700e-004	7.5000e-004
tblVehicleEF	LHD1	2.5350e-003	2.4320e-003
tblVehicleEF	LHD1	8.4300e-003	5.7010e-003
tblVehicleEF	LHD1	8.7200e-004	2.4700e-004
tblVehicleEF	LHD1	3.1110e-003	2.4630e-003
tblVehicleEF	LHD1	0.11	0.09
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	1.7990e-003	1.4330e-003
tblVehicleEF	LHD1	0.06	0.04
tblVehicleEF	LHD1	0.32	0.56
tblVehicleEF	LHD1	0.25	0.07
tblVehicleEF	LHD1	9.0000e-005	8.6000e-005
tblVehicleEF	LHD1	5.8400e-003	6.3740e-003
tblVehicleEF	LHD1	3.7000e-004	1.1900e-004
tblVehicleEF	LHD1	3.1110e-003	2.4630e-003
tblVehicleEF	LHD1	0.11	0.09
tblVehicleEF	LHD1	0.02	0.03
tblVehicleEF	LHD1	1.7990e-003	1.4330e-003
tblVehicleEF	LHD1	0.07	0.06
tblVehicleEF	LHD1	0.32	0.56

tblVehicleEF	LHD1	0.27	0.08
tblVehicleEF	LHD2	3.7460e-003	3.7400e-003
tblVehicleEF	LHD2	3.7700e-003	3.5360e-003
tblVehicleEF	LHD2	7.4580e-003	0.01
tblVehicleEF	LHD2	0.13	0.15
tblVehicleEF	LHD2	0.31	0.39
tblVehicleEF	LHD2	1.26	0.72
tblVehicleEF	LHD2	13.57	13.36
tblVehicleEF	LHD2	610.80	654.07
tblVehicleEF	LHD2	26.97	9.22
tblVehicleEF	LHD2	0.09	0.08
tblVehicleEF	LHD2	0.55	0.71
tblVehicleEF	LHD2	0.50	0.22
tblVehicleEF	LHD2	1.1440e-003	1.2760e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	8.4330e-003	9.6270e-003
tblVehicleEF	LHD2	4.4100e-004	1.5200e-004
tblVehicleEF	LHD2	1.0950e-003	1.2210e-003
tblVehicleEF	LHD2	2.6630e-003	2.6430e-003
tblVehicleEF	LHD2	8.0540e-003	9.1940e-003
tblVehicleEF	LHD2	4.0500e-004	1.4000e-004
tblVehicleEF	LHD2	1.0290e-003	1.4320e-003
tblVehicleEF	LHD2	0.03	0.05
tblVehicleEF	LHD2	0.01	0.02
tblVehicleEF	LHD2	6.8900e-004	9.0800e-004
tblVehicleEF	LHD2	0.04	0.05
tblVehicleEF	LHD2	0.07	0.32

tblVehicleEF	LHD2	0.10	0.05
tblVehicleEF	LHD2	1.3300e-004	1.2800e-004
tblVehicleEF	LHD2	5.9490e-003	6.3290e-003
tblVehicleEF	LHD2	2.9200e-004	9.1000e-005
tblVehicleEF	LHD2	1.0290e-003	1.4320e-003
tblVehicleEF	LHD2	0.03	0.05
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	6.8900e-004	9.0800e-004
tblVehicleEF	LHD2	0.05	0.06
tblVehicleEF	LHD2	0.07	0.32
tblVehicleEF	LHD2	0.11	0.05
tblVehicleEF	LHD2	3.7460e-003	3.7480e-003
tblVehicleEF	LHD2	3.8180e-003	3.5740e-003
tbIVehicleEF	LHD2	7.2080e-003	9.7970e-003
tblVehicleEF	LHD2	0.13	0.15
tblVehicleEF	LHD2	0.31	0.39
tblVehicleEF	LHD2	1.20	0.69
tblVehicleEF	LHD2	13.57	13.36
tblVehicleEF	LHD2	610.80	654.07
tblVehicleEF	LHD2	26.97	9.16
tblVehicleEF	LHD2	0.09	0.08
tblVehicleEF	LHD2	0.52	0.67
tblVehicleEF	LHD2	0.49	0.21
tblVehicleEF	LHD2	1.1440e-003	1.2760e-003
tbIVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	8.4330e-003	9.6270e-003
tblVehicleEF	LHD2	4.4100e-004	1.5200e-004

tblVehicleEF	LHD2	1.0950e-003	1.2210e-003
tblVehicleEF	LHD2	2.6630e-003	2.6430e-003
tblVehicleEF	LHD2	8.0540e-003	9.1940e-003
tblVehicleEF	LHD2	4.0500e-004	1.4000e-004
tblVehicleEF	LHD2	1.5320e-003	2.1080e-003
tblVehicleEF	LHD2	0.04	0.05
tblVehicleEF	LHD2	0.01	0.02
tblVehicleEF	LHD2	9.5700e-004	1.2530e-003
tblVehicleEF	LHD2	0.04	0.05
tblVehicleEF	LHD2	0.07	0.30
tblVehicleEF	LHD2	0.10	0.05
tblVehicleEF	LHD2	1.3300e-004	1.2800e-004
tblVehicleEF	LHD2	5.9490e-003	6.3290e-003
tblVehicleEF	LHD2	2.9100e-004	9.1000e-005
tblVehicleEF	LHD2	1.5320e-003	2.1080e-003
tblVehicleEF	LHD2	0.04	0.05
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	9.5700e-004	1.2530e-003
tblVehicleEF	LHD2	0.05	0.06
tblVehicleEF	LHD2	0.07	0.30
tblVehicleEF	LHD2	0.11	0.05
tblVehicleEF	LHD2	3.7460e-003	3.7380e-003
tblVehicleEF	LHD2	3.7580e-003	3.5260e-003
tblVehicleEF	LHD2	7.5080e-003	0.01
tblVehicleEF	LHD2	0.13	0.15
tblVehicleEF	LHD2	0.31	0.38
tblVehicleEF	LHD2	1.27	0.72

tblVehicleEF	LHD2	13.57	13.36
tblVehicleEF	LHD2	610.80	654.06
tblVehicleEF	LHD2	26.97	9.23
tblVehicleEF	LHD2	0.09	0.08
tblVehicleEF	LHD2	0.54	0.69
tblVehicleEF	LHD2	0.51	0.22
tblVehicleEF	LHD2	1.1440e-003	1.2760e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	8.4330e-003	9.6270e-003
tblVehicleEF	LHD2	4.4100e-004	1.5200e-004
tblVehicleEF	LHD2	1.0950e-003	1.2210e-003
tblVehicleEF	LHD2	2.6630e-003	2.6430e-003
tblVehicleEF	LHD2	8.0540e-003	9.1940e-003
tblVehicleEF	LHD2	4.0500e-004	1.4000e-004
tblVehicleEF	LHD2	1.0410e-003	1.4720e-003
tblVehicleEF	LHD2	0.04	0.06
tblVehicleEF	LHD2	0.01	0.02
tblVehicleEF	LHD2	6.6600e-004	8.7900e-004
tblVehicleEF	LHD2	0.04	0.05
tblVehicleEF	LHD2	0.08	0.34
tblVehicleEF	LHD2	0.10	0.05
tblVehicleEF	LHD2	1.3300e-004	1.2800e-004
tblVehicleEF	LHD2	5.9490e-003	6.3290e-003
tblVehicleEF	LHD2	2.9200e-004	9.1000e-005
tbIVehicleEF	LHD2	1.0410e-003	1.4720e-003
tblVehicleEF	LHD2	0.04	0.06
tblVehicleEF	LHD2	0.02	0.02

International Exercises   International Ex	tblVehicleEF	LHD2	6.6600e-004	8.7900e-004
IbIVehicleEF	tblVehicleEF	LHD2	0.05	0.06
Italy	tblVehicleEF	LHD2	0.08	0.34
IbiVehicleEF	tblVehicleEF	LHD2	0.11	0.05
Italy	tblVehicleEF	MCY	0.54	0.38
biVehicleEF         MCY         9.68         8.54           biVehicleEF         MCY         189.29         223.65           biVehicleEF         MCY         44.13         59.21           biVehicleEF         MCY         1.13         1.13           biVehicleEF         MCY         2.4730e-003         2.4800e-003           biVehicleEF         MCY         3.6800e-003         3.1550e-003           biVehicleEF         MCY         2.3100e-003         2.3160e-003           biVehicleEF         MCY         3.4590e-003         2.9650e-003           biVehicleEF         MCY         1.06         1.07           biVehicleEF         MCY         0.62         0.64           biVehicleEF         MCY         0.64         0.65           biVehicleEF         MCY         0.58         1.88           biVehicleEF         MCY         0.58         1.88           biVehicleEF         MCY         2.2780e-003         2.2130e-003           biVehicleEF         MCY         2.2780e-003         2.2130e-003           biVehicleEF         MCY         6.5900e-004         5.8600e-004           biVehicleEF         MCY         6.5900e-004         5.8600e-004      <	tblVehicleEF	MCY	0.15	0.23
IbiVehicleEF	tblVehicleEF	MCY	18.72	18.86
Ib VehicleEF	tblVehicleEF	MCY	9.68	8.54
tbl/ehicleEF         MCY         1.13         1.13           tbl/ehicleEF         MCY         0.31         0.26           tbl/ehicleEF         MCY         2.4730e-003         2.4800e-003           tbl/ehicleEF         MCY         3.6800e-003         3.1550e-003           tbl/ehicleEF         MCY         2.3100e-003         2.3160e-003           tbl/ehicleEF         MCY         3.4590e-003         2.9650e-003           tbl/ehicleEF         MCY         1.06         1.07           tbl/ehicleEF         MCY         0.62         0.64           tbl/ehicleEF         MCY         0.64         0.65           tbl/ehicleEF         MCY         0.58         1.88           tbl/ehicleEF         MCY         2.04         1.80           tbl/ehicleEF         MCY         2.2780e-003         2.2130e-003           tbl/ehicleEF         MCY         6.5900e-004         5.8600e-004           tbl/ehicleEF         MCY         1.06         1.07           tbl/ehicleEF         MCY         0.62         0.64	tblVehicleEF	MCY	189.29	223.65
tbl/ehicleEF         MCY         0.31         0.26           tbl/ehicleEF         MCY         2.4730e-003         2.4800e-003           tbl/ehicleEF         MCY         3.6800e-003         3.1550e-003           tbl/ehicleEF         MCY         2.3100e-003         2.3160e-003           tbl/ehicleEF         MCY         3.4590e-003         2.9650e-003           tbl/ehicleEF         MCY         1.06         1.07           tbl/ehicleEF         MCY         0.62         0.64           tbl/ehicleEF         MCY         0.58         2.60           tbl/ehicleEF         MCY         0.58         1.88           tbl/ehicleEF         MCY         2.04         1.80           tbl/ehicleEF         MCY         2.2780e-003         2.2130e-003           tbl/ehicleEF         MCY         6.5900e-004         5.8600e-004           tbl/ehicleEF         MCY         1.06         1.07           tbl/ehicleEF         MCY         0.62         0.64	tblVehicleEF	MCY	44.13	59.21
tblVehicleEF         MCY         2.4730e-003         2.4800e-003           tblVehicleEF         MCY         3.6800e-003         3.1550e-003           tblVehicleEF         MCY         2.3100e-003         2.3160e-003           tblVehicleEF         MCY         3.4590e-003         2.9650e-003           tblVehicleEF         MCY         1.06         1.07           tblVehicleEF         MCY         0.62         0.64           tblVehicleEF         MCY         0.64         0.65           tblVehicleEF         MCY         0.58         1.88           tblVehicleEF         MCY         2.04         1.80           tblVehicleEF         MCY         2.2780e-003         2.2130e-003           tblVehicleEF         MCY         6.5900e-004         5.8600e-004           tblVehicleEF         MCY         1.06         1.07           tblVehicleEF         MCY         1.06         1.07           tblVehicleEF         MCY         0.62         0.64	tblVehicleEF	MCY	1.13	1.13
tblVehicleEF         MCY         3.6800e-003         3.1550e-003           tblVehicleEF         MCY         2.3100e-003         2.3160e-003           tblVehicleEF         MCY         1.06         1.07           tblVehicleEF         MCY         0.62         0.64           tblVehicleEF         MCY         0.64         0.65           tblVehicleEF         MCY         0.58         1.88           tblVehicleEF         MCY         2.04         1.80           tblVehicleEF         MCY         2.2780e-003         2.2130e-003           tblVehicleEF         MCY         6.5900e-004         5.8600e-004           tblVehicleEF         MCY         1.06         1.07           tblVehicleEF         MCY         0.62         0.64	tblVehicleEF	MCY	0.31	0.26
tblVehicleEF         MCY         2.3100e-003         2.3160e-003           tblVehicleEF         MCY         3.4590e-003         2.9650e-003           tblVehicleEF         MCY         1.06         1.07           tblVehicleEF         MCY         0.62         0.64           tblVehicleEF         MCY         0.64         0.65           tblVehicleEF         MCY         2.58         2.60           tblVehicleEF         MCY         0.58         1.88           tblVehicleEF         MCY         2.04         1.80           tblVehicleEF         MCY         2.2780e-003         2.2130e-003           tblVehicleEF         MCY         6.5900e-004         5.8600e-004           tblVehicleEF         MCY         1.06         1.07           tblVehicleEF         MCY         0.62         0.64	tblVehicleEF	MCY	2.4730e-003	2.4800e-003
tblVehicleEF         MCY         3.4590e-003         2.9650e-003           tblVehicleEF         MCY         1.06         1.07           tblVehicleEF         MCY         0.62         0.64           tblVehicleEF         MCY         0.64         0.65           tblVehicleEF         MCY         2.58         2.60           tblVehicleEF         MCY         0.58         1.88           tblVehicleEF         MCY         2.04         1.80           tblVehicleEF         MCY         2.2780e-003         2.2130e-003           tblVehicleEF         MCY         6.5900e-004         5.8600e-004           tblVehicleEF         MCY         1.06         1.07           tblVehicleEF         MCY         0.62         0.64	tblVehicleEF	MCY	3.6800e-003	3.1550e-003
tblVehicleEF         MCY         1.06         1.07           tblVehicleEF         MCY         0.62         0.64           tblVehicleEF         MCY         0.64         0.65           tblVehicleEF         MCY         2.58         2.60           tblVehicleEF         MCY         0.58         1.88           tblVehicleEF         MCY         2.04         1.80           tblVehicleEF         MCY         2.2780e-003         2.2130e-003           tblVehicleEF         MCY         6.5900e-004         5.8600e-004           tblVehicleEF         MCY         1.06         1.07           tblVehicleEF         MCY         0.62         0.64	tblVehicleEF	MCY	2.3100e-003	2.3160e-003
tblVehicleEF         MCY         0.62         0.64           tblVehicleEF         MCY         0.64         0.65           tblVehicleEF         MCY         2.58         2.60           tblVehicleEF         MCY         0.58         1.88           tblVehicleEF         MCY         2.04         1.80           tblVehicleEF         MCY         2.2780e-003         2.2130e-003           tblVehicleEF         MCY         6.5900e-004         5.8600e-004           tblVehicleEF         MCY         1.06         1.07           tblVehicleEF         MCY         0.62         0.64	tblVehicleEF	MCY	3.4590e-003	2.9650e-003
tbl/VehicleEF         MCY         0.64         0.65           tbl/VehicleEF         MCY         2.58         2.60           tbl/VehicleEF         MCY         0.58         1.88           tbl/VehicleEF         MCY         2.04         1.80           tbl/VehicleEF         MCY         2.2780e-003         2.2130e-003           tbl/VehicleEF         MCY         6.5900e-004         5.8600e-004           tbl/VehicleEF         MCY         1.06         1.07           tbl/VehicleEF         MCY         0.62         0.64	tblVehicleEF	MCY	1.06	1.07
tblVehicleEF         MCY         2.58         2.60           tblVehicleEF         MCY         0.58         1.88           tblVehicleEF         MCY         2.04         1.80           tblVehicleEF         MCY         2.2780e-003         2.2130e-003           tblVehicleEF         MCY         6.5900e-004         5.8600e-004           tblVehicleEF         MCY         1.06         1.07           tblVehicleEF         MCY         0.62         0.64	tblVehicleEF	MCY	0.62	0.64
tblVehicleEF         MCY         0.58         1.88           tblVehicleEF         MCY         2.04         1.80           tblVehicleEF         MCY         2.2780e-003         2.2130e-003           tblVehicleEF         MCY         6.5900e-004         5.8600e-004           tblVehicleEF         MCY         1.06         1.07           tblVehicleEF         MCY         0.62         0.64	tblVehicleEF	MCY	0.64	0.65
tblVehicleEF         MCY         2.04         1.80           tblVehicleEF         MCY         2.2780e-003         2.2130e-003           tblVehicleEF         MCY         0.5900e-004         5.8600e-004           tblVehicleEF         MCY         1.06         1.07           tblVehicleEF         MCY         0.62         0.64	tblVehicleEF	MCY	2.58	2.60
tblVehicleEF         MCY         2.2780e-003         2.2130e-003           tblVehicleEF         MCY         6.5900e-004         5.8600e-004           tblVehicleEF         MCY         1.06         1.07           tblVehicleEF         MCY         0.62         0.64	tblVehicleEF	MCY	0.58	1.88
tblVehicleEF         MCY         6.5900e-004         5.8600e-004           tblVehicleEF         MCY         1.06         1.07           tblVehicleEF         MCY         0.62         0.64	tblVehicleEF	MCY	2.04	1.80
tblVehicleEF MCY 1.06 1.07 tblVehicleEF MCY 0.62 0.64	tblVehicleEF	MCY	2.2780e-003	2.2130e-003
tblVehicleEF MCY 0.62 0.64	tblVehicleEF	MCY	6.5900e-004	5.8600e-004
	tblVehicleEF	MCY	1.06	1.07
	tblVehicleEF	MCY	0.62	0.64
tblVehicleEF MCY 0.64 0.65	tblVehicleEF	MCY	0.64	0.65

tblVehicleEF	MCY	3.22	3.23
tblVehicleEF	MCY	0.58	1.88
tblVehicleEF	MCY	2.22	1.96
tblVehicleEF	MCY	0.53	0.37
tblVehicleEF	MCY	0.13	0.21
tblVehicleEF	MCY	18.05	18.15
tblVehicleEF	MCY	8.84	7.77
tblVehicleEF	MCY	189.29	222.30
tblVehicleEF	MCY	44.13	57.32
tblVehicleEF	MCY	0.99	0.99
tblVehicleEF	MCY	0.29	0.25
tblVehicleEF	MCY	2.4730e-003	2.4800e-003
tblVehicleEF	MCY	3.6800e-003	3.1550e-003
tblVehicleEF	MCY	2.3100e-003	2.3160e-003
tblVehicleEF	MCY	3.4590e-003	2.9650e-003
tblVehicleEF	MCY	1.72	1.71
tblVehicleEF	MCY	0.68	0.69
tblVehicleEF	MCY	1.06	1.05
tblVehicleEF	MCY	2.52	2.54
tblVehicleEF	MCY	0.54	1.76
tblVehicleEF	MCY	1.82	1.60
tblVehicleEF	MCY	2.2650e-003	2.2000e-003
tblVehicleEF	MCY	6.3900e-004	5.6700e-004
tblVehicleEF	MCY	1.72	1.71
tblVehicleEF	MCY	0.68	0.69
tblVehicleEF	MCY	1.06	1.05
tblVehicleEF	MCY	3.15	3.16

tblVehicleEF	MCY	0.54	1.76
tblVehicleEF	MCY	1.98	1.74
tblVehicleEF	MCY	0.54	0.38
tblVehicleEF	MCY	0.15	0.24
tblVehicleEF	MCY	18.82	19.00
tblVehicleEF	MCY	9.83	8.69
tblVehicleEF	MCY	189.29	223.92
tblVehicleEF	MCY	44.13	59.59
tblVehicleEF	MCY	1.10	1.10
tblVehicleEF	MCY	0.31	0.27
tblVehicleEF	MCY	2.4730e-003	2.4800e-003
tblVehicleEF	MCY	3.6800e-003	3.1550e-003
tblVehicleEF	MCY	2.3100e-003	2.3160e-003
tblVehicleEF	MCY	3.4590e-003	2.9650e-003
tblVehicleEF	MCY	1.15	1.17
tblVehicleEF	MCY	0.80	0.82
tblVehicleEF	MCY	0.61	0.63
tblVehicleEF	MCY	2.59	2.61
tblVehicleEF	MCY	0.67	2.18
tblVehicleEF	MCY	2.08	1.85
tblVehicleEF	MCY	2.2800e-003	2.2160e-003
tblVehicleEF	MCY	6.6300e-004	5.9000e-004
tblVehicleEF	MCY	1.15	1.17
tblVehicleEF	MCY	0.80	0.82
tblVehicleEF	MCY	0.61	0.63
tblVehicleEF	MCY	3.23	3.25
tblVehicleEF	MCY	0.67	2.18

tblVehicleEF	MCY	2.26	2.01
tblVehicleEF	MDV	0.01	5.6770e-003
tblVehicleEF	MDV	0.01	0.07
tblVehicleEF	MDV	1.21	1.09
tblVehicleEF	MDV	2.22	2.92
tblVehicleEF	MDV	495.22	408.75
tblVehicleEF	MDV	99.91	80.84
tblVehicleEF	MDV	0.13	0.10
tblVehicleEF	MDV	0.19	0.31
tblVehicleEF	MDV	2.2990e-003	1.9550e-003
tblVehicleEF	MDV	2.4650e-003	1.9340e-003
tblVehicleEF	MDV	2.1190e-003	1.8020e-003
tblVehicleEF	MDV	2.2660e-003	1.7790e-003
tblVehicleEF	MDV	0.06	0.08
tblVehicleEF	MDV	0.15	0.13
tblVehicleEF	MDV	0.07	0.09
tblVehicleEF	MDV	0.03	0.02
tblVehicleEF	MDV	0.09	0.41
tblVehicleEF	MDV	0.17	0.36
tblVehicleEF	MDV	4.9590e-003	3.9920e-003
tblVehicleEF	MDV	1.0380e-003	7.9000e-004
tblVehicleEF	MDV	0.06	0.08
tblVehicleEF	MDV	0.15	0.13
tblVehicleEF	MDV	0.07	0.09
tblVehicleEF	MDV	0.04	0.04
tblVehicleEF	MDV	0.09	0.41
tblVehicleEF	MDV	0.18	0.39

tblVehicleEF	MDV	0.01	6.0290e-003
tblVehicleEF	MDV	0.01	0.07
tblVehicleEF	MDV	1.32	1.19
tblVehicleEF	MDV	1.90	2.49
tblVehicleEF	MDV	516.89	420.70
tblVehicleEF	MDV	99.91	80.01
tblVehicleEF	MDV	0.11	0.08
tblVehicleEF	MDV	0.18	0.29
tblVehicleEF	MDV	2.2990e-003	1.9550e-003
tblVehicleEF	MDV	2.4650e-003	1.9340e-003
tblVehicleEF	MDV	2.1190e-003	1.8020e-003
tblVehicleEF	MDV	2.2660e-003	1.7790e-003
tblVehicleEF	MDV	0.10	0.12
tblVehicleEF	MDV	0.15	0.14
tblVehicleEF	MDV	0.09	0.12
tblVehicleEF	MDV	0.03	0.03
tblVehicleEF	MDV	0.08	0.38
tblVehicleEF	MDV	0.15	0.32
tblVehicleEF	MDV	5.1770e-003	4.1080e-003
tblVehicleEF	MDV	1.0320e-003	7.8200e-004
tblVehicleEF	MDV	0.10	0.12
tblVehicleEF	MDV	0.15	0.14
tblVehicleEF	MDV	0.09	0.12
tblVehicleEF	MDV	0.05	0.04
tblVehicleEF	MDV	0.08	0.38
tblVehicleEF	MDV	0.16	0.35
tblVehicleEF	MDV	0.01	5.5640e-003

tblVehicleEF	MDV	0.01	0.08
tblVehicleEF	MDV	1.17	1.05
tblVehicleEF	MDV	2.29	3.02
tblVehicleEF	MDV	487.26	404.33
tblVehicleEF	MDV	99.91	81.03
tblVehicleEF	MDV	0.13	0.09
tblVehicleEF	MDV	0.20	0.31
tblVehicleEF	MDV	2.2990e-003	1.9550e-003
tblVehicleEF	MDV	2.4650e-003	1.9340e-003
tblVehicleEF	MDV	2.1190e-003	1.8020e-003
tblVehicleEF	MDV	2.2660e-003	1.7790e-003
tblVehicleEF	MDV	0.06	0.08
tblVehicleEF	MDV	0.16	0.14
tblVehicleEF	MDV	0.06	0.08
tblVehicleEF	MDV	0.03	0.02
tbIVehicleEF	MDV	0.10	0.48
tblVehicleEF	MDV	0.17	0.37
tblVehicleEF	MDV	4.8790e-003	3.9480e-003
tblVehicleEF	MDV	1.0390e-003	7.9200e-004
tblVehicleEF	MDV	0.06	0.08
tblVehicleEF	MDV	0.16	0.14
tblVehicleEF	MDV	0.06	0.08
tblVehicleEF	MDV	0.04	0.03
tblVehicleEF	MDV	0.10	0.48
tblVehicleEF	MDV	0.19	0.40
tblVehicleEF	MH	0.02	2.9970e-003
tblVehicleEF	MH	0.02	0.00

tblVehicleEF	MH	1.76	0.25
tblVehicleEF	MH	5.23	0.00
tblVehicleEF	MH	1,125.05	953.67
tblVehicleEF	MH	59.88	0.00
tblVehicleEF	MH	1.00	3.27
tblVehicleEF	MH	0.75	0.00
tblVehicleEF	MH	0.01	0.02
tblVehicleEF	MH	0.02	0.07
tblVehicleEF	MH	1.0430e-003	0.00
tblVehicleEF	MH	3.2050e-003	4.0000e-003
tblVehicleEF	MH	0.02	0.07
tblVehicleEF	MH	9.5900e-004	0.00
tblVehicleEF	MH	0.84	0.00
tblVehicleEF	MH	0.06	0.00
tblVehicleEF	MH	0.36	0.00
tblVehicleEF	MH	0.07	0.06
tblVehicleEF	MH	0.02	0.00
tblVehicleEF	MH	0.30	0.00
tblVehicleEF	MH	0.01	9.0160e-003
tblVehicleEF	MH	6.9000e-004	0.00
tblVehicleEF	MH	0.84	0.00
tblVehicleEF	MH	0.06	0.00
tblVehicleEF	MH	0.36	0.00
tblVehicleEF	MH	0.10	0.07
tblVehicleEF	MH	0.02	0.00
tblVehicleEF	MH	0.33	0.00
tblVehicleEF	MH	0.02	2.9970e-003

tblVehicleEF	MH	0.02	0.00
tblVehicleEF	MH	1.81	0.25
tblVehicleEF	MH	4.92	0.00
tblVehicleEF	MH	1,125.05	953.67
tblVehicleEF	MH	59.88	0.00
tblVehicleEF	MH	0.92	3.09
tblVehicleEF	MH	0.71	0.00
tblVehicleEF	MH	0.01	0.02
tblVehicleEF	MH	0.02	0.07
tblVehicleEF	MH	1.0430e-003	0.00
tblVehicleEF	MH	3.2050e-003	4.0000e-003
tblVehicleEF	MH	0.02	0.07
tblVehicleEF	MH	9.5900e-004	0.00
tblVehicleEF	MH	1.24	0.00
tblVehicleEF	MH	0.06	0.00
tblVehicleEF	MH	0.51	0.00
tblVehicleEF	MH	0.07	0.06
tblVehicleEF	MH	0.02	0.00
tblVehicleEF	MH	0.29	0.00
tblVehicleEF	MH	0.01	9.0160e-003
tblVehicleEF	MH	6.8400e-004	0.00
tblVehicleEF	MH	1.24	0.00
tblVehicleEF	MH	0.06	0.00
tblVehicleEF	MH	0.51	0.00
tblVehicleEF	MH	0.10	0.07
tblVehicleEF	MH	0.02	0.00
tblVehicleEF	MH	0.31	0.00
			. I

tblVehicleEF	MH	0.02	2.9970e-003
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tblVehicleEF	MH	0.02	0.00
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tblVehicleEF	MHD	7.4900e-004	1.2400e-004
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tblVehicleEF	MHD	9.9000e-004	5.7300e-004
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tblVehicleEF	MHD	0.01	9.8540e-003
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tblVehicleEF	MHD	9.9000e-004	5.7300e-004
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tblVehicleEF	MHD	2.8420e-003	6.1300e-003
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tblVehicleEF	OBUS	2.52	0.84
tblVehicleEF	OBUS	2.0000e-005	1.1800e-004
tblVehicleEF	OBUS	2.6330e-003	7.0870e-003
tblVehicleEF	OBUS	8.2900e-004	2.0000e-004
tblVehicleEF	OBUS	1.9000e-005	1.1300e-004
tblVehicleEF	OBUS	2.5030e-003	6.7660e-003
tblVehicleEF	OBUS	7.6200e-004	1.8400e-004
tblVehicleEF	OBUS	1.4160e-003	1.8400e-003
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tblVehicleEF	OBUS	0.03	0.05
tblVehicleEF	OBUS	7.6700e-004	9.5000e-004
tblVehicleEF	OBUS	0.04	0.03
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tblVehicleEF	OBUS	1.7000e-005	1.0500e-004		
tblVehicleEF	OBUS	2.6330e-003	7.0870e-003		
tblVehicleEF	OBUS	8.2900e-004	2.0000e-004		
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tblVehicleEF	OBUS	7.6200e-004	1.8400e-004		
tblVehicleEF	OBUS	2.0710e-003	2.6500e-003		
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tblVehicleEF	OBUS	0.03	0.05		
			-		

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tblVehicleEF	OBUS	7.6400e-004	1.8600e-004
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tblVehicleEF	OBUS	0.05	0.07
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tblVehicleEF	UBUS	1.0450e-003	5.2000e-005		
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tblVehicleEF	UBUS	7.66	0.63		
tblVehicleEF	UBUS	1,951.45	1,987.99		
tblVehicleEF	UBUS	100.38	8.27		
tblVehicleEF	UBUS	8.79	0.47		
tblVehicleEF	UBUS	15.04	0.08		
tblVehicleEF	UBUS	0.60	0.07		
tblVehicleEF	UBUS	0.01	0.03		
tblVehicleEF	UBUS	0.12	3.2070e-003		
tblVehicleEF	UBUS	1.1360e-003	5.7000e-005		
tblVehicleEF	UBUS	0.26	0.03		
tblVehicleEF	UBUS	3.0000e-003	7.9690e-003		
tblVehicleEF	UBUS	0.12	3.0640e-003		
tblVehicleEF	UBUS	1.0450e-003	5.2000e-005		
tblVehicleEF	UBUS	5.8640e-003	8.6100e-004		
tblVehicleEF	UBUS	0.07	7.6580e-003		
tblVehicleEF	UBUS	3.3120e-003	6.0000e-004		
tblVehicleEF	UBUS	0.80	0.09		
tblVehicleEF	UBUS	0.02	0.04		
tblVehicleEF	UBUS	0.63	0.04		
tblVehicleEF	UBUS	9.8070e-003	1.4050e-003		
tblVehicleEF	UBUS	1.1430e-003	8.2000e-005		
tblVehicleEF	UBUS	5.8640e-003	8.6100e-004		
tblVehicleEF	UBUS	0.07	7.6580e-003		

tblVehicleEF	UBUS	3.3120e-003	6.0000e-004
tblVehicleEF	UBUS	3.33	5.97
tblVehicleEF	UBUS	0.02	0.04
tblVehicleEF	UBUS	0.69	0.05
tblVehicleEF	UBUS	2.44	5.85
tblVehicleEF	UBUS	0.05	0.01
tblVehicleEF	UBUS	10.66	45.42
tblVehicleEF	UBUS	9.05	0.73
tblVehicleEF	UBUS	1,951.45	1,987.99
tblVehicleEF	UBUS	100.38	8.45
tblVehicleEF	UBUS	9.15	0.47
tblVehicleEF	UBUS	15.10	0.08
tblVehicleEF	UBUS	0.60	0.07
tblVehicleEF	UBUS	0.01	0.03
tblVehicleEF	UBUS	0.12	3.2070e-003
tblVehicleEF	UBUS	1.1360e-003	5.7000e-005
tblVehicleEF	UBUS	0.26	0.03
tblVehicleEF	UBUS	3.0000e-003	7.9690e-003
tblVehicleEF	UBUS	0.12	3.0640e-003
tblVehicleEF	UBUS	1.0450e-003	5.2000e-005
tblVehicleEF	UBUS	4.6290e-003	5.8300e-004
tblVehicleEF	UBUS	0.08	7.9410e-003
tblVehicleEF	UBUS	2.5090e-003	4.1300e-004
tblVehicleEF	UBUS	0.79	0.09
tblVehicleEF	UBUS	0.03	0.06
tblVehicleEF	UBUS	0.70	0.05
tblVehicleEF	UBUS	9.8060e-003	1.4050e-003

tblVehicleEF	UBUS	1.1670e-003	8.4000e-005
tblVehicleEF	UBUS	4.6290e-003	5.8300e-004
tblVehicleEF	UBUS	0.08	7.9410e-003
tblVehicleEF	UBUS	2.5090e-003	4.1300e-004
tblVehicleEF	UBUS	3.31	5.97
tblVehicleEF	UBUS	0.03	0.06
tblVehicleEF	UBUS	0.76	0.05
tblVehicleTrips	ST_TR	6.39	4.52
tblVehicleTrips	ST_TR	696.00	293.13
tblVehicleTrips	ST_TR	177.59	163.41
tblVehicleTrips	SU_TR	5.86	3.76
tblVehicleTrips	SU_TR	500.00	388.07
tblVehicleTrips	SU_TR	166.44	153.15
tblVehicleTrips	WD_TR	6.65	5.00
tblVehicleTrips	WD_TR	716.00	289.96
tblVehicleTrips	WD_TR	102.24	98.24
tblWater	AerobicPercent	87.46	100.00
tblWater	AerobicPercent	87.46	100.00
tblWater	AerobicPercent	87.46	100.00
tblWater	AnaerobicandFacultativeLagoonsPerce	2.21	0.00
tblWater	AnaerobicandFacultativeLagoonsPerce	2.21	0.00
tblWater	nt AnaerobicandFacultativeLagoonsPerce	2.21	0.00
tblWater	nt SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWoodstoves	NumberCatalytic	6.90	0.00
tblWoodstoves	NumberNoncatalytic	6.90	0.00

# 2.0 Emissions Summary

## 2.1 Overall Construction (Maximum Daily Emission)

## **Unmitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day									lb/c	lay					
2020	2.9055	23.0246	21.2805	0.0511	5.9146	1.1608	6.7383	2.9848	1.0841	3.7427	0.0000	4,963.336 4	4,963.3364	0.6412	0.0000	4,975.755 1
2021	25.0406	17.8940	20.3337	0.0504	2.0381	0.7065	2.7446	0.5462	0.6815	1.2277	0.0000	4,895.286 2	4,895.2862	0.4741	0.0000	4,907.139 0
Maximum	25.0406	23.0246	21.2805	0.0511	5.9146	1.1608	6.7383	2.9848	1.0841	3.7427	0.0000	4,963.336 4	4,963.3364	0.6412	0.0000	4,975.755 1

## **Mitigated Construction**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year					lb/d	day							lb/c	day		
2020	1.2761	14.6648	21.5710	0.0511	2.2551	0.1962	2.2860	1.1233	0.1942	1.1540	0.0000	4,963.336 4	4,963.3364	0.6412	0.0000	4,975.755 1
2021	24.8761	14.2504	20.9128	0.0504	1.8822	0.1839	2.0661	0.5079	0.1825	0.6904	0.0000	4,895.286 2	4,895.2862	0.4741	0.0000	4,907.139 0
Maximum	24.8761	14.6648	21.5710	0.0511	2.2551	0.1962	2.2860	1.1233	0.1942	1.1540	0.0000	4,963.336 4	4,963.3364	0.6412	0.0000	4,975.755 1
	ROG	NOx	СО	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	6.42	29.33	-2.09	0.00	47.98	79.64	54.11	53.80	78.67	62.89	0.00	0.00	0.00	0.00	0.00	0.00

## 2.2 Overall Operational

## **Unmitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	lay							lb/d	ay		
Area	4.0507	0.1314	11.4031	6.0000e- 004		0.0631	0.0631		0.0631	0.0631	0.0000	20.5331	20.5331	0.0198	0.0000	21.0281
Energy	0.0833	0.7271	0.4173	4.5400e- 003		0.0575	0.0575		0.0575	0.0575		908.2358	908.2358	0.0174	0.0167	913.6330
Mobile	10.6697	12.9314	78.1482	0.1940	18.4317	0.1506	18.5823	4.9155	0.1401	5.0556		20,187.59 78	20,187.597 8	1.4609		20,224.11 94
Total	14.8037	13.7898	89.9685	0.1992	18.4317	0.2712	18.7029	4.9155	0.2607	5.1762	0.0000	21,116.36 67	21,116.366 7	1.4981	0.0167	21,158.78 04

## **Mitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	lay							lb/d	ay		
Area	4.0507	0.1314	11.4031	6.0000e- 004		0.0631	0.0631		0.0631	0.0631	0.0000	20.5331	20.5331	0.0198	0.0000	21.0281
Energy	0.0719	0.6286	0.3650	3.9200e- 003		0.0497	0.0497		0.0497	0.0497		784.4908	784.4908	0.0150	0.0144	789.1526
Mobile	10.6697	12.9314	78.1482	0.1940	18.4317	0.1506	18.5823	4.9155	0.1401	5.0556		20,187.59 78	20,187.597 8	1.4609		20,224.11 94
Total	14.7924	13.6914	89.9162	0.1986	18.4317	0.2633	18.6951	4.9155	0.2529	5.1684	0.0000	20,992.62 17	20,992.621 7	1.4957	0.0144	21,034.30 01

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.08	0.71	0.06	0.31	0.00	2.89	0.04	0.00	3.01	0.15	0.00	0.59	0.59	0.16	13.63	0.59

## 3.0 Construction Detail

#### **Construction Phase**

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	7/18/2020	8/14/2020	5	20	
2	Site Preparation	Site Preparation	8/15/2020	8/18/2020	5	2	
3	Grading	Grading	8/19/2020	8/24/2020	5	4	
4	Building Construction	Building Construction	8/25/2020	5/31/2021	5	200	
5	Paving	Paving	6/1/2021	6/14/2021	5	10	
6	Architectural Coating	Architectural Coating	6/15/2021	6/28/2021	5	10	

Acres of Grading (Site Preparation Phase): 1

Acres of Grading (Grading Phase): 1.5

Acres of Paving: 1.01

Residential Indoor: 316,963; Residential Outdoor: 105,654; Non-Residential Indoor: 37,500; Non-Residential Outdoor: 12,500; Striped

#### OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Rubber Tired Dozers	1	8.00	247	0.40
Demolition	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Site Preparation	Graders	1	8.00	187	0.41
Site Preparation	Rubber Tired Dozers	1	7.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Grading	Graders	1	6.00	187	0.41
Grading	Rubber Tired Dozers	1	6.00	247	0.40
Grading	Tractors/Loaders/Backhoes	1	7.00	97	0.37

Building Construction	Cranes	1	6.00	231	0.29
Building Construction	Forklifts	1	6.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Building Construction	Welders	3	8.00	46	0.45
Paving	Cement and Mortar Mixers	1	6.00	9	0.56
Paving	Pavers	1	6.00	130	0.42
Paving	Paving Equipment	1	8.00	132	0.36
Paving	Rollers	1	7.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48

### **Trips and VMT**

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle	Hauling Vehicle
Demolition	5	13.00	4.00	112.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	3	8.00	4.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	3	8.00	4.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	7	160.00	39.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	5	13.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	32.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

## **3.1 Mitigation Measures Construction**

Use Cleaner Engines for Construction Equipment

Replace Ground Cover

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

Clean Paved Roads

## 3.2 Demolition - 2020 Unmitigated Construction On-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	lay							lb/c	lay		
Fugitive Dust					1.2133	0.0000	1.2133	0.1837	0.0000	0.1837			0.0000			0.0000
Off-Road	2.1262	20.9463	14.6573	0.0241		1.1525	1.1525		1.0761	1.0761		2,322.312 7	2,322.3127	0.5970		2,337.236 3
Total	2.1262	20.9463	14.6573	0.0241	1.2133	1.1525	2.3658	0.1837	1.0761	1.2599		2,322.312 7	2,322.3127	0.5970		2,337.236

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	lay							lb/c	lay		
Hauling	0.0489	1.6102	0.3568	4.4200e- 003	0.0979	5.1400e- 003	0.1031	0.0268	4.9200e- 003	0.0318		479.2658	479.2658	0.0326		480.0814
Vendor	0.0142	0.4255	0.1115	1.0400e- 003	0.0256	2.0000e- 003	0.0276	7.3700e- 003	1.9200e- 003	9.2900e- 003		110.8099	110.8099	6.7600e- 003		110.9789
Worker	0.0598	0.0426	0.5692	1.5400e- 003	0.1453	1.2100e- 003	0.1465	0.0385	1.1200e- 003	0.0397		152.8947	152.8947	4.8200e- 003		153.0152
Total	0.1230	2.0783	1.0375	7.0000e- 003	0.2688	8.3500e- 003	0.2772	0.0728	7.9600e- 003	0.0807		742.9704	742.9704	0.0442		744.0755

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/c	lay							lb/d	lay		
Fugitive Dust					0.4495	0.0000	0.4495	0.0681	0.0000	0.0681			0.0000			0.0000
Off-Road	0.4630	8.5434	15.4154	0.0241		0.0375	0.0375		0.0375	0.0375	0.0000	2,322.312 7	2,322.3127	0.5970		2,337.236 3
Total	0.4630	8.5434	15.4154	0.0241	0.4495	0.0375	0.4870	0.0681	0.0375	0.1055	0.0000	2,322.312 7	2,322.3127	0.5970		2,337.236 3

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/c	lay							lb/d	lay		
Hauling	0.0489	1.6102	0.3568	4.4200e- 003	0.0913	5.1400e- 003	0.0964	0.0252	4.9200e- 003	0.0301		479.2658	479.2658	0.0326		480.0814
Vendor	0.0142	0.4255	0.1115	1.0400e- 003	0.0240	2.0000e- 003	0.0260	6.9700e- 003	1.9200e- 003	8.8900e- 003		110.8099	110.8099	6.7600e- 003		110.9789
Worker	0.0598	0.0426	0.5692	1.5400e- 003	0.1339	1.2100e- 003	0.1352	0.0358	1.1200e- 003	0.0369		152.8947	152.8947	4.8200e- 003		153.0152
Total	0.1230	2.0783	1.0375	7.0000e- 003	0.2492	8.3500e- 003	0.2575	0.0679	7.9600e- 003	0.0759		742.9704	742.9704	0.0442		744.0755

## 3.3 Site Preparation - 2020

## **Unmitigated Construction On-Site**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/c	lay							lb/d	lay		
Fugitive Dust					5.7996	0.0000	5.7996	2.9537	0.0000	2.9537			0.0000			0.0000
Off-Road	1.6299	18.3464	7.7093	0.0172		0.8210	0.8210		0.7553	0.7553		1,667.411 9	1,667.4119	0.5393		1,680.893 7
Total	1.6299	18.3464	7.7093	0.0172	5.7996	0.8210	6.6205	2.9537	0.7553	3.7090		1,667.411 9	1,667.4119	0.5393		1,680.893 7

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	lay							lb/d	ay		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0142	0.4255	0.1115	1.0400e- 003	0.0256	2.0000e- 003	0.0276	7.3700e- 003	1.9200e- 003	9.2900e- 003		110.8099	110.8099	6.7600e- 003		110.9789
Worker	0.0368	0.0262	0.3503	9.4000e- 004	0.0894	7.5000e- 004	0.0902	0.0237	6.9000e- 004	0.0244		94.0890	94.0890	2.9700e- 003		94.1632
Total	0.0511	0.4517	0.4618	1.9800e- 003	0.1150	2.7500e- 003	0.1178	0.0311	2.6100e- 003	0.0337		204.8989	204.8989	9.7300e- 003		205.1421

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	lay							lb/c	lay		
Fugitive Dust					2.1487	0.0000	2.1487	1.0944	0.0000	1.0944			0.0000			0.0000
Off-Road	0.2998	5.0659	9.8221	0.0172		0.0281	0.0281	Dunning	0.0281	0.0281	0.0000	1,667.411 9	1,667.4119	0.5393		1,680.893 7
Total	0.2998	5.0659	9.8221	0.0172	2.1487	0.0281	2.1768	1.0944	0.0281	1.1224	0.0000	1,667.411 9	1,667.4119	0.5393		1,680.893 7

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/c	lay							lb/c	lay		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0142	0.4255	0.1115	1.0400e- 003	0.0240	2.0000e- 003	0.0260	6.9700e- 003	1.9200e- 003	8.8900e- 003		110.8099	110.8099	6.7600e- 003		110.9789
Worker	0.0368	0.0262	0.3503	9.4000e- 004	0.0824	7.5000e- 004	0.0832	0.0220	6.9000e- 004	0.0227		94.0890	94.0890	2.9700e- 003		94.1632
Total	0.0511	0.4517	0.4618	1.9800e- 003	0.1064	2.7500e- 003	0.1091	0.0290	2.6100e- 003	0.0316		204.8989	204.8989	9.7300e- 003		205.1421

3.4 Grading - 2020

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/c	lay							lb/d	lay		
Fugitive Dust					4.9143	0.0000	4.9143	2.5256	0.0000	2.5256			0.0000			0.0000
Off-Road	1.3498	15.0854	6.4543	0.0141		0.6844	0.6844		0.6296	0.6296		1,365.718 3	1,365.7183	0.4417		1,376.760 9
Total	1.3498	15.0854	6.4543	0.0141	4.9143	0.6844	5.5986	2.5256	0.6296	3.1552		1,365.718 3	1,365.7183	0.4417		1,376.760 9

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/c	lay							lb/c	lay		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0142	0.4255	0.1115	1.0400e- 003	0.0256	2.0000e- 003	0.0276	7.3700e- 003	1.9200e- 003	9.2900e- 003		110.8099	110.8099	6.7600e- 003		110.9789
Worker	0.0368	0.0262	0.3503	9.4000e- 004	0.0894	7.5000e- 004	0.0902	0.0237	6.9000e- 004	0.0244		94.0890	94.0890	2.9700e- 003		94.1632
Total	0.0511	0.4517	0.4618	1.9800e- 003	0.1150	2.7500e- 003	0.1178	0.0311	2.6100e- 003	0.0337		204.8989	204.8989	9.7300e- 003		205.1421

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	lay							lb/c	lay		
Fugitive Dust					1.8207	0.0000	1.8207	0.9357	0.0000	0.9357			0.0000			0.0000
Off-Road	0.2466	4.1795	8.0841	0.0141		0.0230	0.0230	Dunning	0.0230	0.0230	0.0000	1,365.718 3	1,365.7183	0.4417		1,376.760 9
Total	0.2466	4.1795	8.0841	0.0141	1.8207	0.0230	1.8437	0.9357	0.0230	0.9587	0.0000	1,365.718 3	1,365.7183	0.4417		1,376.760 9

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	lay							lb/d	day		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0142	0.4255	0.1115	1.0400e- 003	0.0240	2.0000e- 003	0.0260	6.9700e- 003	1.9200e- 003	8.8900e- 003		110.8099	110.8099	6.7600e- 003	<u> </u>	110.9789
Worker	0.0368	0.0262	0.3503	9.4000e- 004	0.0824	7.5000e- 004	0.0832	0.0220	6.9000e- 004	0.0227		94.0890	94.0890	2.9700e- 003	Autoria (1911)	94.1632
Total	0.0511	0.4517	0.4618	1.9800e- 003	0.1064	2.7500e- 003	0.1091	0.0290	2.6100e- 003	0.0316		204.8989	204.8989	9.7300e- 003		205.1421

## 3.5 Building Construction - 2020 Unmitigated Construction On-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	ay							lb/c	lay		
Off-Road	2.0305	14.7882	13.1881	0.0220		0.7960	0.7960		0.7688	0.7688		2,001.159 5	2,001.1595	0.3715		2,010.446 7
Total	2.0305	14.7882	13.1881	0.0220		0.7960	0.7960		0.7688	0.7688		2,001.159 5	2,001.1595	0.3715		2,010.446 7

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	lay							lb/d	lay		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1387	4.1485	1.0870	0.0101	0.2497	0.0195	0.2692	0.0719	0.0187	0.0906		1,080.396 3	1,080.3963	0.0659		1,082.044 5
Worker	0.7363	0.5238	7.0055	0.0189	1.7884	0.0150	1.8034	0.4743	0.0138	0.4881		1,881.780 6	1,881.7806	0.0593		1,883.263 8
Total	0.8750	4.6724	8.0925	0.0290	2.0381	0.0345	2.0726	0.5462	0.0325	0.5786		2,962.176 9	2,962.1769	0.1253		2,965.308 4

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	ay							lb/d	lay		
Off-Road	0.4010	9.9925	13.4786	0.0220		0.1617	0.1617		0.1617	0.1617	0.0000	2,001.159 5	2,001.1595	0.3715		2,010.446 7
Total	0.4010	9.9925	13.4786	0.0220		0.1617	0.1617		0.1617	0.1617	0.0000	2,001.159 5	2,001.1595	0.3715		2,010.446 7

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	lay							lb/c	ay		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1387	4.1485	1.0870	0.0101	0.2337	0.0195	0.2532	0.0680	0.0187	0.0866		1,080.396 3	1,080.3963	0.0659		1,082.044 5
Worker	0.7363	0.5238	7.0055	0.0189	1.6485	0.0150	1.6634	0.4400	0.0138	0.4537		1,881.780 6	1,881.7806	0.0593		1,883.263 8
Total	0.8750	4.6724	8.0925	0.0290	1.8822	0.0345	1.9166	0.5079	0.0325	0.5404		2,962.176 9	2,962.1769	0.1253		2,965.308 4

## 3.5 Building Construction - 2021 Unmitigated Construction On-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e		
Category		lb/day										lb/day						
Off-Road	1.8125	13.6361	12.8994	0.0221		0.6843	0.6843		0.6608	0.6608		2,001.220 0	2,001.2200	0.3573		2,010.151 7		
Total	1.8125	13.6361	12.8994	0.0221		0.6843	0.6843		0.6608	0.6608		2,001.220 0	2,001.2200	0.3573		2,010.151 7		

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day									lb/day						
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1185	3.7865	0.9899	0.0100	0.2497	7.7400e- 003	0.2574	0.0719	7.4000e- 003	0.0793		1,072.034 5	1,072.0345	0.0632		1,073.613 4
Worker	0.6859	0.4714	6.4444	0.0183	1.7884	0.0145	1.8029	0.4743	0.0133	0.4876		1,822.031 8	1,822.0318	0.0537		1,823.373 9
Total	0.8044	4.2579	7.4343	0.0283	2.0381	0.0222	2.0603	0.5462	0.0207	0.5669		2,894.066 2	2,894.0662	0.1169		2,896.987 3

## **Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	ay							lb/d	lay		
Off-Road	0.4010	9.9925	13.4786	0.0221		0.1617	0.1617		0.1617	0.1617	0.0000	2,001.220 0	2,001.2200	0.3573		2,010.151 7
Total	0.4010	9.9925	13.4786	0.0221		0.1617	0.1617		0.1617	0.1617	0.0000	2,001.220 0	2,001.2200	0.3573		2,010.151 7

## **Mitigated Construction Off-Site**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	lay							lb/d	ay		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1185	3.7865	0.9899	0.0100	0.2337	7.7400e- 003	0.2414	0.0680	7.4000e- 003	0.0754		1,072.034 5	1,072.0345	0.0632		1,073.613 4
Worker	0.6859	0.4714	6.4444	0.0183	1.6485	0.0145	1.6629	0.4400	0.0133	0.4533		1,822.031 8	1,822.0318	0.0537		1,823.373 9
Total	0.8044	4.2579	7.4343	0.0283	1.8822	0.0222	1.9044	0.5079	0.0207	0.5286		2,894.066 2	2,894.0662	0.1169		2,896.987 3

3.6 Paving - 2021
<u>Unmitigated Construction On-Site</u>

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	lay							lb/d	lay		
Off-Road	0.7739	7.7422	8.8569	0.0135		0.4153	0.4153		0.3830	0.3830		1,296.866 4	1,296.8664	0.4111		1,307.144 2
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.7739	7.7422	8.8569	0.0135		0.4153	0.4153		0.3830	0.3830		1,296.866 4	1,296.8664	0.4111		1,307.144 2

## **Unmitigated Construction Off-Site**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/c	lay							lb/c	lay		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0557	0.0383	0.5236	1.4900e- 003	0.1453	1.1700e- 003	0.1465	0.0385	1.0800e- 003	0.0396		148.0401	148.0401	4.3600e- 003		148.1491
Total	0.0557	0.0383	0.5236	1.4900e- 003	0.1453	1.1700e- 003	0.1465	0.0385	1.0800e- 003	0.0396		148.0401	148.0401	4.3600e- 003		148.1491

## **Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	lay							lb/c	lay		
Off-Road	0.2149	5.7133	9.8512	0.0135		0.0213	0.0213		0.0213	0.0213	0.0000	1,296.866 4	1,296.8664	0.4111		1,307.144 2
Paving	0.0000					0.0000	0.0000	D	0.0000	0.0000			0.0000			0.0000
Total	0.2149	5.7133	9.8512	0.0135		0.0213	0.0213		0.0213	0.0213	0.0000	1,296.866 4	1,296.8664	0.4111		1,307.144 2

## **Mitigated Construction Off-Site**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/c	ay							lb/d	day		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0557	0.0383	0.5236	1.4900e- 003	0.1339	1.1700e- 003	0.1351	0.0358	1.0800e- 003	0.0368		148.0401	148.0401	4.3600e- 003		148.1491
Total	0.0557	0.0383	0.5236	1.4900e- 003	0.1339	1.1700e- 003	0.1351	0.0358	1.0800e- 003	0.0368		148.0401	148.0401	4.3600e- 003		148.1491

## 3.7 Architectural Coating - 2021 Unmitigated Construction On-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/c	lay							lb/c	lay		
Archit. Coating	24.6845					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2189	1.5268	1.8176	2.9700e- 003		0.0941	0.0941		0.0941	0.0941		281.4481	281.4481	0.0193		281.9309
Total	24.9034	1.5268	1.8176	2.9700e- 003		0.0941	0.0941		0.0941	0.0941		281.4481	281.4481	0.0193		281.9309

## **Unmitigated Construction Off-Site**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/c	lay							lb/d	lay		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1372	0.0943	1.2889	3.6600e- 003	0.3577	2.8900e- 003	0.3606	0.0949	2.6600e- 003	0.0975		364.4064	364.4064	0.0107		364.6748
Total	0.1372	0.0943	1.2889	3.6600e- 003	0.3577	2.8900e- 003	0.3606	0.0949	2.6600e- 003	0.0975		364.4064	364.4064	0.0107		364.6748

## **Mitigated Construction On-Site**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	lay							lb/d	day		
Archit. Coating	24.6845					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.0545	1.0598	1.8324	2.9700e- 003		3.9600e- 003	3.9600e- 003		3.9600e- 003	3.9600e- 003	0.0000	281.4481	281.4481	0.0193		281.9309
Total	24.7390	1.0598	1.8324	2.9700e- 003	-	3.9600e- 003	3.9600e- 003		3.9600e- 003	3.9600e- 003	0.0000	281.4481	281.4481	0.0193		281.9309

## **Mitigated Construction Off-Site**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	lay							lb/d	lay		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1372	0.0943	1.2889	3.6600e- 003	0.3297	2.8900e- 003	0.3326	0.0880	2.6600e- 003	0.0907		364.4064	364.4064	0.0107		364.6748
Total	0.1372	0.0943	1.2889	3.6600e- 003	0.3297	2.8900e- 003	0.3326	0.0880	2.6600e- 003	0.0907		364.4064	364.4064	0.0107		364.6748

# 4.0 Operational Detail - Mobile

## **4.1 Mitigation Measures Mobile**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	lay							lb/c	lay		
Mitigated	10.6697	12.9314	78.1482	0.1940	18.4317	0.1506	18.5823	4.9155	0.1401	5.0556		20,187.59 78	20,187.597 8	1.4609		20,224.11 94
Unmitigated	10.6697	12.9314	78.1482	0.1940	18.4317	0.1506	18.5823	4.9155	0.1401	5.0556		20,187.59 78	20,187.597 8	1.4609		20,224.11 94

## **4.2 Trip Summary Information**

	Aver	age Daily Trip F	Rate	Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Mid Rise	690.00	623.76	518.88	2,241,964	2,241,964
Fast Food Restaurant w/o Drive Thru	579.92	586.26	776.14	1,102,667	1,102,667
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Supermarket	2,259.52	3,758.43	3522.45	3,501,966	3,501,966
Unenclosed Parking with Elevator	0.00	0.00	0.00		
Total	3,529.44	4,968.45	4,817.47	6,846,597	6,846,597

## **4.3 Trip Type Information**

		Miles			Trip %			Trip Purpos	e %
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
Apartments Mid Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
Fast Food Restaurant w/o Drive	16.60	8.40	6.90	1.50	79.50	19.00	51	37	12
Other Non-Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Supermarket	16.60	8.40	6.90	6.50	74.50	19.00	34	30	36
Unenclosed Parking with	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0

#### 4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Mid Rise	0.577488	0.047363	0.217190	0.126235	0.016240	0.000946	0.003108	0.005000	0.000387	0.000324	0.005485	0.000105	0.000131
Fast Food Restaurant w/o Drive	0.545842	0.044768	0.205288	0.119317	0.015350	0.006227	0.020460	0.031333	0.002546	0.002133	0.005184	0.000692	0.000862
Other Non-Asphalt Surfaces	0.545842	0.044768	0.205288	0.119317	0.015350	0.006227	0.020460	0.031333	0.002546	0.002133	0.005184	0.000692	0.000862
Supermarket	0.545842	0.044768	0.205288	0.119317	0.015350	0.006227	0.020460	0.031333	0.002546	0.002133	0.005184	0.000692	0.000862
Unenclosed Parking with Elevator	0.545842	0.044768	0.205288	0.119317	0.015350	0.006227	0.020460	0.031333	0.002546	0.002133	0.005184	0.000692	0.000862

# 5.0 Energy Detail

Historical Energy Use: N

## **5.1 Mitigation Measures Energy**

Exceed Title 24

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category												lb/d	lay			
NaturalGas Mitigated	0.0719	0.6286	0.3650	3.9200e- 003		0.0497	0.0497		0.0497	0.0497		784.4908	784.4908	0.0150	0.0144	789.1526
NaturalGas Unmitigated	0.0833	0.7271	0.4173	4.5400e- 003		0.0575	0.0575		0.0575	0.0575		908.2358	908.2358	0.0174	0.0167	913.6330

## 5.2 Energy by Land Use - NaturalGas

## **Unmitigated**

	NaturalGa s Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr					lb/d	day							lb/d	day		
Apartments Mid Rise	5064.85	0.0546	0.4668	0.1986	2.9800e- 003		0.0377	0.0377		0.0377	0.0377		595.8651	595.8651	0.0114	0.0109	599.4060
Fast Food Restaurant w/o	1264.44	0.0136	0.1240	0.1041	7.4000e- 004		9.4200e- 003	9.4200e- 003		9.4200e- 003	9.4200e- 003		148.7575	148.7575	2.8500e- 003	2.7300e- 003	149.6414
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Supermarket	1390.71	0.0150	0.1363	0.1145	8.2000e- 004		0.0104	0.0104		0.0104	0.0104		163.6132	163.6132	3.1400e- 003	3.0000e- 003	164.5855
Unenclosed Parking with	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0833	0.7271	0.4173	4.5400e- 003		0.0575	0.0575		0.0575	0.0575		908.2358	908.2358	0.0174	0.0167	913.6330

#### **Mitigated**

	NaturalGa s Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr		lb/day											lb/d	day		
Apartments Mid Rise	4.2695	0.0460	0.3935	0.1674	2.5100e- 003		0.0318	0.0318		0.0318	0.0318		502.2942	502.2942	9.6300e- 003	9.2100e- 003	505.2790
Fast Food Restaurant w/o	1.19379	0.0129	0.1170	0.0983	7.0000e- 004		8.8900e- 003	8.8900e- 003		8.8900e- 003	8.8900e- 003		140.4455	140.4455	2.6900e- 003	2.5700e- 003	141.2800
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Supermarket	1.20488	0.0130	0.1181	0.0992	7.1000e- 004		8.9800e- 003	8.9800e- 003		8.9800e- 003	8.9800e- 003		141.7512	141.7512	2.7200e- 003	2.6000e- 003	142.5935
Unenclosed Parking with	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0719	0.6286	0.3650	3.9200e- 003		0.0497	0.0497		0.0497	0.0497		784.4908	784.4908	0.0150	0.0144	789.1526

## 6.0 Area Detail

## **6.1 Mitigation Measures Area**

	ROG	NOx	СО	SO2	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	gory Ib/day										lb/d	ay				
Mitigated	4.0507	0.1314	11.4031	6.0000e- 004		0.0631	0.0631		0.0631	0.0631	0.0000	20.5331	20.5331	0.0198	0.0000	21.0281
Unmitigated	4.0507	0.1314	11.4031	6.0000e- 004		0.0631	0.0631		0.0631	0.0631	0.0000	20.5331	20.5331	0.0198	0.0000	21.0281

## 6.2 Area by SubCategory

## **Unmitigated**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/d	lay				
Architectural Coating	0.0676					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	3.6386					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.3445	0.1314	11.4031	6.0000e- 004		0.0631	0.0631		0.0631	0.0631		20.5331	20.5331	0.0198		21.0281
Total	4.0507	0.1314	11.4031	6.0000e- 004		0.0631	0.0631		0.0631	0.0631	0.0000	20.5331	20.5331	0.0198	0.0000	21.0281

## **Mitigated**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory		lb/day										lb/d	lay			
Architectural Coating	0.0676					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	3.6386	D				0.0000	0.0000		0.0000	0.0000			0.0000	D.	D	0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	D	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.3445	0.1314	11.4031	6.0000e- 004		0.0631	0.0631	D	0.0631	0.0631		20.5331	20.5331	0.0198	D	21.0281
Total	4.0507	0.1314	11.4031	6.0000e- 004		0.0631	0.0631		0.0631	0.0631	0.0000	20.5331	20.5331	0.0198	0.0000	21.0281

#### 7.0 Water Detail

## 7.1 Mitigation Measures Water

Install Low Flow Bathroom Faucet

Install Low Flow Kitchen Faucet

Install Low Flow Toilet

Install Low Flow Shower

Use Water Efficient Irrigation System

#### 8.0 Waste Detail

## 8.1 Mitigation Measures Waste

## 9.0 Operational Offroad

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

## 10.0 Stationary Equipment

## **Fire Pumps and Emergency Generators**

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

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

### **User Defined Equipment**

Equipment Type	Number
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## 11.0 Vegetation

CalEEMod Version: CalEEMod.2016.3.2

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Proposed Project - Los Angeles-South Coast County, Winter

# Proposed Project Los Angeles-South Coast County, Winter

#### 1.0 Project Characteristics

#### 1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Non-Asphalt Surfaces	25.40	1000sqft	0.58	25,398.00	0
Unenclosed Parking with Elevator	99.92	1000sqft	0.43	99,915.00	0
Fast Food Restaurant w/o Drive Thru	2.00	1000sqft	0.05	2,000.00	0
Apartments Mid Rise	138.00	Dwelling Unit	0.00	156,525.00	395
Supermarket	23.00	1000sqft	0.53	23,000.00	0

## 1.2 Other Project Characteristics

UrbanizationUrbanWind Speed (m/s)2.2Precipitation Freq (Days)33Climate Zone9Operational Year2023

**Utility Company** Southern California Edison

 CO2 Intensity
 531.44
 CH4 Intensity
 0.029
 N20 Intensity
 0.006

 (Ib/MWhr)
 (Ib/MWhr)
 (Ib/MWhr)

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

Project Characteristics - See assumptions file

Land Use - See assumptions file.

Off-road Equipment -

Trips and VMT - See assumptions file.

Demolition -

Architectural Coating - See assumptions file.

Woodstoves - No fireplaces or wood burning stoves.

Area Coating - See assumptions file.

Energy Use -

Water And Wastewater - Assumes 100% aerobic.

Construction Off-road Equipment Mitigation - Per Mid-Town Specific Plan Mitigation Measures AQ-1 and AQ-2

**Energy Mitigation -**

Water Mitigation -

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	ConstArea_Parking	7,519.00	5,995.00
tblArchitecturalCoating	EF_Nonresidential_Exterior	100.00	10.00
tblArchitecturalCoating	EF_Nonresidential_Interior	100.00	10.00
tblArchitecturalCoating	EF_Residential_Exterior	50.00	10.00
tblArchitecturalCoating	EF_Residential_Interior	50.00	10.00
tblAreaCoating	Area_EF_Nonresidential_Exterior	100	10
tblAreaCoating	Area_EF_Nonresidential_Interior	100	10
tblAreaCoating	Area_EF_Residential_Exterior	50	10
tblAreaCoating	Area_EF_Residential_Interior	50	10
tblAreaCoating	Area_Parking	7519	5995
tblConstDustMitigation	CleanPavedRoadPercentReduction	0	9

tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	7.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim

Italification	tblFireplaces	NumberGas	117.30	0.00
IbiFleetMix	tblFireplaces	NumberNoFireplace	13.80	138.00
Itilificativi	tblFireplaces	NumberWood	6.90	0.00
tbiFleetMix LDT1 0.04 0.05  tbiFleetMix LDT2 0.21 0.22  tbiFleetMix LHD1 0.02 0.02  tbiFleetMix LHD1 0.02 0.02  tbiFleetMix LHD2 6.2270e-003 9.4600e-004  tbiFleetMix MCY 5.1840e-003 5.4850e-003  tbiFleetMix MOV 0.12 0.13  tbiFleetMix MH 8.6200e-004 1.3100e-004  tbiFleetMix MHD 0.02 3.1080e-003  tbiFleetMix MHD 0.02 3.1080e-003  tbiFleetMix OBUS 2.5460e-003 3.8700e-004  tbiFleetMix SBUS 6.9200e-004 1.0500e-004  tbiFleetMix UBUS 2.1330e-003 3.2400e-004  tbiLandUse LandUseSquareFeet 2.5400.00 2.5398.00  tbiLandUse LandUseSquareFeet 99,920.00 99,915.00  tbiLandUse LandUseSquareFeet 18,000.00 156,525.00  tbiLandUse LotAcreage 2.29 0.43  tbiLandUse LotAcreage 3.63 0.00  tbiProjectCharacteristics CO2IntensityFactor 702.44 531.44  tbiTripsAndVMT VendorTripNumber 0.00 4.00  tbiTripsAndVMT VendorTripNumber 0.00 4.00  tbiTripsAndVMT VendorTripNumber 0.00 4.00  tbiTripsAndVMT VendorTripNumber 0.00 4.00  tbiVehicleEF HHD 0.48 0.03	tblFleetMix	HHD	0.03	5.0000e-003
DiFleetMix	tblFleetMix	LDA	0.55	0.58
Italian	tblFleetMix	LDT1	0.04	0.05
The property in the property is a second of the property in the property is a second of the property in the property is a second of the property in the property is a second of the property in the property is a second of the property in the property is a second of the property is	tblFleetMix	LDT2	0.21	0.22
InterestMix	tblFleetMix	LHD1	0.02	0.02
tblFleetMix         MDV         0.12         0.13           tblFleetMix         MH         8.6200e-004         1.3100e-004           tblFleetMix         MHD         0.02         3.1080e-003           tblFleetMix         OBUS         2.5460e-003         3.8700e-004           tblFleetMix         SBUS         6.9200e-004         1.0500e-004           tblFleetMix         UBUS         2.1330e-003         3.2400e-004           tblLandUse         LandUseSquareFeet         25,400.00         25,398.00           tblLandUse         LandUseSquareFeet         99,920.00         99,915.00           tblLandUse         LandUseSquareFeet         138,000.00         156,525.00           tblLandUse         LotAcreage         2.29         0.43           tblLandUse         LotAcreage         3.63         0.00           tblProjectCharacteristics         CO2IntensityFactor         702.44         531.44           tblTripsAndVMT         VendorTripNumber         0.00         4.00           tblTripsAndVMT         VendorTripNumber         0.00         4.00           tblVehicleEF         HHD         0.48         0.03	tblFleetMix	LHD2	6.2270e-003	9.4600e-004
tblFleetMix         MH         8.6200e-004         1.3100e-004           tblFleetMix         MHD         0.02         3.1080e-003           tblFleetMix         OBUS         2.5460e-003         3.8700e-004           tblFleetMix         SBUS         6.9200e-004         1.0500e-004           tblFleetMix         UBUS         2.1330e-003         3.2400e-004           tblLandUse         LandUseSquareFeet         25,400.00         25,398.00           tblLandUse         LandUseSquareFeet         99,920.00         99,915.00           tblLandUse         LandUseSquareFeet         138,000.00         156,525.00           tblLandUse         LotAcreage         2.29         0.43           tblLandUse         LotAcreage         3.63         0.00           tblProjectCharacteristics         CO2IntensityFactor         702.44         531.44           tblTripsAndVMT         VendorTripNumber         0.00         4.00           tblTripsAndVMT         VendorTripNumber         0.00         4.00           tblTripsAndVMT         VendorTripNumber         0.00         4.00           tblVehicleEF         HHD         0.48         0.03	tblFleetMix	MCY	5.1840e-003	5.4850e-003
tbiFleetMix         MHD         0.02         3.1080e-003           tbiFleetMix         OBUS         2.5460e-003         3.8700e-004           tbiFleetMix         SBUS         6.9200e-004         1.0500e-004           tbiFleetMix         UBUS         2.1330e-003         3.2400e-004           tbiLandUse         LandUseSquareFeet         25,400.00         25,398.00           tbiLandUse         LandUseSquareFeet         99,920.00         99,915.00           tbiLandUse         LandUseSquareFeet         138,000.00         156,525.00           tbiLandUse         LotAcreage         2.29         0.43           tbiProjectCharacteristics         CO2IntensityFactor         702.44         531.44           tblTripsAndVMT         VendorTripNumber         0.00         4.00           tblTripsAndVMT         VendorTripNumber         0.00         4.00           tblTripsAndVMT         VendorTripNumber         0.00         4.00           tblTripsAndVMT         VendorTripNumber         0.00         4.00           tblVehicleEF         HHD         0.48         0.03	tblFleetMix	MDV	0.12	0.13
tblFleetMix         OBUS         2.5460e-003         3.8700e-004           tblFleetMix         SBUS         6.9200e-004         1.0500e-004           tblFleetMix         UBUS         2.1330e-003         3.2400e-004           tblLandUse         LandUseSquareFeet         25,400.00         25,398.00           tblLandUse         LandUseSquareFeet         99,920.00         99,915.00           tblLandUse         LandUseSquareFeet         138,000.00         156,525.00           tblLandUse         LotAcreage         2.29         0.43           tblLandUse         LotAcreage         3.63         0.00           tblProjectCharacteristics         CO2IntensityFactor         702.44         531.44           tblTripsAndVMT         VendorTripNumber         0.00         4.00           tblTripsAndVMT         VendorTripNumber         0.00         4.00           tblTripsAndVMT         VendorTripNumber         0.00         4.00           tblVehicleEF         HHD         0.48         0.03	tblFleetMix	MH	8.6200e-004	1.3100e-004
tblFleetMix         SBUS         6.9200e-004         1.0500e-004           tblFleetMix         UBUS         2.1330e-003         3.2400e-004           tblLandUse         LandUseSquareFeet         25,400.00         25,398.00           tblLandUse         LandUseSquareFeet         99,920.00         99,915.00           tblLandUse         LandUseSquareFeet         138,000.00         156,525.00           tblLandUse         LotAcreage         2.29         0.43           tblLandUse         LotAcreage         3.63         0.00           tblProjectCharacteristics         CO2IntensityFactor         702.44         531.44           tblTripsAndVMT         VendorTripNumber         0.00         4.00           tblTripsAndVMT         VendorTripNumber         0.00         4.00           tblTripsAndVMT         VendorTripNumber         0.00         4.00           tblYehicleEF         HHD         0.48         0.03	tblFleetMix	MHD	0.02	3.1080e-003
tblFleetMix         UBUS         2.1330e-003         3.2400e-004           tblLandUse         LandUseSquareFeet         25,400.00         25,398.00           tblLandUse         LandUseSquareFeet         99,920.00         99,915.00           tblLandUse         LandUseSquareFeet         138,000.00         156,525.00           tblLandUse         LotAcreage         2.29         0.43           tblProjectCharacteristics         CO2IntensityFactor         702.44         531.44           tblTripsAndVMT         VendorTripNumber         0.00         4.00           tblTripsAndVMT         VendorTripNumber         0.00         4.00           tblTripsAndVMT         VendorTripNumber         0.00         4.00           tblVehicleEF         HHD         0.48         0.03	tblFleetMix	OBUS	2.5460e-003	3.8700e-004
tblLandUse         LandUseSquareFeet         25,400.00         25,398.00           tblLandUse         LandUseSquareFeet         99,920.00         99,915.00           tblLandUse         LandUseSquareFeet         138,000.00         156,525.00           tblLandUse         LotAcreage         2.29         0.43           tblProjectCharacteristics         CO2IntensityFactor         702.44         531.44           tblTripsAndVMT         VendorTripNumber         0.00         4.00           tblTripsAndVMT         VendorTripNumber         0.00         4.00           tblTripsAndVMT         VendorTripNumber         0.00         4.00           tblVehicleEF         HHD         0.48         0.03	tblFleetMix	SBUS	6.9200e-004	1.0500e-004
tblLandUse         LandUseSquareFeet         99,920.00         99,915.00           tblLandUse         LandUseSquareFeet         138,000.00         156,525.00           tblLandUse         LotAcreage         2.29         0.43           tblLandUse         LotAcreage         3.63         0.00           tblProjectCharacteristics         CO2IntensityFactor         702.44         531.44           tblTripsAndVMT         VendorTripNumber         0.00         4.00           tblTripsAndVMT         VendorTripNumber         0.00         4.00           tblTripsAndVMT         VendorTripNumber         0.00         4.00           tblVehicleEF         HHD         0.48         0.03	tblFleetMix	UBUS	2.1330e-003	3.2400e-004
tblLandUse         LandUseSquareFeet         138,000.00         156,525.00           tblLandUse         LotAcreage         2.29         0.43           tblLandUse         LotAcreage         3.63         0.00           tblProjectCharacteristics         CO2IntensityFactor         702.44         531.44           tblTripsAndVMT         VendorTripNumber         0.00         4.00           tblTripsAndVMT         VendorTripNumber         0.00         4.00           tblVehicleEF         HHD         0.48         0.03	tblLandUse	LandUseSquareFeet	25,400.00	25,398.00
tblLandUse         LotAcreage         2.29         0.43           tblLandUse         LotAcreage         3.63         0.00           tblProjectCharacteristics         CO2IntensityFactor         702.44         531.44           tblTripsAndVMT         VendorTripNumber         0.00         4.00           tblTripsAndVMT         VendorTripNumber         0.00         4.00           tblTripsAndVMT         VendorTripNumber         0.00         4.00           tblVehicleEF         HHD         0.48         0.03	tblLandUse	LandUseSquareFeet	99,920.00	99,915.00
tblLandUse         LotAcreage         3.63         0.00           tblProjectCharacteristics         CO2IntensityFactor         702.44         531.44           tblTripsAndVMT         VendorTripNumber         0.00         4.00           tblTripsAndVMT         VendorTripNumber         0.00         4.00           tblTripsAndVMT         VendorTripNumber         0.00         4.00           tblVehicleEF         HHD         0.48         0.03	tblLandUse	LandUseSquareFeet	138,000.00	156,525.00
tblProjectCharacteristics         CO2IntensityFactor         702.44         531.44           tblTripsAndVMT         VendorTripNumber         0.00         4.00           tblTripsAndVMT         VendorTripNumber         0.00         4.00           tblTripsAndVMT         VendorTripNumber         0.00         4.00           tblVehicleEF         HHD         0.48         0.03	tblLandUse	LotAcreage	2.29	0.43
tblTripsAndVMT         VendorTripNumber         0.00         4.00           tblTripsAndVMT         VendorTripNumber         0.00         4.00           tblTripsAndVMT         VendorTripNumber         0.00         4.00           tblVehicleEF         HHD         0.48         0.03	tblLandUse	LotAcreage	3.63	0.00
tblTripsAndVMT         VendorTripNumber         0.00         4.00           tblTripsAndVMT         VendorTripNumber         0.00         4.00           tblVehicleEF         HHD         0.48         0.03	tblProjectCharacteristics	CO2IntensityFactor	702.44	531.44
tblTripsAndVMT         VendorTripNumber         0.00         4.00           tblVehicleEF         HHD         0.48         0.03	tblTripsAndVMT	VendorTripNumber	0.00	4.00
tblVehicleEF HHD 0.48 0.03	tblTripsAndVMT	VendorTripNumber	0.00	4.00
	tblTripsAndVMT	VendorTripNumber	0.00	4.00
tblVehicleEF HHD 0.09 0.08	tblVehicleEF	HHD	0.48	0.03
	tblVehicleEF	HHD	0.09	0.08

tblVehicleEF	HHD	0.07	1.0000e-006
tblVehicleEF	HHD	1.63	6.71
tblVehicleEF	HHD	1.06	0.46
tblVehicleEF	HHD	3.33	9.5440e-003
tblVehicleEF	HHD	4,465.78	1,125.75
tblVehicleEF	HHD	1,572.96	1,398.54
tblVehicleEF	HHD	10.75	0.08
tblVehicleEF	HHD	14.30	5.75
tblVehicleEF	HHD	2.12	2.71
tblVehicleEF	HHD	19.50	2.35
tblVehicleEF	HHD	0.01	3.1920e-003
tblVehicleEF	HHD	0.06	0.06
tblVehicleEF	HHD	0.04	0.04
tblVehicleEF	HHD	6.2960e-003	0.02
tblVehicleEF	HHD	9.1000e-005	1.0000e-006
tblVehicleEF	HHD	9.6000e-003	3.0540e-003
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	8.8400e-003	8.8980e-003
tblVehicleEF	HHD	6.0240e-003	0.02
tblVehicleEF	HHD	8.3000e-005	1.0000e-006
tblVehicleEF	HHD	1.0300e-004	6.0000e-006
tblVehicleEF	HHD	4.5010e-003	2.2900e-004
tblVehicleEF	HHD	0.41	0.45
tblVehicleEF	HHD	7.8000e-005	4.0000e-006
tblVehicleEF	HHD	0.09	0.02
tblVehicleEF	HHD	3.7200e-004	1.1920e-003
tblVehicleEF	HHD	0.08	3.0000e-006

tblVehicleEF	HHD	0.04	0.01
tblVehicleEF	HHD	0.01	0.01
tblVehicleEF	HHD	1.6200e-004	1.0000e-006
tblVehicleEF	HHD	1.0300e-004	6.000e-006
tblVehicleEF	HHD	4.5010e-003	2.2900e-004
tblVehicleEF	HHD	0.49	0.52
tblVehicleEF	HHD	7.8000e-005	4.0000e-006
tblVehicleEF	HHD	0.20	0.11
tblVehicleEF	HHD	3.7200e-004	1.1920e-003
tblVehicleEF	HHD	0.08	3.000e-006
tblVehicleEF	HHD	0.45	0.03
tblVehicleEF	HHD	0.09	0.08
tblVehicleEF	HHD	0.07	1.0000e-006
tblVehicleEF	HHD	1.19	6.61
tblVehicleEF	HHD	1.07	0.46
tblVehicleEF	HHD	3.16	9.0650e-003
tblVehicleEF	HHD	4,731.10	1,113.07
tblVehicleEF	HHD	1,572.96	1,398.54
tblVehicleEF	HHD	10.75	0.08
tblVehicleEF	HHD	14.76	5.50
tblVehicleEF	HHD	2.01	2.56
tblVehicleEF	HHD	19.49	2.35
tblVehicleEF	HHD	8.4600e-003	2.7790e-003
tblVehicleEF	HHD	0.06	0.06
tblVehicleEF	HHD	0.04	0.04
tblVehicleEF	HHD	6.2960e-003	0.02
tblVehicleEF	HHD	9.1000e-005	1.0000e-006

tblVehicleEF	HHD	8.0940e-003	2.6590e-003
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	8.8400e-003	8.8980e-003
tblVehicleEF	HHD	6.0240e-003	0.02
tblVehicleEF	HHD	8.3000e-005	1.0000e-006
tblVehicleEF	HHD	1.5600e-004	9.0000e-006
tblVehicleEF	HHD	4.6140e-003	2.3400e-004
tblVehicleEF	HHD	0.39	0.48
tblVehicleEF	HHD	1.1200e-004	6.0000e-006
tblVehicleEF	HHD	0.09	0.02
tblVehicleEF	HHD	3.6000e-004	1.1730e-003
tblVehicleEF	HHD	0.07	3.0000e-006
tblVehicleEF	HHD	0.04	0.01
tblVehicleEF	HHD	0.01	0.01
tblVehicleEF	HHD	1.5900e-004	1.0000e-006
tblVehicleEF	HHD	1.5600e-004	9.0000e-006
tblVehicleEF	HHD	4.6140e-003	2.3400e-004
tblVehicleEF	HHD	0.46	0.55
tblVehicleEF	HHD	1.1200e-004	6.0000e-006
tblVehicleEF	HHD	0.20	0.11
tblVehicleEF	HHD	3.6000e-004	1.1730e-003
tblVehicleEF	HHD	0.08	3.0000e-006
tblVehicleEF	HHD	0.52	0.02
tblVehicleEF	HHD	0.09	9.8200e-004
tblVehicleEF	HHD	0.07	1.0000e-006
tblVehicleEF	HHD	2.25	6.74
tblVehicleEF	HHD	1.06	0.24

tblVehicleEF	HHD	3.36	9.6390e-003
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tblVehicleEF	HHD	10.75	0.09
tblVehicleEF	HHD	13.67	5.98
tblVehicleEF	HHD	2.09	2.62
tblVehicleEF	HHD	19.50	2.35
tblVehicleEF	HHD	0.01	3.5320e-003
tblVehicleEF	HHD	0.06	0.06
tblVehicleEF	HHD	0.04	0.04
tblVehicleEF	HHD	6.2960e-003	0.02
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tblVehicleEF	HHD	8.8400e-003	8.7530e-003
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tblVehicleEF	HHD	8.3000e-005	1.0000e-006
tblVehicleEF	HHD	1.0000e-004	6.0000e-006
tblVehicleEF	HHD	4.7840e-003	2.5900e-004
tblVehicleEF	HHD	0.45	0.42
tblVehicleEF	HHD	7.6000e-005	4.0000e-006
tblVehicleEF	HHD	0.09	0.02
tblVehicleEF	HHD	4.0500e-004	1.2680e-003
tblVehicleEF	HHD	0.08	3.0000e-006
tblVehicleEF	HHD	0.04	0.01
tblVehicleEF	HHD	0.01	0.01
tblVehicleEF	HHD	1.6300e-004	1.0000e-006

tblVehicleEF	HHD	1.0000e-004	6.0000e-006
tblVehicleEF	HHD	4.7840e-003	2.5900e-004
tblVehicleEF	HHD	0.53	0.47
tblVehicleEF	HHD	7.6000e-005	4.0000e-006
tblVehicleEF	HHD	0.20	0.02
tblVehicleEF	HHD	4.0500e-004	1.2680e-003
tblVehicleEF	HHD	0.08	3.0000e-006
tblVehicleEF	LDA	4.8310e-003	2.6490e-003
tblVehicleEF	LDA	4.7360e-003	0.05
tblVehicleEF	LDA	0.61	0.67
tblVehicleEF	LDA	1.04	2.04
tblVehicleEF	LDA	263.16	265.54
tblVehicleEF	LDA	54.94	52.30
tblVehicleEF	LDA	0.05	0.04
tblVehicleEF	LDA	0.06	0.17
tblVehicleEF	LDA	2.1170e-003	1.7100e-003
tblVehicleEF	LDA	2.2400e-003	1.7590e-003
tblVehicleEF	LDA	1.9520e-003	1.5750e-003
tblVehicleEF	LDA	2.0590e-003	1.6170e-003
tblVehicleEF	LDA	0.04	0.05
tblVehicleEF	LDA	0.10	0.09
tblVehicleEF	LDA	0.03	0.05
tblVehicleEF	LDA	0.01	0.01
tblVehicleEF	LDA	0.04	0.20
tblVehicleEF	LDA	0.06	0.20
tblVehicleEF	LDA	2.6360e-003	2.5940e-003
tblVehicleEF	LDA	5.6700e-004	5.1100e-004

tblVehicleEF	LDA	0.04	0.05
tblVehicleEF	LDA	0.10	0.09
tblVehicleEF	LDA	0.03	0.05
tblVehicleEF	LDA	0.02	0.01
tblVehicleEF	LDA	0.04	0.20
tblVehicleEF	LDA	0.07	0.22
tblVehicleEF	LDA	5.1340e-003	2.8290e-003
tblVehicleEF	LDA	4.2110e-003	0.04
tblVehicleEF	LDA	0.67	0.73
tblVehicleEF	LDA	0.89	1.74
tblVehicleEF	LDA	275.40	277.14
tblVehicleEF	LDA	54.94	51.75
tblVehicleEF	LDA	0.04	0.03
tblVehicleEF	LDA	0.06	0.16
tblVehicleEF	LDA	2.1170e-003	1.7100e-003
tblVehicleEF	LDA	2.2400e-003	1.7590e-003
tblVehicleEF	LDA	1.9520e-003	1.5750e-003
tblVehicleEF	LDA	2.0590e-003	1.6170e-003
tblVehicleEF	LDA	0.06	0.07
tblVehicleEF	LDA	0.10	0.10
tblVehicleEF	LDA	0.05	0.06
tblVehicleEF	LDA	0.01	0.01
tblVehicleEF	LDA	0.04	0.19
tblVehicleEF	LDA	0.06	0.18
tblVehicleEF	LDA	2.7590e-003	2.7080e-003
tblVehicleEF	LDA	5.6400e-004	5.0600e-004
tblVehicleEF	LDA	0.06	0.07

tblVehicleEF	LDA	0.10	0.10
tblVehicleEF	LDA	0.05	0.06
tblVehicleEF	LDA	0.02	0.02
tblVehicleEF	LDA	0.04	0.19
tblVehicleEF	LDA	0.06	0.20
tblVehicleEF	LDA	4.7330e-003	2.5920e-003
tblVehicleEF	LDA	4.8460e-003	0.05
tblVehicleEF	LDA	0.59	0.64
tblVehicleEF	LDA	1.08	2.10
tblVehicleEF	LDA	258.68	261.25
tblVehicleEF	LDA	54.94	52.42
tblVehicleEF	LDA	0.05	0.03
tblVehicleEF	LDA	0.06	0.17
tblVehicleEF	LDA	2.1170e-003	1.7100e-003
tblVehicleEF	LDA	2.2400e-003	1.7590e-003
tblVehicleEF	LDA	1.9520e-003	1.5750e-003
tblVehicleEF	LDA	2.0590e-003	1.6170e-003
tblVehicleEF	LDA	0.04	0.05
tblVehicleEF	LDA	0.10	0.10
tblVehicleEF	LDA	0.03	0.04
tblVehicleEF	LDA	0.01	0.01
tblVehicleEF	LDA	0.04	0.23
tblVehicleEF	LDA	0.07	0.21
tblVehicleEF	LDA	2.5910e-003	2.5520e-003
tblVehicleEF	LDA	5.6700e-004	5.1200e-004
tblVehicleEF	LDA	0.04	0.05
tblVehicleEF	LDA	0.10	0.10

tblVehicleEF	LDA	0.03	0.04
tblVehicleEF	LDA	0.02	0.01
tblVehicleEF	LDA	0.04	0.23
tblVehicleEF	LDA	0.07	0.23
tblVehicleEF	LDT1	0.01	6.7160e-003
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tblVehicleEF	LDT1	1.52	1.30
tblVehicleEF	LDT1	2.49	2.19
tblVehicleEF	LDT1	330.49	313.30
tblVehicleEF	LDT1	67.47	62.20
tblVehicleEF	LDT1	0.14	0.10
tblVehicleEF	LDT1	0.14	0.24
tblVehicleEF	LDT1	3.3520e-003	2.5020e-003
tblVehicleEF	LDT1	3.2790e-003	2.4470e-003
tblVehicleEF	LDT1	3.0870e-003	2.3020e-003
tblVehicleEF	LDT1	3.0150e-003	2.2500e-003
tblVehicleEF	LDT1	0.12	0.12
tblVehicleEF	LDT1	0.25	0.18
tblVehicleEF	LDT1	0.10	0.10
tblVehicleEF	LDT1	0.03	0.03
tblVehicleEF	LDT1	0.16	0.64
tblVehicleEF	LDT1	0.17	0.32
tblVehicleEF	LDT1	3.3240e-003	3.0620e-003
tblVehicleEF	LDT1	7.1800e-004	6.0800e-004
tblVehicleEF	LDT1	0.12	0.12
tblVehicleEF	LDT1	0.25	0.18
tblVehicleEF	LDT1	0.10	0.10

tblVehicleEF	LDT1	0.05	0.04
tblVehicleEF	LDT1	0.16	0.64
tblVehicleEF	LDT1	0.18	0.35
tblVehicleEF	LDT1	0.01	7.1130e-003
tblVehicleEF	LDT1	0.01	0.06
tblVehicleEF	LDT1	1.65	1.41
tblVehicleEF	LDT1	2.11	1.86
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tblVehicleEF	LDT1	0.12	0.09
tblVehicleEF	LDT1	0.13	0.22
tblVehicleEF	LDT1	3.3520e-003	2.5020e-003
tblVehicleEF	LDT1	3.2790e-003	2.4470e-003
tblVehicleEF	LDT1	3.0870e-003	2.3020e-003
tblVehicleEF	LDT1	3.0150e-003	2.2500e-003
tblVehicleEF	LDT1	0.19	0.18
tblVehicleEF	LDT1	0.26	0.19
tblVehicleEF	LDT1	0.14	0.14
tblVehicleEF	LDT1	0.04	0.03
tblVehicleEF	LDT1	0.15	0.59
tblVehicleEF	LDT1	0.15	0.28
tblVehicleEF	LDT1	3.4700e-003	3.1770e-003
tblVehicleEF	LDT1	7.1200e-004	6.0200e-004
tblVehicleEF	LDT1	0.19	0.18
tblVehicleEF	LDT1	0.26	0.19
tblVehicleEF	LDT1	0.14	0.14
tblVehicleEF	LDT1	0.05	0.05

tblVehicleEF	LDT1	0.15	0.59
tblVehicleEF	LDT1	0.16	0.31
tblVehicleEF	LDT1	0.01	6.5900e-003
tblVehicleEF	LDT1	0.01	0.07
tblVehicleEF	LDT1	1.47	1.26
tblVehicleEF	LDT1	2.57	2.26
tblVehicleEF	LDT1	325.20	308.93
tblVehicleEF	LDT1	67.47	62.34
tblVehicleEF	LDT1	0.14	0.10
tblVehicleEF	LDT1	0.15	0.24
tblVehicleEF	LDT1	3.3520e-003	2.5020e-003
tblVehicleEF	LDT1	3.2790e-003	2.4470e-003
tblVehicleEF	LDT1	3.0870e-003	2.3020e-003
tblVehicleEF	LDT1	3.0150e-003	2.2500e-003
tblVehicleEF	LDT1	0.12	0.12
tblVehicleEF	LDT1	0.28	0.20
tblVehicleEF	LDT1	0.10	0.10
tblVehicleEF	LDT1	0.03	0.03
tblVehicleEF	LDT1	0.19	0.76
tblVehicleEF	LDT1	0.17	0.33
tblVehicleEF	LDT1	3.2700e-003	3.0190e-003
tblVehicleEF	LDT1	7.1900e-004	6.0900e-004
tblVehicleEF	LDT1	0.12	0.12
tblVehicleEF	LDT1	0.28	0.20
tblVehicleEF	LDT1	0.10	0.10
tblVehicleEF	LDT1	0.05	0.04
tblVehicleEF	LDT1	0.19	0.76

tblVehicleEF	LDT1	0.19	0.36
tblVehicleEF	LDT2	6.6130e-003	4.4260e-003
tblVehicleEF	LDT2	5.6850e-003	0.06
tblVehicleEF	LDT2	0.79	0.94
tblVehicleEF	LDT2	1.23	2.55
tblVehicleEF	LDT2	368.32	332.67
tblVehicleEF	LDT2	75.43	66.53
tblVehicleEF	LDT2	0.07	0.07
tblVehicleEF	LDT2	0.09	0.25
tblVehicleEF	LDT2	2.1490e-003	1.8230e-003
tblVehicleEF	LDT2	2.3760e-003	1.8150e-003
tblVehicleEF	LDT2	1.9770e-003	1.6780e-003
tblVehicleEF	LDT2	2.1840e-003	1.6690e-003
tblVehicleEF	LDT2	0.04	0.07
tblVehicleEF	LDT2	0.09	0.12
tblVehicleEF	LDT2	0.04	0.07
tblVehicleEF	LDT2	0.02	0.02
tblVehicleEF	LDT2	0.06	0.39
tblVehicleEF	LDT2	0.08	0.29
tblVehicleEF	LDT2	3.6890e-003	3.2500e-003
tblVehicleEF	LDT2	7.7500e-004	6.5000e-004
tblVehicleEF	LDT2	0.04	0.07
tblVehicleEF	LDT2	0.09	0.12
tblVehicleEF	LDT2	0.04	0.07
tblVehicleEF	LDT2	0.02	0.03
tblVehicleEF	LDT2	0.06	0.39
tblVehicleEF	LDT2	0.08	0.31

tblVehicleEF	LDT2	7.0150e-003	4.7110e-003
tblVehicleEF	LDT2	5.0630e-003	0.06
tblVehicleEF	LDT2	0.87	1.03
tblVehicleEF	LDT2	1.06	2.18
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tblVehicleEF	LDT2	0.06	0.07
tblVehicleEF	LDT2	0.09	0.24
tblVehicleEF	LDT2	2.1490e-003	1.8230e-003
tblVehicleEF	LDT2	2.3760e-003	1.8150e-003
tblVehicleEF	LDT2	1.9770e-003	1.6780e-003
tblVehicleEF	LDT2	2.1840e-003	1.6690e-003
tblVehicleEF	LDT2	0.07	0.11
tblVehicleEF	LDT2	0.10	0.12
tblVehicleEF	LDT2	0.06	0.10
tblVehicleEF	LDT2	0.02	0.02
tblVehicleEF	LDT2	0.06	0.36
tblVehicleEF	LDT2	0.07	0.26
tblVehicleEF	LDT2	3.8550e-003	3.3620e-003
tblVehicleEF	LDT2	7.7200e-004	6.4300e-004
tblVehicleEF	LDT2	0.07	0.11
tblVehicleEF	LDT2	0.10	0.12
tblVehicleEF	LDT2	0.06	0.10
tblVehicleEF	LDT2	0.03	0.03
tblVehicleEF	LDT2	0.06	0.36
tblVehicleEF	LDT2	0.07	0.28
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tblVehicleEF	LDT2	5.8190e-003	0.06
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tblVehicleEF	LDT2	0.07	0.07
tblVehicleEF	LDT2	0.09	0.26
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tblVehicleEF	LDT2	2.3760e-003	1.8150e-003
tblVehicleEF	LDT2	1.9770e-003	1.6780e-003
tblVehicleEF	LDT2	2.1840e-003	1.6690e-003
tblVehicleEF	LDT2	0.04	0.07
tblVehicleEF	LDT2	0.10	0.13
tblVehicleEF	LDT2	0.04	0.07
tblVehicleEF	LDT2	0.02	0.02
tblVehicleEF	LDT2	0.07	0.46
tblVehicleEF	LDT2	0.08	0.29
tblVehicleEF	LDT2	3.6280e-003	3.2090e-003
tblVehicleEF	LDT2	7.7500e-004	6.5200e-004
tblVehicleEF	LDT2	0.04	0.07
tblVehicleEF	LDT2	0.10	0.13
tblVehicleEF	LDT2	0.04	0.07
tblVehicleEF	LDT2	0.02	0.03
tblVehicleEF	LDT2	0.07	0.46
tblVehicleEF	LDT2	0.09	0.32
tblVehicleEF	LHD1	5.2860e-003	5.3650e-003
tblVehicleEF	LHD1	0.01	4.9910e-003

tblVehicleEF	LHD1	0.02	0.01
tblVehicleEF	LHD1	0.15	0.19
tblVehicleEF	LHD1	0.75	0.57
tblVehicleEF	LHD1	2.58	1.08
tblVehicleEF	LHD1	8.94	8.81
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tblVehicleEF	LHD1	0.86	0.55
tblVehicleEF	LHD1	0.95	0.32
tblVehicleEF	LHD1	8.3300e-004	7.8400e-004
tblVehicleEF	LHD1	0.01	9.7290e-003
tblVehicleEF	LHD1	8.8370e-003	5.9880e-003
tblVehicleEF	LHD1	9.4800e-004	2.6800e-004
tblVehicleEF	LHD1	7.9700e-004	7.5000e-004
tblVehicleEF	LHD1	2.5350e-003	2.4320e-003
tblVehicleEF	LHD1	8.4300e-003	5.7010e-003
tblVehicleEF	LHD1	8.7200e-004	2.4700e-004
tblVehicleEF	LHD1	2.9730e-003	2.3520e-003
tblVehicleEF	LHD1	0.10	0.07
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	1.8290e-003	1.4550e-003
tblVehicleEF	LHD1	0.06	0.04
tblVehicleEF	LHD1	0.30	0.51
tblVehicleEF	LHD1	0.24	0.07
tblVehicleEF	LHD1	9.0000e-005	8.6000e-005
tblVehicleEF	LHD1	5.8400e-003	6.3740e-003

tblVehicleEF	LHD1	3.7000e-004	1.1900e-004
tblVehicleEF	LHD1	2.9730e-003	2.3520e-003
tblVehicleEF	LHD1	0.10	0.07
tblVehicleEF	LHD1	0.02	0.03
tblVehicleEF	LHD1	1.8290e-003	1.4550e-003
tblVehicleEF	LHD1	0.07	0.06
tblVehicleEF	LHD1	0.30	0.51
tblVehicleEF	LHD1	0.27	0.08
tblVehicleEF	LHD1	5.2860e-003	5.3760e-003
tblVehicleEF	LHD1	0.01	5.0880e-003
tblVehicleEF	LHD1	0.02	0.01
tblVehicleEF	LHD1	0.15	0.19
tblVehicleEF	LHD1	0.76	0.58
tblVehicleEF	LHD1	2.46	1.03
tblVehicleEF	LHD1	8.94	8.81
tblVehicleEF	LHD1	595.21	653.00
tblVehicleEF	LHD1	32.17	11.97
tblVehicleEF	LHD1	0.07	0.05
tblVehicleEF	LHD1	0.81	0.52
tblVehicleEF	LHD1	0.91	0.30
tblVehicleEF	LHD1	8.3300e-004	7.8400e-004
tblVehicleEF	LHD1	0.01	9.7290e-003
tblVehicleEF	LHD1	8.8370e-003	5.9880e-003
tblVehicleEF	LHD1	9.4800e-004	2.6800e-004
tblVehicleEF	LHD1	7.9700e-004	7.5000e-004
tblVehicleEF	LHD1	2.5350e-003	2.4320e-003
tblVehicleEF	LHD1	8.4300e-003	5.7010e-003

tblVehicleEF	LHD1	8.7200e-004	2.4700e-004
tblVehicleEF	LHD1	4.4450e-003	3.4570e-003
tblVehicleEF	LHD1	0.10	0.08
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	2.5600e-003	2.0040e-003
tblVehicleEF	LHD1	0.06	0.05
tblVehicleEF	LHD1	0.29	0.50
tblVehicleEF	LHD1	0.23	0.07
tblVehicleEF	LHD1	9.0000e-005	8.6000e-005
tblVehicleEF	LHD1	5.8400e-003	6.3740e-003
tblVehicleEF	LHD1	3.6700e-004	1.1800e-004
tblVehicleEF	LHD1	4.4450e-003	3.4570e-003
tblVehicleEF	LHD1	0.10	0.08
tblVehicleEF	LHD1	0.02	0.03
tblVehicleEF	LHD1	2.5600e-003	2.0040e-003
tblVehicleEF	LHD1	0.08	0.06
tblVehicleEF	LHD1	0.29	0.50
tblVehicleEF	LHD1	0.26	0.08
tblVehicleEF	LHD1	5.2860e-003	5.3620e-003
tblVehicleEF	LHD1	0.01	4.9650e-003
tblVehicleEF	LHD1	0.02	0.01
tblVehicleEF	LHD1	0.15	0.19
tblVehicleEF	LHD1	0.74	0.56
tblVehicleEF	LHD1	2.59	1.09
tblVehicleEF	LHD1	8.94	8.81
tblVehicleEF	LHD1	595.21	652.97
tblVehicleEF	LHD1	32.17	12.07

tblVehicleEF	LHD1	0.07	0.05
tblVehicleEF	LHD1	0.85	0.54
tblVehicleEF	LHD1	0.95	0.32
tblVehicleEF	LHD1	8.3300e-004	7.8400e-004
tblVehicleEF	LHD1	0.01	9.7290e-003
tblVehicleEF	LHD1	8.8370e-003	5.9880e-003
tblVehicleEF	LHD1	9.4800e-004	2.6800e-004
tblVehicleEF	LHD1	7.9700e-004	7.5000e-004
tblVehicleEF	LHD1	2.5350e-003	2.4320e-003
tblVehicleEF	LHD1	8.4300e-003	5.7010e-003
tblVehicleEF	LHD1	8.7200e-004	2.4700e-004
tblVehicleEF	LHD1	3.1110e-003	2.4630e-003
tblVehicleEF	LHD1	0.11	0.09
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	1.7990e-003	1.4330e-003
tblVehicleEF	LHD1	0.06	0.04
tblVehicleEF	LHD1	0.32	0.56
tblVehicleEF	LHD1	0.25	0.07
tblVehicleEF	LHD1	9.0000e-005	8.6000e-005
tblVehicleEF	LHD1	5.8400e-003	6.3740e-003
tblVehicleEF	LHD1	3.7000e-004	1.1900e-004
tblVehicleEF	LHD1	3.1110e-003	2.4630e-003
tblVehicleEF	LHD1	0.11	0.09
tblVehicleEF	LHD1	0.02	0.03
tblVehicleEF	LHD1	1.7990e-003	1.4330e-003
tblVehicleEF	LHD1	0.07	0.06
tblVehicleEF	LHD1	0.32	0.56

tblVehicleEF	LHD1	0.27	0.08
tblVehicleEF	LHD2	3.7460e-003	3.7400e-003
tblVehicleEF	LHD2	3.7700e-003	3.5360e-003
tblVehicleEF	LHD2	7.4580e-003	0.01
tblVehicleEF	LHD2	0.13	0.15
tblVehicleEF	LHD2	0.31	0.39
tblVehicleEF	LHD2	1.26	0.72
tblVehicleEF	LHD2	13.57	13.36
tblVehicleEF	LHD2	610.80	654.07
tblVehicleEF	LHD2	26.97	9.22
tblVehicleEF	LHD2	0.09	0.08
tblVehicleEF	LHD2	0.55	0.71
tblVehicleEF	LHD2	0.50	0.22
tblVehicleEF	LHD2	1.1440e-003	1.2760e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	8.4330e-003	9.6270e-003
tblVehicleEF	LHD2	4.4100e-004	1.5200e-004
tblVehicleEF	LHD2	1.0950e-003	1.2210e-003
tblVehicleEF	LHD2	2.6630e-003	2.6430e-003
tblVehicleEF	LHD2	8.0540e-003	9.1940e-003
tblVehicleEF	LHD2	4.0500e-004	1.4000e-004
tblVehicleEF	LHD2	1.0290e-003	1.4320e-003
tblVehicleEF	LHD2	0.03	0.05
tblVehicleEF	LHD2	0.01	0.02
tblVehicleEF	LHD2	6.8900e-004	9.0800e-004
tblVehicleEF	LHD2	0.04	0.05
tblVehicleEF	LHD2	0.07	0.32

tblVehicleEF	LHD2	0.10	0.05
tblVehicleEF	LHD2	1.3300e-004	1.2800e-004
tblVehicleEF	LHD2	5.9490e-003	6.3290e-003
tblVehicleEF	LHD2	2.9200e-004	9.1000e-005
tblVehicleEF	LHD2	1.0290e-003	1.4320e-003
tblVehicleEF	LHD2	0.03	0.05
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	6.8900e-004	9.0800e-004
tblVehicleEF	LHD2	0.05	0.06
tblVehicleEF	LHD2	0.07	0.32
tblVehicleEF	LHD2	0.11	0.05
tblVehicleEF	LHD2	3.7460e-003	3.7480e-003
tblVehicleEF	LHD2	3.8180e-003	3.5740e-003
tblVehicleEF	LHD2	7.2080e-003	9.7970e-003
tblVehicleEF	LHD2	0.13	0.15
tblVehicleEF	LHD2	0.31	0.39
tblVehicleEF	LHD2	1.20	0.69
tblVehicleEF	LHD2	13.57	13.36
tblVehicleEF	LHD2	610.80	654.07
tblVehicleEF	LHD2	26.97	9.16
tblVehicleEF	LHD2	0.09	0.08
tblVehicleEF	LHD2	0.52	0.67
tblVehicleEF	LHD2	0.49	0.21
tblVehicleEF	LHD2	1.1440e-003	1.2760e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	8.4330e-003	9.6270e-003
tblVehicleEF	LHD2	4.4100e-004	1.5200e-004

tblVehicleEF	LHD2	1.0950e-003	1.2210e-003
tblVehicleEF	LHD2	2.6630e-003	2.6430e-003
tblVehicleEF	LHD2	8.0540e-003	9.1940e-003
tblVehicleEF	LHD2	4.0500e-004	1.4000e-004
tblVehicleEF	LHD2	1.5320e-003	2.1080e-003
tblVehicleEF	LHD2	0.04	0.05
tblVehicleEF	LHD2	0.01	0.02
tblVehicleEF	LHD2	9.5700e-004	1.2530e-003
tblVehicleEF	LHD2	0.04	0.05
tblVehicleEF	LHD2	0.07	0.30
tblVehicleEF	LHD2	0.10	0.05
tblVehicleEF	LHD2	1.3300e-004	1.2800e-004
tblVehicleEF	LHD2	5.9490e-003	6.3290e-003
tblVehicleEF	LHD2	2.9100e-004	9.1000e-005
tblVehicleEF	LHD2	1.5320e-003	2.1080e-003
tblVehicleEF	LHD2	0.04	0.05
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	9.5700e-004	1.2530e-003
tblVehicleEF	LHD2	0.05	0.06
tblVehicleEF	LHD2	0.07	0.30
tblVehicleEF	LHD2	0.11	0.05
tblVehicleEF	LHD2	3.7460e-003	3.7380e-003
tblVehicleEF	LHD2	3.7580e-003	3.5260e-003
tblVehicleEF	LHD2	7.5080e-003	0.01
tblVehicleEF	LHD2	0.13	0.15
tblVehicleEF	LHD2	0.31	0.38
tblVehicleEF	LHD2	1.27	0.72

tblVehicleEF	LHD2	13.57	13.36
tblVehicleEF	LHD2	610.80	654.06
tblVehicleEF	LHD2	26.97	9.23
tblVehicleEF	LHD2	0.09	0.08
tblVehicleEF	LHD2	0.54	0.69
tblVehicleEF	LHD2	0.51	0.22
tblVehicleEF	LHD2	1.1440e-003	1.2760e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	8.4330e-003	9.6270e-003
tblVehicleEF	LHD2	4.4100e-004	1.5200e-004
tblVehicleEF	LHD2	1.0950e-003	1.2210e-003
tblVehicleEF	LHD2	2.6630e-003	2.6430e-003
tblVehicleEF	LHD2	8.0540e-003	9.1940e-003
tblVehicleEF	LHD2	4.0500e-004	1.4000e-004
tblVehicleEF	LHD2	1.0410e-003	1.4720e-003
tblVehicleEF	LHD2	0.04	0.06
tblVehicleEF	LHD2	0.01	0.02
tblVehicleEF	LHD2	6.6600e-004	8.7900e-004
tblVehicleEF	LHD2	0.04	0.05
tblVehicleEF	LHD2	0.08	0.34
tblVehicleEF	LHD2	0.10	0.05
tblVehicleEF	LHD2	1.3300e-004	1.2800e-004
tblVehicleEF	LHD2	5.9490e-003	6.3290e-003
tblVehicleEF	LHD2	2.9200e-004	9.1000e-005
tblVehicleEF	LHD2	1.0410e-003	1.4720e-003
tblVehicleEF	LHD2	0.04	0.06
tblVehicleEF	LHD2	0.02	0.02

tblVehicleEF	LHD2	6.6600e-004	8.7900e-004
tblVehicleEF	LHD2	0.05	0.06
tblVehicleEF	LHD2	0.08	0.34
tblVehicleEF	LHD2	0.11	0.05
tblVehicleEF	MCY	0.54	0.38
tblVehicleEF	MCY	0.15	0.23
tblVehicleEF	MCY	18.72	18.86
tblVehicleEF	MCY	9.68	8.54
tblVehicleEF	MCY	189.29	223.65
tblVehicleEF	MCY	44.13	59.21
tblVehicleEF	MCY	1.13	1.13
tblVehicleEF	MCY	0.31	0.26
tblVehicleEF	MCY	2.4730e-003	2.4800e-003
tblVehicleEF	MCY	3.6800e-003	3.1550e-003
tblVehicleEF	MCY	2.3100e-003	2.3160e-003
tblVehicleEF	MCY	3.4590e-003	2.9650e-003
tblVehicleEF	MCY	1.06	1.07
tblVehicleEF	MCY	0.62	0.64
tblVehicleEF	MCY	0.64	0.65
tblVehicleEF	MCY	2.58	2.60
tblVehicleEF	MCY	0.58	1.88
tblVehicleEF	MCY	2.04	1.80
tblVehicleEF	MCY	2.2780e-003	2.2130e-003
tblVehicleEF	MCY	6.5900e-004	5.8600e-004
tblVehicleEF	MCY	1.06	1.07
tblVehicleEF	MCY	0.62	0.64
tblVehicleEF	MCY	0.64	0.65

tblVehicleEF	MCY	3.22	3.23
tblVehicleEF	MCY	0.58	1.88
tblVehicleEF	MCY	2.22	1.96
tblVehicleEF	MCY	0.53	0.37
tblVehicleEF	MCY	0.13	0.21
tblVehicleEF	MCY	18.05	18.15
tblVehicleEF	MCY	8.84	7.77
tblVehicleEF	MCY	189.29	222.30
tblVehicleEF	MCY	44.13	57.32
tblVehicleEF	MCY	0.99	0.99
tblVehicleEF	MCY	0.29	0.25
tblVehicleEF	MCY	2.4730e-003	2.4800e-003
tblVehicleEF	MCY	3.6800e-003	3.1550e-003
tblVehicleEF	MCY	2.3100e-003	2.3160e-003
tblVehicleEF	MCY	3.4590e-003	2.9650e-003
tblVehicleEF	MCY	1.72	1.71
tblVehicleEF	MCY	0.68	0.69
tblVehicleEF	MCY	1.06	1.05
tblVehicleEF	MCY	2.52	2.54
tblVehicleEF	MCY	0.54	1.76
tblVehicleEF	MCY	1.82	1.60
tblVehicleEF	MCY	2.2650e-003	2.2000e-003
tblVehicleEF	MCY	6.3900e-004	5.6700e-004
tblVehicleEF	MCY	1.72	1.71
tblVehicleEF	MCY	0.68	0.69
tblVehicleEF	MCY	1.06	1.05
tblVehicleEF	MCY	3.15	3.16

tblVehicleEF	MCY	0.54	1.76
tblVehicleEF	MCY	1.98	1.74
tblVehicleEF	MCY	0.54	0.38
tblVehicleEF	MCY	0.15	0.24
tblVehicleEF	MCY	18.82	19.00
tblVehicleEF	MCY	9.83	8.69
tblVehicleEF	MCY	189.29	223.92
tblVehicleEF	MCY	44.13	59.59
tblVehicleEF	MCY	1.10	1.10
tblVehicleEF	MCY	0.31	0.27
tblVehicleEF	MCY	2.4730e-003	2.4800e-003
tblVehicleEF	MCY	3.6800e-003	3.1550e-003
tblVehicleEF	MCY	2.3100e-003	2.3160e-003
tblVehicleEF	MCY	3.4590e-003	2.9650e-003
tblVehicleEF	MCY	1.15	1.17
tblVehicleEF	MCY	0.80	0.82
tblVehicleEF	MCY	0.61	0.63
tblVehicleEF	MCY	2.59	2.61
tblVehicleEF	MCY	0.67	2.18
tblVehicleEF	MCY	2.08	1.85
tblVehicleEF	MCY	2.2800e-003	2.2160e-003
tblVehicleEF	MCY	6.6300e-004	5.9000e-004
tblVehicleEF	MCY	1.15	1.17
tblVehicleEF	MCY	0.80	0.82
tblVehicleEF	MCY	0.61	0.63
tblVehicleEF	MCY	3.23	3.25
tblVehicleEF	MCY	0.67	2.18

tblVehicleEF	MCY	2.26	2.01
tblVehicleEF	MDV	0.01	5.6770e-003
tblVehicleEF	MDV	0.01	0.07
tblVehicleEF	MDV	1.21	1.09
tblVehicleEF	MDV	2.22	2.92
tblVehicleEF	MDV	495.22	408.75
tblVehicleEF	MDV	99.91	80.84
tblVehicleEF	MDV	0.13	0.10
tblVehicleEF	MDV	0.19	0.31
tblVehicleEF	MDV	2.2990e-003	1.9550e-003
tblVehicleEF	MDV	2.4650e-003	1.9340e-003
tblVehicleEF	MDV	2.1190e-003	1.8020e-003
tblVehicleEF	MDV	2.2660e-003	1.7790e-003
tblVehicleEF	MDV	0.06	0.08
tbIVehicleEF	MDV	0.15	0.13
tblVehicleEF	MDV	0.07	0.09
tblVehicleEF	MDV	0.03	0.02
tblVehicleEF	MDV	0.09	0.41
tblVehicleEF	MDV	0.17	0.36
tblVehicleEF	MDV	4.9590e-003	3.9920e-003
tblVehicleEF	MDV	1.0380e-003	7.9000e-004
tblVehicleEF	MDV	0.06	0.08
tblVehicleEF	MDV	0.15	0.13
tblVehicleEF	MDV	0.07	0.09
tblVehicleEF	MDV	0.04	0.04
tblVehicleEF	MDV	0.09	0.41
tblVehicleEF	MDV	0.18	0.39

tblVehicleEF	MDV	0.01	6.0290e-003
tblVehicleEF	MDV	0.01	0.07
tblVehicleEF	MDV	1.32	1.19
tblVehicleEF	MDV	1.90	2.49
tblVehicleEF	MDV	516.89	420.70
tblVehicleEF	MDV	99.91	80.01
tblVehicleEF	MDV	0.11	0.08
tblVehicleEF	MDV	0.18	0.29
tblVehicleEF	MDV	2.2990e-003	1.9550e-003
tblVehicleEF	MDV	2.4650e-003	1.9340e-003
tblVehicleEF	MDV	2.1190e-003	1.8020e-003
tblVehicleEF	MDV	2.2660e-003	1.7790e-003
tblVehicleEF	MDV	0.10	0.12
tblVehicleEF	MDV	0.15	0.14
tblVehicleEF	MDV	0.09	0.12
tblVehicleEF	MDV	0.03	0.03
tblVehicleEF	MDV	0.08	0.38
tblVehicleEF	MDV	0.15	0.32
tblVehicleEF	MDV	5.1770e-003	4.1080e-003
tblVehicleEF	MDV	1.0320e-003	7.8200e-004
tblVehicleEF	MDV	0.10	0.12
tblVehicleEF	MDV	0.15	0.14
tblVehicleEF	MDV	0.09	0.12
tblVehicleEF	MDV	0.05	0.04
tblVehicleEF	MDV	0.08	0.38
tblVehicleEF	MDV	0.16	0.35
tblVehicleEF	MDV	0.01	5.5640e-003

tblVehicleEF	MDV	0.01	0.08
tblVehicleEF	MDV	1.17	1.05
tblVehicleEF	MDV	2.29	3.02
tblVehicleEF	MDV	487.26	404.33
tblVehicleEF	MDV	99.91	81.03
tblVehicleEF	MDV	0.13	0.09
tblVehicleEF	MDV	0.20	0.31
tblVehicleEF	MDV	2.2990e-003	1.9550e-003
tblVehicleEF	MDV	2.4650e-003	1.9340e-003
tblVehicleEF	MDV	2.1190e-003	1.8020e-003
tblVehicleEF	MDV	2.2660e-003	1.7790e-003
tblVehicleEF	MDV	0.06	0.08
tblVehicleEF	MDV	0.16	0.14
tblVehicleEF	MDV	0.06	0.08
tblVehicleEF	MDV	0.03	0.02
tbIVehicleEF	MDV	0.10	0.48
tblVehicleEF	MDV	0.17	0.37
tblVehicleEF	MDV	4.8790e-003	3.9480e-003
tblVehicleEF	MDV	1.0390e-003	7.9200e-004
tblVehicleEF	MDV	0.06	0.08
tblVehicleEF	MDV	0.16	0.14
tblVehicleEF	MDV	0.06	0.08
tblVehicleEF	MDV	0.04	0.03
tblVehicleEF	MDV	0.10	0.48
tblVehicleEF	MDV	0.19	0.40
tblVehicleEF	MH	0.02	2.9970e-003
tblVehicleEF	MH	0.02	0.00

tblVehicleEF	MH	1.76	0.25
tblVehicleEF	MH	5.23	0.00
tblVehicleEF	MH	1,125.05	953.67
tblVehicleEF	MH	59.88	0.00
tblVehicleEF	MH	1.00	3.27
tblVehicleEF	MH	0.75	0.00
tblVehicleEF	MH	0.01	0.02
tblVehicleEF	MH	0.02	0.07
tblVehicleEF	MH	1.0430e-003	0.00
tblVehicleEF	MH	3.2050e-003	4.0000e-003
tblVehicleEF	MH	0.02	0.07
tblVehicleEF	MH	9.5900e-004	0.00
tblVehicleEF	MH	0.84	0.00
tblVehicleEF	MH	0.06	0.00
tblVehicleEF	MH	0.36	0.00
tblVehicleEF	MH	0.07	0.06
tblVehicleEF	MH	0.02	0.00
tblVehicleEF	MH	0.30	0.00
tblVehicleEF	MH	0.01	9.0160e-003
tblVehicleEF	MH	6.9000e-004	0.00
tblVehicleEF	MH	0.84	0.00
tblVehicleEF	MH	0.06	0.00
tblVehicleEF	MH	0.36	0.00
tblVehicleEF	MH	0.10	0.07
tblVehicleEF	MH	0.02	0.00
tblVehicleEF	MH	0.33	0.00
tblVehicleEF	MH	0.02	2.9970e-003

tblVehicleEF	MH	0.02	0.00
tblVehicleEF	MH	1.81	0.25
tblVehicleEF	MH	4.92	0.00
tblVehicleEF	MH	1,125.05	953.67
tblVehicleEF	MH	59.88	0.00
tblVehicleEF	MH	0.92	3.09
tblVehicleEF	MH	0.71	0.00
tblVehicleEF	MH	0.01	0.02
tblVehicleEF	MH	0.02	0.07
tblVehicleEF	MH	1.0430e-003	0.00
tblVehicleEF	MH	3.2050e-003	4.0000e-003
tblVehicleEF	MH	0.02	0.07
tblVehicleEF	MH	9.5900e-004	0.00
tblVehicleEF	MH	1.24	0.00
tblVehicleEF	MH	0.06	0.00
tblVehicleEF	MH	0.51	0.00
tblVehicleEF	MH	0.07	0.06
tblVehicleEF	MH	0.02	0.00
tblVehicleEF	MH	0.29	0.00
tblVehicleEF	MH	0.01	9.0160e-003
tblVehicleEF	MH	6.8400e-004	0.00
tblVehicleEF	MH	1.24	0.00
tblVehicleEF	MH	0.06	0.00
tblVehicleEF	MH	0.51	0.00
tblVehicleEF	MH	0.10	0.07
tblVehicleEF	MH	0.02	0.00
tblVehicleEF	MH	0.31	0.00
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tblVehicleEF	MH	0.02	2.9970e-003
tblVehicleEF	MH	0.02	0.00
tblVehicleEF	MH	1.75	0.25
tblVehicleEF	MH	5.28	0.00
tblVehicleEF	MH	1,125.05	953.67
tblVehicleEF	MH	59.88	0.00
tblVehicleEF	MH	0.98	3.21
tblVehicleEF	MH	0.75	0.00
tblVehicleEF	MH	0.01	0.02
tblVehicleEF	MH	0.02	0.07
tblVehicleEF	MH	1.0430e-003	0.00
tblVehicleEF	MH	3.2050e-003	4.0000e-003
tblVehicleEF	MH	0.02	0.07
tblVehicleEF	MH	9.5900e-004	0.00
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tblVehicleEF	MH	0.07	0.00
tblVehicleEF	MH	0.37	0.00
tblVehicleEF	MH	0.07	0.06
tblVehicleEF	MH	0.02	0.00
tblVehicleEF	MH	0.30	0.00
tblVehicleEF	MH	0.01	9.0160e-003
tblVehicleEF	MH	6.9000e-004	0.00
tblVehicleEF	MH	0.95	0.00
tblVehicleEF	MH	0.07	0.00
tblVehicleEF	MH	0.37	0.00
tblVehicleEF	MH	0.10	0.07
tblVehicleEF	MH	0.02	0.00

tblVehicleEF	MH	0.33	0.00
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tblVehicleEF	MHD	3.8910e-003	2.0980e-003
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tblVehicleEF	MHD	0.36	0.40
tblVehicleEF	MHD	0.32	0.28
tblVehicleEF	MHD	5.63	1.37
tblVehicleEF	MHD	130.55	64.65
tblVehicleEF	MHD	1,141.08	1,030.64
tblVehicleEF	MHD	62.84	12.06
tblVehicleEF	MHD	0.35	0.35
tblVehicleEF	MHD	0.76	1.08
tblVehicleEF	MHD	9.98	1.58
tblVehicleEF	MHD	1.0200e-004	3.2600e-004
tblVehicleEF	MHD	2.8420e-003	6.1300e-003
tblVehicleEF	MHD	8.1400e-004	1.3500e-004
tblVehicleEF	MHD	9.7000e-005	3.1200e-004
tblVehicleEF	MHD	2.7140e-003	5.8580e-003
tblVehicleEF	MHD	7.4900e-004	1.2400e-004
tblVehicleEF	MHD	1.0540e-003	6.2300e-004
tblVehicleEF	MHD	0.04	0.03
tblVehicleEF	MHD	0.02	0.02
tblVehicleEF	MHD	7.0500e-004	4.1000e-004
tblVehicleEF	MHD	0.04	0.02
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tblVehicleEF	MHD	1.2580e-003	6.1500e-004

tblVehicleEF	MHD	0.01	9.8540e-003
tblVehicleEF	MHD	7.2700e-004	1.1900e-004
tblVehicleEF	MHD	1.0540e-003	6.2300e-004
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tblVehicleEF	MHD	0.02	0.14
tblVehicleEF	MHD	0.38	0.07
tblVehicleEF	MHD	0.01	4.2040e-003
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tblVehicleEF	MHD	1,141.08	1,030.65
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tblVehicleEF	MHD	0.71	1.02
tblVehicleEF	MHD	9.94	1.58
tblVehicleEF	MHD	8.6000e-005	2.7800e-004
tblVehicleEF	MHD	2.8420e-003	6.1300e-003
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tblVehicleEF	MHD	1.5770e-003	9.2500e-004
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tblVehicleEF	MHD	0.02	0.02
tblVehicleEF	MHD	9.9000e-004	5.7300e-004
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tblVehicleEF	MHD	0.02	0.13
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tblVehicleEF	MHD	0.01	9.8540e-003
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tblVehicleEF	MHD	0.33	0.36

tblVehicleEF	MHD	0.74	1.06
tblVehicleEF	MHD	9.99	1.58
tblVehicleEF	MHD	1.2400e-004	3.9300e-004
tblVehicleEF	MHD	2.8420e-003	6.1300e-003
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tblVehicleEF	MHD	7.4900e-004	1.2400e-004
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tblVehicleEF	MHD	0.35	0.06
tblVehicleEF	MHD	1.1580e-003	6.1300e-004
tblVehicleEF	MHD	0.01	9.8540e-003
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tblVehicleEF	OBUS	8.2900e-004	2.0000e-004
tblVehicleEF	OBUS	1.9000e-005	1.1300e-004
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tblVehicleEF	OBUS	7.6200e-004	1.8400e-004
tblVehicleEF	OBUS	1.4160e-003	1.8400e-003
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tblVehicleEF	OBUS	1.4160e-003	1.8400e-003
			<b>.</b>

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tblVehicleEF	OBUS	0.05	0.04
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tblVehicleEF	OBUS	0.35	0.12
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tblVehicleEF	OBUS	1.7000e-005	1.0500e-004
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tblVehicleEF	OBUS	2.5030e-003	6.7660e-003
tblVehicleEF	OBUS	7.6200e-004	1.8400e-004
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tblVehicleEF	OBUS	0.05	0.07
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tblVehicleEF	SBUS	0.02	0.03
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	CDLIC		0.09
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tblVehicleEF	UBUS	0.05	0.01

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tblVehicleEF	UBUS	1,951.45	1,987.99
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tblVehicleEF	UBUS	15.04	0.08
tblVehicleEF	UBUS	0.60	0.07
tblVehicleEF	UBUS	0.01	0.03
tblVehicleEF	UBUS	0.12	3.2070e-003
tblVehicleEF	UBUS	1.1360e-003	5.7000e-005
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tblVehicleEF	UBUS	3.0000e-003	7.9690e-003
tblVehicleEF	UBUS	0.12	3.0640e-003
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tblVehicleEF	UBUS	9.8070e-003	1.4050e-003
tblVehicleEF	UBUS	1.1430e-003	8.2000e-005
tblVehicleEF	UBUS	5.8640e-003	8.6100e-004
tblVehicleEF	UBUS	0.07	7.6580e-003

tblVehicleEF	UBUS	3.3120e-003	6.0000e-004
tblVehicleEF	UBUS	3.33	5.97
tblVehicleEF	UBUS	0.02	0.04
tblVehicleEF	UBUS	0.69	0.05
tblVehicleEF	UBUS	2.44	5.85
tblVehicleEF	UBUS	0.05	0.01
tblVehicleEF	UBUS	10.66	45.42
tblVehicleEF	UBUS	9.05	0.73
tblVehicleEF	UBUS	1,951.45	1,987.99
tblVehicleEF	UBUS	100.38	8.45
tblVehicleEF	UBUS	9.15	0.47
tblVehicleEF	UBUS	15.10	0.08
tblVehicleEF	UBUS	0.60	0.07
tblVehicleEF	UBUS	0.01	0.03
tblVehicleEF	UBUS	0.12	3.2070e-003
tblVehicleEF	UBUS	1.1360e-003	5.7000e-005
tblVehicleEF	UBUS	0.26	0.03
tblVehicleEF	UBUS	3.0000e-003	7.9690e-003
tblVehicleEF	UBUS	0.12	3.0640e-003
tblVehicleEF	UBUS	1.0450e-003	5.2000e-005
tblVehicleEF	UBUS	4.6290e-003	5.8300e-004
tblVehicleEF	UBUS	0.08	7.9410e-003
tblVehicleEF	UBUS	2.5090e-003	4.1300e-004
tblVehicleEF	UBUS	0.79	0.09
tblVehicleEF	UBUS	0.03	0.06
tblVehicleEF	UBUS	0.70	0.05
tblVehicleEF	UBUS	9.8060e-003	1.4050e-003

tblVehicleEF	UBUS	1.1670e-003	8.4000e-005
tblVehicleEF	UBUS	4.6290e-003	5.8300e-004
tblVehicleEF	UBUS	0.08	7.9410e-003
tblVehicleEF	UBUS	2.5090e-003	4.1300e-004
tblVehicleEF	UBUS	3.31	5.97
tblVehicleEF	UBUS	0.03	0.06
tblVehicleEF	UBUS	0.76	0.05
tblVehicleTrips	ST_TR	6.39	4.52
tblVehicleTrips	ST_TR	696.00	293.13
tblVehicleTrips	ST_TR	177.59	163.41
tblVehicleTrips	SU_TR	5.86	3.76
tblVehicleTrips	SU_TR	500.00	388.07
tblVehicleTrips	SU_TR	166.44	153.15
tblVehicleTrips	WD_TR	6.65	5.00
tblVehicleTrips	WD_TR	716.00	289.96
tblVehicleTrips	WD_TR	102.24	98.24
tblWater	AerobicPercent	87.46	100.00
tblWater	AerobicPercent	87.46	100.00
tblWater	AerobicPercent	87.46	100.00
tblWater	AnaerobicandFacultativeLagoonsPerce	2.21	0.00
tblWater	AnaerobicandFacultativeLagoonsPerce	2.21	0.00
tblWater	nt AnaerobicandFacultativeLagoonsPerce	2.21	0.00
tblWater	nt SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWoodstoves	NumberCatalytic	6.90	0.00
tblWoodstoves	NumberNoncatalytic	6.90	0.00

# 2.0 Emissions Summary

# 2.1 Overall Construction (Maximum Daily Emission)

# **Unmitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year					lb/c	lay							lb/d	ay		
2020	2.9932	23.0499	20.8031	0.0497	5.9146	1.1610	6.7383	2.9848	1.0842	3.7427	0.0000	4,823.883 5	4,823.8835	0.6425	0.0000	4,836.323 6
2021	25.0560	17.9366	19.8865	0.0490	2.0381	0.7068	2.7449	0.5462	0.6818	1.2279	0.0000	4,759.469 3	4,759.4693	0.4751	0.0000	4,771.345 8
Maximum	25.0560	23.0499	20.8031	0.0497	5.9146	1.1610	6.7383	2.9848	1.0842	3.7427	0.0000	4,823.883 5	4,823.8835	0.6425	0.0000	4,836.323 6

### **Mitigated Construction**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year					lb/d	day							lb/	day		
2020	1.3637	14.7201	21.0935	0.0497	2.2551	0.1965	2.2860	1.1233	0.1945	1.1540	0.0000	4,823.883 5	4,823.8835	0.6425	0.0000	4,836.323 6
2021	24.8915	14.2930	20.4657	0.0490	1.8822	0.1842	2.0663	0.5079	0.1827	0.6906	0.0000	4,759.469 3	4,759.4693	0.4751	0.0000	4,771.345 8
Maximum	24.8915	14.7201	21.0935	0.0497	2.2551	0.1965	2.2860	1.1233	0.1945	1.1540	0.0000	4,823.883 5	4,823.8835	0.6425	0.0000	4,836.323 6
	ROG	NOx	СО	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	6.40	29.21	-2.14	0.00	47.98	79.62	54.11	53.80	78.64	62.89	0.00	0.00	0.00	0.00	0.00	0.00

# 2.2 Overall Operational

# **Unmitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d				lb/d	ay						
Area	4.0507	0.1314	11.4031	6.0000e- 004		0.0631	0.0631		0.0631	0.0631	0.0000	20.5331	20.5331	0.0198	0.0000	21.0281
Energy	0.0833	0.7271	0.4173	4.5400e- 003		0.0575	0.0575		0.0575	0.0575		908.2358	908.2358	0.0174	0.0167	913.6330
Mobile	11.0841	13.7362	77.5368	0.1866	18.4297	0.1507	18.5804	4.9148	0.1402	5.0550		19,348.49 52	19,348.495 2	1.4154		19,383.87 93
Total	15.2180	14.5946	89.3572	0.1917	18.4297	0.2713	18.7010	4.9148	0.2608	5.1756	0.0000	20,277.26 41	20,277.264 1	1.4526	0.0167	20,318.54 04

# **Mitigated Operational**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/c	lay							lb/d	ay		
Area	4.0507	0.1314	11.4031	6.0000e- 004		0.0631	0.0631		0.0631	0.0631	0.0000	20.5331	20.5331	0.0198	0.0000	21.0281
Energy	0.0719	0.6286	0.3650	3.9200e- 003		0.0497	0.0497	D	0.0497	0.0497		784.4908	784.4908	0.0150	0.0144	789.1526
Mobile	11.0841	13.7362	77.5368	0.1866	18.4297	0.1507	18.5804	4.9148	0.1402	5.0550		19,348.49 52	19,348.495 2	1.4154		19,383.87 93
Total	15.2067	14.4962	89.3049	0.1911	18.4297	0.2635	18.6932	4.9148	0.2530	5.1678	0.0000	20,153.51 91	20,153.519 1	1.4502	0.0144	20,194.06 00

	ROG	NOx	со	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.07	0.67	0.06	0.32	0.00	2.89	0.04	0.00	3.01	0.15	0.00	0.61	0.61	0.16	13.63	0.61

# 3.0 Construction Detail

#### **Construction Phase**

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	7/18/2020	8/14/2020	5	20	
2	Site Preparation	Site Preparation	8/15/2020	8/18/2020	5	2	
3	Grading	Grading	8/19/2020	8/24/2020	5	4	
4	Building Construction	Building Construction	8/25/2020	5/31/2021	5	200	
5	Paving	Paving	6/1/2021	6/14/2021	5	10	
6	Architectural Coating	Architectural Coating	6/15/2021	6/28/2021	5	10	

Acres of Grading (Site Preparation Phase): 1

Acres of Grading (Grading Phase): 1.5

Acres of Paving: 1.01

Residential Indoor: 316,963; Residential Outdoor: 105,654; Non-Residential Indoor: 37,500; Non-Residential Outdoor: 12,500; Striped

#### **OffRoad Equipment**

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Rubber Tired Dozers	1	8.00	247	0.40
Demolition	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Site Preparation	Graders	1	8.00	187	0.41
Site Preparation	Rubber Tired Dozers	1	7.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Grading	Graders	1	6.00	187	0.41
Grading	Rubber Tired Dozers	1	6.00	247	0.40
Grading	Tractors/Loaders/Backhoes	1	7.00	97	0.37

Building Construction	Cranes	1	6.00	231	0.29
Building Construction	Forklifts	1	6.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Building Construction	Welders	3	8.00	46	0.45
Paving	Cement and Mortar Mixers	1	6.00	9	0.56
Paving	Pavers	1	6.00	130	0.42
Paving	Paving Equipment	1	8.00	132	0.36
Paving	Rollers	1	7.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48

### Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	5	13.00	4.00	112.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	3	8.00	4.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	3	8.00	4.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	7	160.00	39.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	5	13.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	32.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

# **3.1 Mitigation Measures Construction**

Use Cleaner Engines for Construction Equipment

Replace Ground Cover

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

Clean Paved Roads

# 3.2 Demolition - 2020 Unmitigated Construction On-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	lay							lb/c	lay		
Fugitive Dust					1.2133	0.0000	1.2133	0.1837	0.0000	0.1837			0.0000			0.0000
Off-Road	2.1262	20.9463	14.6573	0.0241		1.1525	1.1525		1.0761	1.0761		2,322.312 7	2,322.3127	0.5970		2,337.236 3
Total	2.1262	20.9463	14.6573	0.0241	1.2133	1.1525	2.3658	0.1837	1.0761	1.2599		2,322.312 7	2,322.3127	0.5970		2,337.236

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	lay							lb/d	lay		
Hauling	0.0501	1.6311	0.3792	4.3500e- 003	0.0979	5.2200e- 003	0.1031	0.0268	4.9900e- 003	0.0318		471.0127	471.0127	0.0338		471.8579
Vendor	0.0149	0.4254	0.1230	1.0100e- 003	0.0256	2.0300e- 003	0.0276	7.3700e- 003	1.9500e- 003	9.3200e- 003		107.7796	107.7796	7.2100e- 003		107.9598
Worker	0.0664	0.0471	0.5213	1.4500e- 003	0.1453	1.2100e- 003	0.1465	0.0385	1.1200e- 003	0.0397		143.9647	143.9647	4.5400e- 003		144.0781
Total	0.1314	2.1036	1.0235	6.8100e- 003	0.2688	8.4600e- 003	0.2773	0.0728	8.0600e- 003	0.0808		722.7570	722.7570	0.0456		723.8958

### **Mitigated Construction On-Site**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	lay							lb/c	lay		
Fugitive Dust					0.4495	0.0000	0.4495	0.0681	0.0000	0.0681			0.0000			0.0000
Off-Road	0.4630	8.5434	15.4154	0.0241		0.0375	0.0375	Dunning	0.0375	0.0375	0.0000	2,322.312 7	2,322.3127	0.5970		2,337.236 3
Total	0.4630	8.5434	15.4154	0.0241	0.4495	0.0375	0.4870	0.0681	0.0375	0.1055	0.0000	2,322.312 7	2,322.3127	0.5970		2,337.236 3

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/c	lay							lb/d	lay		
Hauling	0.0501	1.6311	0.3792	4.3500e- 003	0.0913	5.2200e- 003	0.0965	0.0252	4.9900e- 003	0.0302		471.0127	471.0127	0.0338		471.8579
Vendor	0.0149	0.4254	0.1230	1.0100e- 003	0.0240	2.0300e- 003	0.0260	6.9700e- 003	1.9500e- 003	8.9200e- 003		107.7796	107.7796	7.2100e- 003		107.9598
Worker	0.0664	0.0471	0.5213	1.4500e- 003	0.1339	1.2100e- 003	0.1352	0.0358	1.1200e- 003	0.0369		143.9647	143.9647	4.5400e- 003	MINIMUM	144.0781
Total	0.1314	2.1036	1.0235	6.8100e- 003	0.2492	8.4600e- 003	0.2576	0.0679	8.0600e- 003	0.0760		722.7570	722.7570	0.0456		723.8958

# 3.3 Site Preparation - 2020

# **Unmitigated Construction On-Site**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	lay							lb/d	lay		
Fugitive Dust					5.7996	0.0000	5.7996	2.9537	0.0000	2.9537			0.0000			0.0000
Off-Road	1.6299	18.3464	7.7093	0.0172		0.8210	0.8210		0.7553	0.7553		1,667.411 9	1,667.4119	0.5393		1,680.893 7
Total	1.6299	18.3464	7.7093	0.0172	5.7996	0.8210	6.6205	2.9537	0.7553	3.7090		1,667.411 9	1,667.4119	0.5393		1,680.893 7

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	lay							lb/c	lay		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0149	0.4254	0.1230	1.0100e- 003	0.0256	2.0300e- 003	0.0276	7.3700e- 003	1.9500e- 003	9.3200e- 003		107.7796	107.7796	7.2100e- 003		107.9598
Worker	0.0409	0.0290	0.3208	8.9000e- 004	0.0894	7.5000e- 004	0.0902	0.0237	6.9000e- 004	0.0244		88.5936	88.5936	2.7900e- 003	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	88.6634
Total	0.0558	0.4544	0.4438	1.9000e- 003	0.1150	2.7800e- 003	0.1178	0.0311	2.6400e- 003	0.0337		196.3733	196.3733	0.0100		196.6232

### **Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/c	lay							lb/c	lay		
Fugitive Dust					2.1487	0.0000	2.1487	1.0944	0.0000	1.0944			0.0000			0.0000
Off-Road	0.2998	5.0659	9.8221	0.0172		0.0281	0.0281		0.0281	0.0281	0.0000	1,667.411 9	1,667.4119	0.5393		1,680.893 7
Total	0.2998	5.0659	9.8221	0.0172	2.1487	0.0281	2.1768	1.0944	0.0281	1.1224	0.0000	1,667.411 9	1,667.4119	0.5393		1,680.893 7

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	lay							lb/c	ay		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0149	0.4254	0.1230	1.0100e- 003	0.0240	2.0300e- 003	0.0260	6.9700e- 003	1.9500e- 003	8.9200e- 003		107.7796	107.7796	7.2100e- 003		107.9598
Worker	0.0409	0.0290	0.3208	8.9000e- 004	0.0824	7.5000e- 004	0.0832	0.0220	6.9000e- 004	0.0227		88.5936	88.5936	2.7900e- 003		88.6634
Total	0.0558	0.4544	0.4438	1.9000e- 003	0.1064	2.7800e- 003	0.1092	0.0290	2.6400e- 003	0.0316		196.3733	196.3733	0.0100		196.6232

3.4 Grading - 2020

### **Unmitigated Construction On-Site**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	lay							lb/d	lay		
Fugitive Dust					4.9143	0.0000	4.9143	2.5256	0.0000	2.5256			0.0000			0.0000
Off-Road	1.3498	15.0854	6.4543	0.0141		0.6844	0.6844		0.6296	0.6296		1,365.718 3	1,365.7183	0.4417		1,376.760 9
Total	1.3498	15.0854	6.4543	0.0141	4.9143	0.6844	5.5986	2.5256	0.6296	3.1552		1,365.718 3	1,365.7183	0.4417		1,376.760 9

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	lay							lb/c	lay		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0149	0.4254	0.1230	1.0100e- 003	0.0256	2.0300e- 003	0.0276	7.3700e- 003	1.9500e- 003	9.3200e- 003		107.7796	107.7796	7.2100e- 003		107.9598
Worker	0.0409	0.0290	0.3208	8.9000e- 004	0.0894	7.5000e- 004	0.0902	0.0237	6.9000e- 004	0.0244		88.5936	88.5936	2.7900e- 003		88.6634
Total	0.0558	0.4544	0.4438	1.9000e- 003	0.1150	2.7800e- 003	0.1178	0.0311	2.6400e- 003	0.0337		196.3733	196.3733	0.0100		196.6232

### **Mitigated Construction On-Site**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	lay							lb/d	lay		
Fugitive Dust					1.8207	0.0000	1.8207	0.9357	0.0000	0.9357			0.0000			0.0000
Off-Road	0.2466	4.1795	8.0841	0.0141		0.0230	0.0230		0.0230	0.0230	0.0000	1,365.718 3	1,365.7183	0.4417		1,376.760 9
Total	0.2466	4.1795	8.0841	0.0141	1.8207	0.0230	1.8437	0.9357	0.0230	0.9587	0.0000	1,365.718 3	1,365.7183	0.4417		1,376.760 9

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	lay							lb/d	lay		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0149	0.4254	0.1230	1.0100e- 003	0.0240	2.0300e- 003	0.0260	6.9700e- 003	1.9500e- 003	8.9200e- 003		107.7796	107.7796	7.2100e- 003		107.9598
Worker	0.0409	0.0290	0.3208	8.9000e- 004	0.0824	7.5000e- 004	0.0832	0.0220	6.9000e- 004	0.0227		88.5936	88.5936	2.7900e- 003		88.6634
Total	0.0558	0.4544	0.4438	1.9000e- 003	0.1064	2.7800e- 003	0.1092	0.0290	2.6400e- 003	0.0316		196.3733	196.3733	0.0100		196.6232

# 3.5 Building Construction - 2020 Unmitigated Construction On-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	ay							lb/c	lay		
Off-Road	2.0305	14.7882	13.1881	0.0220		0.7960	0.7960		0.7688	0.7688		2,001.159 5	2,001.1595	0.3715		2,010.446 7
Total	2.0305	14.7882	13.1881	0.0220		0.7960	0.7960		0.7688	0.7688		2,001.159 5	2,001.1595	0.3715		2,010.446 7

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	lay							lb/d	lay		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1450	4.1477	1.1988	9.8400e- 003	0.2497	0.0198	0.2695	0.0719	0.0190	0.0909		1,050.851 4	1,050.8514	0.0703		1,052.608 1
Worker	0.8176	0.5800	6.4162	0.0178	1.7884	0.0150	1.8034	0.4743	0.0138	0.4881		1,771.872 6	1,771.8726	0.0559		1,773.268 8
Total	0.9627	4.7276	7.6150	0.0276	2.0381	0.0348	2.0729	0.5462	0.0327	0.5789		2,822.724 0	2,822.7240	0.1261		2,825.876 9

## **Mitigated Construction On-Site**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	ay							lb/c	lay		
Off-Road	0.4010	9.9925	13.4786	0.0220		0.1617	0.1617		0.1617	0.1617	0.0000	2,001.159 5	2,001.1595	0.3715		2,010.446 7
Total	0.4010	9.9925	13.4786	0.0220		0.1617	0.1617		0.1617	0.1617	0.0000	2,001.159 5	2,001.1595	0.3715		2,010.446 7

#### **Mitigated Construction Off-Site**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	lay							lb/d	ay		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1450	4.1477	1.1988	9.8400e- 003	0.2337	0.0198	0.2535	0.0680	0.0190	0.0869		1,050.851 4	1,050.8514	0.0703		1,052.608 1
Worker	0.8176	0.5800	6.4162	0.0178	1.6485	0.0150	1.6634	0.4400	0.0138	0.4537		1,771.872 6	1,771.8726	0.0559		1,773.268 8
Total	0.9627	4.7276	7.6150	0.0276	1.8822	0.0348	1.9169	0.5079	0.0327	0.5407		2,822.724 0	2,822.7240	0.1261		2,825.876 9

## 3.5 Building Construction - 2021 Unmitigated Construction On-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	ay							lb/c	lay		
Off-Road	1.8125	13.6361	12.8994	0.0221		0.6843	0.6843		0.6608	0.6608		2,001.220 0	2,001.2200	0.3573		2,010.151 7
Total	1.8125	13.6361	12.8994	0.0221		0.6843	0.6843		0.6608	0.6608		2,001.220 0	2,001.2200	0.3573		2,010.151 7

## **Unmitigated Construction Off-Site**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	lay							lb/d	lay		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1245	3.7787	1.0950	9.7600e- 003	0.2497	7.9900e- 003	0.2577	0.0719	7.6400e- 003	0.0795		1,042.647 6	1,042.6476	0.0673		1,044.330 3
Worker	0.7629	0.5218	5.8921	0.0172	1.7884	0.0145	1.8029	0.4743	0.0133	0.4876		1,715.601 8	1,715.6018	0.0505		1,716.863 8
Total	0.8874	4.3005	6.9871	0.0270	2.0381	0.0224	2.0605	0.5462	0.0210	0.5671		2,758.249 3	2,758.2493	0.1178		2,761.194 1

## **Mitigated Construction On-Site**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	ay							lb/c	lay		
Off-Road	0.4010	9.9925	13.4786	0.0221		0.1617	0.1617		0.1617	0.1617	0.0000	2,001.220 0	2,001.2200	0.3573		2,010.151 7
Total	0.4010	9.9925	13.4786	0.0221		0.1617	0.1617		0.1617	0.1617	0.0000	2,001.220 0	2,001.2200	0.3573		2,010.151 7

#### **Mitigated Construction Off-Site**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	lay							lb/d	ay		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1245	3.7787	1.0950	9.7600e- 003	0.2337	7.9900e- 003	0.2417	0.0680	7.6400e- 003	0.0756		1,042.647 6	1,042.6476	0.0673		1,044.330 3
Worker	0.7629	0.5218	5.8921	0.0172	1.6485	0.0145	1.6629	0.4400	0.0133	0.4533		1,715.601 8	1,715.6018	0.0505		1,716.863 8
Total	0.8874	4.3005	6.9871	0.0270	1.8822	0.0224	1.9046	0.5079	0.0210	0.5289		2,758.249 3	2,758.2493	0.1178		2,761.194 1

3.6 Paving - 2021
<u>Unmitigated Construction On-Site</u>

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	lay							lb/d	lay		
Off-Road	0.7739	7.7422	8.8569	0.0135		0.4153	0.4153		0.3830	0.3830		1,296.866 4	1,296.8664	0.4111		1,307.144 2
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.7739	7.7422	8.8569	0.0135		0.4153	0.4153		0.3830	0.3830		1,296.866 4	1,296.8664	0.4111		1,307.144 2

#### **Unmitigated Construction Off-Site**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/c	lay							lb/c	lay		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0620	0.0424	0.4787	1.4000e- 003	0.1453	1.1700e- 003	0.1465	0.0385	1.0800e- 003	0.0396		139.3926	139.3926	4.1000e- 003		139.4952
Total	0.0620	0.0424	0.4787	1.4000e- 003	0.1453	1.1700e- 003	0.1465	0.0385	1.0800e- 003	0.0396		139.3926	139.3926	4.1000e- 003		139.4952

## **Mitigated Construction On-Site**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	lay							lb/d	lay		
Off-Road	0.2149	5.7133	9.8512	0.0135		0.0213	0.0213		0.0213	0.0213	0.0000	1,296.866 4	1,296.8664	0.4111		1,307.144
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.2149	5.7133	9.8512	0.0135		0.0213	0.0213		0.0213	0.0213	0.0000	1,296.866 4	1,296.8664	0.4111		1,307.144 2

#### **Mitigated Construction Off-Site**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	lay							lb/d	ay		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0620	0.0424	0.4787	1.4000e- 003	0.1339	1.1700e- 003	0.1351	0.0358	1.0800e- 003	0.0368		139.3926	139.3926	4.1000e- 003		139.4952
Total	0.0620	0.0424	0.4787	1.4000e- 003	0.1339	1.1700e- 003	0.1351	0.0358	1.0800e- 003	0.0368		139.3926	139.3926	4.1000e- 003		139.4952

## 3.7 Architectural Coating - 2021 Unmitigated Construction On-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/c	lay							lb/c	lay		
Archit. Coating	24.6845					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2189	1.5268	1.8176	2.9700e- 003		0.0941	0.0941		0.0941	0.0941		281.4481	281.4481	0.0193		281.9309
Total	24.9034	1.5268	1.8176	2.9700e- 003		0.0941	0.0941		0.0941	0.0941		281.4481	281.4481	0.0193		281.9309

## **Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	lay							lb/d	ay		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1526	0.1044	1.1784	3.4400e- 003	0.3577	2.8900e- 003	0.3606	0.0949	2.6600e- 003	0.0975		343.1204	343.1204	0.0101		343.3728
Total	0.1526	0.1044	1.1784	3.4400e- 003	0.3577	2.8900e- 003	0.3606	0.0949	2.6600e- 003	0.0975		343.1204	343.1204	0.0101		343.3728

## **Mitigated Construction On-Site**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/c	lay							lb/c	lay		
Archit. Coating	24.6845					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.0545	1.0598	1.8324	2.9700e- 003		3.9600e- 003	3.9600e- 003		3.9600e- 003	3.9600e- 003	0.0000	281.4481	281.4481	0.0193		281.9309
Total	24.7390	1.0598	1.8324	2.9700e- 003		3.9600e- 003	3.9600e- 003		3.9600e- 003	3.9600e- 003	0.0000	281.4481	281.4481	0.0193		281.9309

#### **Mitigated Construction Off-Site**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	lay							lb/d	ay		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1526	0.1044	1.1784	3.4400e- 003	0.3297	2.8900e- 003	0.3326	0.0880	2.6600e- 003	0.0907		343.1204	343.1204	0.0101		343.3728
Total	0.1526	0.1044	1.1784	3.4400e- 003	0.3297	2.8900e- 003	0.3326	0.0880	2.6600e- 003	0.0907		343.1204	343.1204	0.0101		343.3728

# 4.0 Operational Detail - Mobile

## 4.1 Mitigation Measures Mobile

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/c	lay							lb/c	lay		
Mitigated	11.0841	13.7362	77.5368	0.1866	18.4297	0.1507	18.5804	4.9148	0.1402	5.0550		19,348.49 52	19,348.495 2	1.4154		19,383.87 93
Unmitigated	11.0841	13.7362	77.5368	0.1866	18.4297	0.1507	18.5804	4.9148	0.1402	5.0550		19,348.49 52	19,348.495 2	1.4154		19,383.87 93

## **4.2 Trip Summary Information**

	Aver	age Daily Trip F	Rate	Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Mid Rise	690.00	623.76	518.88	2,241,964	2,241,964
Fast Food Restaurant w/o Drive Thru	579.92	586.26	776.14	1,102,667	1,102,667
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Supermarket	2,259.52	3,758.43	3522.45	3,501,966	3,501,966
Unenclosed Parking with Elevator	0.00	0.00	0.00		
Total	3,529.44	4,968.45	4,817.47	6,846,597	6,846,597

## **4.3 Trip Type Information**

		Miles			Trip %			Trip Purpos	e %
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
Apartments Mid Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
Fast Food Restaurant w/o Drive	16.60	8.40	6.90	1.50	79.50	19.00	51	37	12
Other Non-Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Supermarket	16.60	8.40	6.90	6.50	74.50	19.00	34	30	36
Unenclosed Parking with	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0

#### 4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Mid Rise	0.577488	0.047363	0.217190	0.126235	0.016240	0.000946	0.003108	0.005000	0.000387	0.000324	0.005485	0.000105	0.000131
Fast Food Restaurant w/o Drive Thru	0.545842	0.044768	0.205288	0.119317	0.015350	0.006227	0.020460	0.031333	0.002546	0.002133	0.005184	0.000692	0.000862
Other Non-Asphalt Surfaces	0.545842	0.044768	0.205288	0.119317	0.015350	0.006227	0.020460	0.031333	0.002546	0.002133	0.005184	0.000692	0.000862
Supermarket	0.545842	0.044768	0.205288	0.119317	0.015350	0.006227	0.020460	0.031333	0.002546	0.002133	0.005184	0.000692	0.000862
Unenclosed Parking with Elevator	0.545842	0.044768	0.205288	0.119317	0.015350	0.006227	0.020460	0.031333	0.002546	0.002133	0.005184	0.000692	0.000862

# 5.0 Energy Detail

Historical Energy Use: N

## **5.1 Mitigation Measures Energy**

Exceed Title 24

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	ay							lb/c	ay		
NaturalGas Mitigated	0.0719	0.6286	0.3650	3.9200e- 003		0.0497	0.0497		0.0497	0.0497		784.4908	784.4908	0.0150	0.0144	789.1526
NaturalGas Unmitigated	0.0833	0.7271	0.4173	4.5400e- 003		0.0575	0.0575		0.0575	0.0575		908.2358	908.2358	0.0174	0.0167	913.6330

## 5.2 Energy by Land Use - NaturalGas

## **Unmitigated**

	NaturalGa s Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr					lb/d	day							lb/d	day		
Apartments Mid Rise	5064.85	0.0546	0.4668	0.1986	2.9800e- 003		0.0377	0.0377		0.0377	0.0377		595.8651	595.8651	0.0114	0.0109	599.4060
Fast Food Restaurant w/o	1264.44	0.0136	0.1240	0.1041	7.4000e- 004		9.4200e- 003	9.4200e- 003		9.4200e- 003	9.4200e- 003		148.7575	148.7575	2.8500e- 003	2.7300e- 003	149.6414
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Supermarket	1390.71	0.0150	0.1363	0.1145	8.2000e- 004		0.0104	0.0104		0.0104	0.0104	D	163.6132	163.6132	3.1400e- 003	3.0000e- 003	164.5855
Unenclosed Parking with	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0833	0.7271	0.4173	4.5400e- 003		0.0575	0.0575		0.0575	0.0575		908.2358	908.2358	0.0174	0.0167	913.6330

#### **Mitigated**

	NaturalGa s Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr					lb/d	day							lb/d	day		
Apartments Mid Rise	4.2695	0.0460	0.3935	0.1674	2.5100e- 003		0.0318	0.0318		0.0318	0.0318		502.2942	502.2942	9.6300e- 003	9.2100e- 003	505.2790
Fast Food Restaurant w/o	1.19379	0.0129	0.1170	0.0983	7.0000e- 004		8.8900e- 003	8.8900e- 003		8.8900e- 003	8.8900e- 003		140.4455	140.4455	2.6900e- 003	2.5700e- 003	141.2800
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Supermarket	1.20488	0.0130	0.1181	0.0992	7.1000e- 004		8.9800e- 003	8.9800e- 003		8.9800e- 003	8.9800e- 003		141.7512	141.7512	2.7200e- 003	2.6000e- 003	142.5935
Unenclosed Parking with	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0719	0.6286	0.3650	3.9200e- 003		0.0497	0.0497		0.0497	0.0497		784.4908	784.4908	0.0150	0.0144	789.1526

## 6.0 Area Detail

## **6.1 Mitigation Measures Area**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	lay							lb/d	ay		
Mitigated	4.0507	0.1314	11.4031	6.0000e- 004		0.0631	0.0631		0.0631	0.0631	0.0000	20.5331	20.5331	0.0198	0.0000	21.0281
Unmitigated	4.0507	0.1314	11.4031	6.0000e- 004		0.0631	0.0631		0.0631	0.0631	0.0000	20.5331	20.5331	0.0198	0.0000	21.0281

## 6.2 Area by SubCategory

## **Unmitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory					lb/c	lay							lb/d	ay		
Architectural Coating	0.0676					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	3.6386	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,				0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.3445	0.1314	11.4031	6.0000e- 004		0.0631	0.0631		0.0631	0.0631		20.5331	20.5331	0.0198		21.0281
Total	4.0507	0.1314	11.4031	6.0000e- 004		0.0631	0.0631		0.0631	0.0631	0.0000	20.5331	20.5331	0.0198	0.0000	21.0281

#### **Mitigated**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory					lb/c	lay							lb/d	lay		
Architectural Coating	0.0676					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	3.6386					0.0000	0.0000		0.0000	0.0000			0.0000	0	0	0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	D	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.3445	0.1314	11.4031	6.0000e- 004		0.0631	0.0631	D	0.0631	0.0631		20.5331	20.5331	0.0198	)	21.0281
Total	4.0507	0.1314	11.4031	6.0000e- 004		0.0631	0.0631		0.0631	0.0631	0.0000	20.5331	20.5331	0.0198	0.0000	21.0281

#### 7.0 Water Detail

## 7.1 Mitigation Measures Water

Install Low Flow Bathroom Faucet

Install Low Flow Kitchen Faucet

Install Low Flow Toilet

Install Low Flow Shower

Use Water Efficient Irrigation System

#### 8.0 Waste Detail

## 8.1 Mitigation Measures Waste

## 9.0 Operational Offroad

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

## 10.0 Stationary Equipment

## **Fire Pumps and Emergency Generators**

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

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

#### **User Defined Equipment**

Equipment Type	Number
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## 11.0 Vegetation

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## **Proposed Project**

## Los Angeles-South Coast County, Mitigation Report

## **Construction Mitigation Summary**

Phase	ROG	NOx	СО	SO2 Percent R	Exhaust PM10 eduction	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Architectural Coating	0.01	0.29	-0.00	0.00	0.94	0.94	0.00	0.00	0.00	0.00	0.00	0.00
Building Construction	0.55	0.22	-0.02	0.00	0.75	0.75	0.00	0.00	0.00	0.00	0.00	0.00
Demolition	0.74	0.54	-0.05	0.00	0.96	0.96	0.00	0.00	0.00	0.00	0.00	0.00
Grading	0.79	0.70	-0.24	0.00	0.96	0.96	0.00	0.00	0.00	0.00	0.00	0.00
Paving	0.67	0.26	-0.11	0.00	0.94	0.94	0.00	0.00	0.00	0.00	0.00	0.00
Site Preparation	0.79	0.71	-0.26	0.00	0.96	0.96	0.00	0.00	0.00	0.00	0.00	0.00

## **OFFROAD Equipment Mitigation**

Equipment Type	Fuel Type	Tier	Number Mitigated	Total Number of Equipment	DPF	Oxidation Catalyst
Air Compressors	Diesel	Tier 4 Interim	1	1	No Change	0.00
Cement and Mortar Mixers	Diesel	Tier 4 Interim	1	1	No Change	0.00
Concrete/Industrial Saws	Diesel	Tier 4 Interim	1	1	No Change	0.00
Cranes	Diesel	Tier 4 Interim	1	1	No Change	0.00
Forklifts	Diesel	Tier 4 Interim	1	1	No Change	0.00
Generator Sets	Diesel	Tier 4 Interim	1	1	No Change	0.00
Graders	Diesel	Tier 4 Interim	2	2	No Change	0.00
Pavers	Diesel	Tier 4 Interim	1	1	No Change	0.00
Paving Equipment	Diesel	Tier 4 Interim	1	1	No Change	0.00

Rollers	Diesel	Tier 4 Interim	1	1	No Change	0.00
Rubber Tired Dozers	Diesel	Tier 4 Interim	3	3	No Change	0.00
Tractors/Loaders/Backhoes	Diesel	Tier 4 Interim	7	7	No Change	0.00
Welders	Diesel	Tier 4 Interim	3	3	No Change	0.00

Equipment Type	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
		Unr	mitigated tons/yr						Unmitiga	ated mt/yr		
Air Compressors	1.09000E-003	7.63000E-003	9.09000E-003	1.00000E-005	4.70000E-004	4.70000E-004	0.00000E+000	1.27663E+000	1.27663E+000	9.00000E-005	0.00000E+000	1.27882E+000
Cement and Mortar Mixers	2.20000E-004	1.38000E-003	1.16000E-003	0.00000E+000	5.00000E-005	5.00000E-005	0.00000E+000	1.71850E-001	1.71850E-001	2.00000E-005	0.00000E+000	1.72300E-001
Concrete/Industrial Saws	4.18000E-003	3.29900E-002	3.68700E-002	6.00000E-005	1.98000E-003	1.98000E-003	0.00000E+000	5.37656E+000	5.37656E+000	3.40000E-004	0.00000E+000	5.38508E+000
Cranes	3.23800E-002	3.82610E-001	1.53340E-001	4.30000E-004	1.56500E-002	1.44000E-002	0.00000E+000	3.80176E+001	3.80176E+001	1.23000E-002	0.00000E+000	3.83250E+001
Forklifts	1.02100E-002	9.25600E-002	8.80200E-002	1.10000E-004	6.73000E-003	6.19000E-003	0.00000E+000	1.00719E+001	1.00719E+001	3.26000E-003	0.00000E+000	1.01533E+001
Generator Sets	3.76800E-002	3.31140E-001	3.69440E-001	6.60000E-004	1.81000E-002	1.81000E-002	0.00000E+000	5.65208E+001	5.65208E+001	3.02000E-003	0.00000E+000	5.65963E+001
Graders	1.19000E-003	1.58100E-002	4.54000E-003	2.00000E-005	5.10000E-004	4.70000E-004	0.00000E+000	1.45766E+000	1.45766E+000	4.70000E-004	0.00000E+000	1.46945E+000
Pavers	9.20000E-004	9.73000E-003	1.08900E-002	2.00000E-005	4.70000E-004	4.30000E-004	0.00000E+000	1.54809E+000	1.54809E+000	5.00000E-004	0.00000E+000	1.56061E+000
Paving Equipment	9.60000E-004	9.70000E-003	1.27100E-002	2.00000E-005	4.80000E-004	4.40000E-004	0.00000E+000	1.78922E+000	1.78922E+000	5.80000E-004	0.00000E+000	1.80369E+000
Rollers	8.30000E-004	8.42000E-003	8.23000E-003	1.00000E-005	5.10000E-004	4.70000E-004	0.00000E+000	1.00846E+000	1.00846E+000	3.30000E-004	0.00000E+000	1.01662E+000
Rubber Tired Dozers	1.33600E-002	1.40240E-001	5.11300E-002	1.10000E-004	6.87000E-003	6.32000E-003	0.00000E+000	9.28809E+000	9.28809E+000	3.00000E-003	0.00000E+000	9.36319E+000
Tractors/Loaders/B ackhoes	2.26200E-002	2.27910E-001	2.56160E-001	3.50000E-004	1.40500E-002	1.29200E-002	0.00000E+000	3.07695E+001	3.07695E+001	9.95000E-003	0.00000E+000	3.10183E+001
Welders	9.63000E-002	4.61380E-001	5.22370E-001	7.70000E-004	2.40200E-002	2.40200E-002	0.00000E+000	5.64662E+001	5.64662E+001	7.81000E-003	0.00000E+000	5.66616E+001

Equipment Type	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	Mitigated tons/yr								Mitigat	ed mt/yr		
Air Compressors	2.70000E-004	5.30000E-003	9.16000E-003	1.00000E-005	2.00000E-005	2.00000E-005	0.00000E+000	1.27663E+000	1.27663E+000	9.00000E-005	0.00000E+000	1.27882E+000
Cement and Mortar Mixers	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.71850E-001	1.71850E-001	2.00000E-005	0.00000E+000	1.72300E-001
Concrete/Industrial Saws	1.15000E-003	2.23200E-002	3.85900E-002	6.00000E-005	8.00000E-005	8.00000E-005	0.00000E+000	5.37656E+000	5.37656E+000	3.40000E-004	0.00000E+000	5.38507E+000
Cranes	7.09000E-003	1.14310E-001	2.30390E-001	4.30000E-004	7.10000E-004	7.10000E-004	0.00000E+000	3.80175E+001	3.80175E+001	1.23000E-002	0.00000E+000	3.83249E+001
Forklifts	2.59000E-003	5.03900E-002	8.71200E-002	1.10000E-004	1.90000E-004	1.90000E-004	0.00000E+000	1.00718E+001	1.00718E+001	3.26000E-003	0.00000E+000	1.01533E+001

Generator Sets	1.20600E-002	2.34610E-001	4.05640E-001	6.60000E-004	8.80000E-004	8.80000E-004	0.00000E+000	5.65207E+001	5.65207E+001	3.02000E-003	0.00000E+000	5.65963E+001
Graders	2.70000E-004	4.36000E-003	8.79000E-003	2.00000E-005	3.00000E-005	3.00000E-005	0.00000E+000	1.45766E+000	1.45766E+000	4.70000E-004	0.00000E+000	1.46945E+000
Pavers	2.20000E-004	7.76000E-003	1.33600E-002	2.00000E-005	3.00000E-005	3.00000E-005	0.00000E+000	1.54809E+000	1.54809E+000	5.00000E-004	0.00000E+000	1.56061E+000
Paving Equipment	2.50000E-004	9.01000E-003	1.55100E-002	2.00000E-005	3.00000E-005	3.00000E-005	0.00000E+000	1.78922E+000	1.78922E+000	5.80000E-004	0.00000E+000	1.80369E+000
Rollers	2.60000E-004	5.02000E-003	8.68000E-003	1.00000E-005	2.00000E-005	2.00000E-005	0.00000E+000	1.00846E+000	1.00846E+000	3.30000E-004	0.00000E+000	1.01661E+000
Rubber Tired Dozers	1.73000E-003	2.78200E-002	5.60700E-002	1.10000E-004	1.70000E-004	1.70000E-004	0.00000E+000	9.28808E+000	9.28808E+000	3.00000E-003	0.00000E+000	9.36317E+000
Tractors/Loaders/Bac khoes	7.85000E-003	1.52730E-001	2.64070E-001	3.50000E-004	5.70000E-004	5.70000E-004	0.00000E+000	3.07695E+001	3.07695E+001	9.95000E-003	0.00000E+000	3.10183E+001
Welders	1.31400E-002	4.98340E-001	4.49050E-001	7.70000E-004	1.40200E-002	1.40200E-002	0.00000E+000	5.64661E+001	5.64661E+001	7.81000E-003	0.00000E+000	5.66615E+001

Equipment Type	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	Percent Reduction											
Air Compressors	7.52294E-001	3.05374E-001	-7.70077E-003	0.00000E+000	9.57447E-001	9.57447E-001	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000
Cement and Mortar Mixers	1.00000E+000	1.00000E+000	1.00000E+000	0.00000E+000	1.00000E+000	1.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000
Concrete/Industrial Saws	7.24880E-001	3.23431E-001	-4.66504E-002	0.00000E+000	9.59596E-001	9.59596E-001	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.85698E-006
Cranes	7.81038E-001	7.01236E-001	-5.02478E-001	0.00000E+000	9.54633E-001	9.50694E-001	0.00000E+000	1.31518E-006	1.31518E-006	0.00000E+000	0.00000E+000	1.30463E-006
Forklifts	7.46327E-001	4.55596E-001	1.02249E-002	0.00000E+000	9.71768E-001	9.69305E-001	0.00000E+000	9.92866E-007	9.92866E-007	0.00000E+000	0.00000E+000	9.84903E-007
Generator Sets	6.79936E-001	2.91508E-001	-9.79861E-002	0.00000E+000	9.51381E-001	9.51381E-001	0.00000E+000	1.23848E-006	1.23848E-006	0.00000E+000	0.00000E+000	1.23683E-006
Graders	7.73109E-001	7.24225E-001	-9.36123E-001	0.00000E+000	9.41176E-001	9.36170E-001	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000
Pavers	7.60870E-001	2.02467E-001	-2.26814E-001	0.00000E+000	9.36170E-001	9.30233E-001	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000
Paving Equipment	7.39583E-001	7.11340E-002	-2.20299E-001	0.00000E+000	9.37500E-001	9.31818E-001	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000
Rollers	6.86747E-001	4.03800E-001	-5.46780E-002	0.00000E+000	9.60784E-001	9.57447E-001	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	9.83652E-006
Rubber Tired Dozers	8.70509E-001	8.01626E-001	-9.66165E-002	0.00000E+000	9.75255E-001	9.73101E-001	0.00000E+000	1.07665E-006	1.07665E-006	0.00000E+000	0.00000E+000	2.13602E-006
Tractors/Loaders/Bac khoes	6.52962E-001	3.29867E-001	-3.08791E-002	0.00000E+000	9.59431E-001	9.55882E-001	0.00000E+000	1.29999E-006	1.29999E-006	0.00000E+000	0.00000E+000	9.67171E-007
Welders	8.63551E-001	-8.01075E-002	1.40360E-001	0.00000E+000	4.16320E-001	4.16320E-001	0.00000E+000	1.23968E-006	1.23968E-006	0.00000E+000	0.00000E+000	1.23541E-006

## **Fugitive Dust Mitigation**

Yes/No	Mitigation Measure	Mitigation Input	Mitigation Input	Mitigation Input
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No	Soil Stabilizer for unpaved Roads	PM10 Reduction		PM2.5 Reduction	0.00		
Yes	Replace Ground Cover of Area Disturbed	PM10 Reduction		PM2.5 Reduction	5.00		
Yes	Water Exposed Area	PM10 Reduction		PM2.5 Reduction	: :	Frequency (per day)	3.00
No	Unpaved Road Mitigation	Moisture Content %		Vehicle Speed (mph)	15.00		
Yes	Clean Paved Road	% PM Reduction	9.00				

		Unmi	Unmitigated Mitigated		Percent Reduction		
Phase	Source	PM10	PM2.5	PM10	PM2.5	PM10	PM2.5
Architectural Coating	Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00
Architectural Coating	Roads	0.00	0.00	0.00	0.00	0.07	0.09
Building Construction	Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00
Building Construction	Roads	0.20	0.05	0.18	0.05	0.08	0.07
Demolition	Fugitive Dust	0.01	0.00	0.00	0.00	0.63	0.63
Demolition	Roads	0.00	0.00	0.00	0.00	0.07	0.06
Grading	Fugitive Dust	0.01	0.01	0.00	0.00	0.63	0.63
Grading	Roads	0.00	0.00	0.00	0.00	0.09	0.17
Paving	Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00
Paving	Roads	0.00	0.00	0.00	0.00	0.07	0.05
Site Preparation	Fugitive Dust	0.01	0.00	0.00	0.00	0.63	0.63
Site Preparation	Roads	0.00	0.00	0.00	0.00	0.17	0.00

## **Operational Percent Reduction Summary**

Category	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Architectural Coating	0.00	0.00		Reduction 0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Consumer Products	0.00	0.00						)	0.00	0.00		
Electricity	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.70	2.70	2.68	2.81	2.70
Hearth	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Landscaping	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Mobile	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Natural Gas	13.68	13.53	12.53	13.25	13.62	13.62	0.00	13.62	13.62	13.54	13.77	13.62
Water Indoor	0.00	0.00	0.00	0.00	0.00	0.00	20.00	16.05	16.34	19.37	19.74	16.53
Water Outdoor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

## **Operational Mobile Mitigation**

#### Project Setting:

Mitigation	Category	Measure	% Reduction	Input Value 1	Input Value 2	Input Value 3
No	Land Use	Increase Density	0.00			
No	Land Use	Increase Diversity	0.15	0.40		
No	Land Use	Improve Walkability Design	0.00			
No	Land Use	Improve Destination Accessibility	0.00			
No	Land Use	Increase Transit Accessibility	0.25			
No	Land Use	Integrate Below Market Rate Housing	0.00			
	Land Use	Land Use SubTotal	0.00			
No	Neighborhood Enhancements	Improve Pedestrian Network				
No	Neighborhood Enhancements	Provide Traffic Calming Measures				
No	Neighborhood Enhancements	Implement NEV Network	0.00			

	Neighborhood Enhancements	Neighborhood Enhancements Subtotal	0.00		
No	Parking Policy Pricing	Limit Parking Supply	0.00		
No	Parking Policy Pricing	Unbundle Parking Costs	0.00	######################################	Tananananananananananananananananananan
No	Parking Policy Pricing	On-street Market Pricing	0.00		
	Parking Policy Pricing	Parking Policy Pricing Subtotal	0.00		
No	Transit Improvements	Provide BRT System	0.00		
No	Transit Improvements	Expand Transit Network	0.00		
No	Transit Improvements	Increase Transit Frequency	0.00		
	Transit Improvements	Transit Improvements Subtotal	0.00		Danisianianianianianianianianianianianianiani
		Land Use and Site Enhancement Subtotal	0.00		
No	Commute	Implement Trip Reduction Program			
No	Commute	Transit Subsidy			
No	Commute	Implement Employee Parking "Cash Out"			
No	Commute	Workplace Parking Charge			<u></u>
No	Commute	Encourage Telecommuting and Alternative Work Schedules	0.00		
No	Commute	Market Commute Trip Reduction Option	0.00		
No	Commute	Employee Vanpool/Shuttle	0.00	2.00	
No	Commute	Provide Ride Sharing Program			
	Commute	Commute Subtotal	0.00		
No	School Trip	Implement School Bus Program	0.00		Danisianianianianianianianianianianianianiani
		Total VMT Reduction	0.00		

## **Area Mitigation**

Measure Implemented	Mitigation Measure	Input Value
No	Only Natural Gas Hearth	
No	No Hearth	
No	Use Low VOC Cleaning Supplies	
No	Use Low VOC Paint (Residential Interior)	10.00
No	Use Low VOC Paint (Residential Exterior)	10.00
No	Use Low VOC Paint (Non-residential Interior)	10.00
No	Use Low VOC Paint (Non-residential Exterior)	10.00
No	Use Low VOC Paint (Parking)	100.00
No	% Electric Lawnmower	
No	% Electric Leafblower	
No	% Electric Chainsaw	

## **Energy Mitigation Measures**

Measure Implemented	Mitigation Measure	Input Value 1	Input Value 2
Yes	Exceed Title 24	30.00	
No	Install High Efficiency Lighting		
No	On-site Renewable		

Appliance Type	Land Use Subtype	% Improvement
ClothWasher		30.00
DishWasher		15.00
Fan		50.00
Refrigerator		15.00

## **Water Mitigation Measures**

Measure Implemented	Mitigation Measure	Input Value 1	Input Value 2
No	Apply Water Conservation on Strategy	0.00	0.00
No	Use Reclaimed Water	0.00	0.00
No	Use Grey Water	0.00	
Yes	Install low-flow bathroom faucet	32.00	
Yes	Install low-flow Kitchen faucet	18.00	0
Yes	Install low-flow Toilet	20.00	
Yes	Install low-flow Shower	20.00	,
No	Turf Reduction	0.00	
Yes	Use Water Efficient Irrigation Systems	6.10	,
No	Water Efficient Landscape	0.00	0.00

## **Solid Waste Mitigation**

Mitigation Measures	Input Value
Institute Recycling and Composting Services Percent Reduction in Waste Disposed	

# CalEEMod Output: Existing Operation: Year 2020

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CalEEMod Version: CalEEMod.2016.3.2

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Date: 7/18/2020 6:14 PM

Existing - Los Angeles-South Coast County, Annual

#### **Existing**

#### Los Angeles-South Coast County, Annual

#### 1.0 Project Characteristics

#### 1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Asphalt Surfaces	1.31	Acre	1.31	0.00	0
Supermarket	9.10	1000sqft	0.28	9,100.00	0

#### 1.2 Other Project Characteristics

 Urbanization
 Urban
 Wind Speed (m/s)
 2.2
 Precipitation Freq (Days)
 33

 Climate Zone
 9
 Operational Year
 2020

Utility Company Southern California Edison

 CO2 Intensity
 531.44
 CH4 Intensity
 0.029
 N2O Intensity
 0.006

 (lb/MWhr)
 (lb/MWhr)
 (lb/MWhr)
 (lb/MWhr)

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

Project Characteristics - See assumptions file.

Land Use - See assumptions file.

Construction Phase -

Vehicle Trips - See assumptions file

Area Coating - Assumes no striping

Energy Use -Water And Wastewater - Assumes 100% aerobic.

Table Name	Column Name	Default Value	New Value
tblLandUse	LandUseSquareFeet	57,063.60	0.00
tblLandUse	LotAcreage	0.21	0.28
tblProjectCharacteristics	CO2IntensityFactor	702.44	531.44
tblSolidWaste	SolidWasteGenerationRate	51.32	47.94
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tblVehicleEF	HHD	1,679.50	1,557.30
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tblVehicleEF	HHD	0.03	0.03

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tblVehicleEF	HHD	0.02	0.06
tblVehicleEF	HHD	9.9000e-005	3.0000e-006
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tblVehicleEF	HHD	3.33	0.01
tblVehicleEF	HHD	5,051.17	1,147.09

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tblVehicleEF	HHD	0.04	0.04
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tblVehicleEF	HHD	0.03	0.03
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tblVehicleEF	LDT2	0.05	0.08
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tblVehicleEF	LDT2	1.07	1.35
tblVehicleEF	LDT2	1.43	2.44
tblVehicleEF	LDT2	426.32	380.44
tblVehicleEF	LDT2	83.22	72.90
tblVehicleEF	LDT2	0.09	0.10
tblVehicleEF	LDT2	0.13	0.32
tblVehicleEF	LDT2	2.1760e-003	2.1380e-003
tblVehicleEF	LDT2	2.3520e-003	2.0990e-003
tblVehicleEF	LDT2	2.0020e-003	1.9680e-003
tblVehicleEF	LDT2	2.1630e-003	1.9300e-003
tblVehicleEF	LDT2	0.08	0.12
tblVehicleEF	LDT2	0.12	0.14
tblVehicleEF	LDT2	0.07	0.11
tblVehicleEF	LDT2	0.02	0.03
tblVehicleEF	LDT2	0.06	0.41

tblVehicleEF	LDT2	0.10	0.34
tblVehicleEF	LDT2	4.2730e-003	3.7640e-003
tblVehicleEF	LDT2	8.5600e-004	7.2100e-004
tblVehicleEF	LDT2	0.08	0.12
tblVehicleEF	LDT2	0.12	0.14
tblVehicleEF	LDT2	0.07	0.11
tblVehicleEF	LDT2	0.03	0.04
tblVehicleEF	LDT2	0.06	0.41
tblVehicleEF	LDT2	0.11	0.37
tblVehicleEF	LDT2	8.4620e-003	6.2020e-003
tblVehicleEF	LDT2	8.4930e-003	0.08
tblVehicleEF	LDT2	0.94	1.19
tblVehicleEF	LDT2	1.73	2.96
tblVehicleEF	LDT2	401.27	362.75
tblVehicleEF	LDT2	83.22	73.90
tblVehicleEF	LDT2	0.10	0.11
tblVehicleEF	LDT2	0.15	0.35
tblVehicleEF	LDT2	2.1760e-003	2.1380e-003
tblVehicleEF	LDT2	2.3520e-003	2.0990e-003
tblVehicleEF	LDT2	2.0020e-003	1.9680e-003
tblVehicleEF	LDT2	2.1630e-003	1.9300e-003
tblVehicleEF	LDT2	0.05	0.08
tblVehicleEF	LDT2	0.13	0.15
tblVehicleEF	LDT2	0.05	0.08
tblVehicleEF	LDT2	0.02	0.03
tblVehicleEF	LDT2	0.08	0.52
tblVehicleEF	LDT2	0.11	0.39

tblVehicleEF	LDT2	4.0210e-003	3.5890e-003
tblVehicleEF	LDT2	8.6200e-004	7.3100e-004
tblVehicleEF	LDT2	0.05	0.08
tblVehicleEF	LDT2	0.13	0.15
tblVehicleEF	LDT2	0.05	0.08
tblVehicleEF	LDT2	0.03	0.04
tblVehicleEF	LDT2	0.08	0.52
tblVehicleEF	LDT2	0.13	0.42
tblVehicleEF	LHD1	6.3570e-003	6.1110e-003
tblVehicleEF	LHD1	0.02	7.2760e-003
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	0.16	0.20
tblVehicleEF	LHD1	1.07	0.85
tblVehicleEF	LHD1	3.29	1.27
tblVehicleEF	LHD1	8.89	8.96
tblVehicleEF	LHD1	622.45	695.35
tblVehicleEF	LHD1	35.85	13.43
tblVehicleEF	LHD1	0.07	0.05
tblVehicleEF	LHD1	1.15	0.81
tblVehicleEF	LHD1	1.13	0.38
tblVehicleEF	LHD1	7.9800e-004	6.7500e-004
tblVehicleEF	LHD1	9.8890e-003	9.5180e-003
tblVehicleEF	LHD1	9.6360e-003	6.9410e-003
tblVehicleEF	LHD1	1.1970e-003	3.3400e-004
tblVehicleEF	LHD1	7.6300e-004	6.4600e-004
tblVehicleEF	LHD1	2.4720e-003	2.3800e-003
tblVehicleEF	LHD1	9.1880e-003	6.6080e-003

tblVehicleEF	LHD1	1.1020e-003	3.0700e-004
tblVehicleEF	LHD1	3.4680e-003	2.9780e-003
tblVehicleEF	LHD1	0.11	0.09
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	2.0560e-003	1.7700e-003
tblVehicleEF	LHD1	0.07	0.06
tblVehicleEF	LHD1	0.33	0.64
tblVehicleEF	LHD1	0.32	0.10
tblVehicleEF	LHD1	9.0000e-005	8.7000e-005
tblVehicleEF	LHD1	6.1270e-003	6.8010e-003
tblVehicleEF	LHD1	4.2000e-004	1.3300e-004
tblVehicleEF	LHD1	3.4680e-003	2.9780e-003
tblVehicleEF	LHD1	0.11	0.09
tblVehicleEF	LHD1	0.03	0.03
tblVehicleEF	LHD1	2.0560e-003	1.7700e-003
tblVehicleEF	LHD1	0.10	0.08
tblVehicleEF	LHD1	0.33	0.64
tblVehicleEF	LHD1	0.35	0.11
tblVehicleEF	LHD1	6.3570e-003	6.1240e-003
tblVehicleEF	LHD1	0.02	7.4190e-003
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	0.16	0.20
tblVehicleEF	LHD1	1.08	0.87
tblVehicleEF	LHD1	3.14	1.22
tblVehicleEF	LHD1	8.89	8.96
tblVehicleEF	LHD1	622.45	695.38
tblVehicleEF	LHD1	35.85	13.33

tblVehicleEF	LHD1	0.07	0.05
tblVehicleEF	LHD1	1.07	0.76
tblVehicleEF	LHD1	1.08	0.36
tblVehicleEF	LHD1	7.9800e-004	6.7500e-004
tblVehicleEF	LHD1	9.8890e-003	9.5180e-003
tblVehicleEF	LHD1	9.6360e-003	6.9410e-003
tblVehicleEF	LHD1	1.1970e-003	3.3400e-004
tblVehicleEF	LHD1	7.6300e-004	6.4600e-004
tblVehicleEF	LHD1	2.4720e-003	2.3800e-003
tblVehicleEF	LHD1	9.1880e-003	6.6080e-003
tblVehicleEF	LHD1	1.1020e-003	3.0700e-004
tblVehicleEF	LHD1	5.2080e-003	4.3920e-003
tblVehicleEF	LHD1	0.12	0.10
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	2.9180e-003	2.4690e-003
tblVehicleEF	LHD1	0.08	0.06
tblVehicleEF	LHD1	0.32	0.62
tblVehicleEF	LHD1	0.31	0.09
tblVehicleEF	LHD1	9.0000e-005	8.7000e-005
tblVehicleEF	LHD1	6.1280e-003	6.8010e-003
tblVehicleEF	LHD1	4.1700e-004	1.3200e-004
tblVehicleEF	LHD1	5.2080e-003	4.3920e-003
tblVehicleEF	LHD1	0.12	0.10
tblVehicleEF	LHD1	0.03	0.03
tblVehicleEF	LHD1	2.9180e-003	2.4690e-003
tblVehicleEF	LHD1	0.10	0.08
tblVehicleEF	LHD1	0.32	0.62

tblVehicleEF	LHD1	0.34	0.10
tblVehicleEF	LHD1	6.3570e-003	6.1080e-003
tblVehicleEF	LHD1	0.02	7.2360e-003
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	0.16	0.20
tblVehicleEF	LHD1	1.06	0.85
tblVehicleEF	LHD1	3.32	1.28
tblVehicleEF	LHD1	8.89	8.96
tblVehicleEF	LHD1	622.45	695.35
tblVehicleEF	LHD1	35.85	13.45
tblVehicleEF	LHD1	0.07	0.05
tblVehicleEF	LHD1	1.13	0.80
tblVehicleEF	LHD1	1.14	0.38
tblVehicleEF	LHD1	7.9800e-004	6.7500e-004
tblVehicleEF	LHD1	9.8890e-003	9.5180e-003
tblVehicleEF	LHD1	9.6360e-003	6.9410e-003
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tblVehicleEF	LHD1	7.6300e-004	6.4600e-004
tblVehicleEF	LHD1	2.4720e-003	2.3800e-003
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tblVehicleEF	LHD1	1.1020e-003	3.0700e-004
tblVehicleEF	LHD1	3.6860e-003	3.1700e-003
tblVehicleEF	LHD1	0.13	0.11
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	2.0330e-003	1.7530e-003
tblVehicleEF	LHD1	0.07	0.06
tblVehicleEF	LHD1	0.35	0.70

tblVehicleEF	LHD1	0.32	0.10
tblVehicleEF	LHD1	9.0000e-005	8.7000e-005
tblVehicleEF	LHD1	6.1270e-003	6.8010e-003
tblVehicleEF	LHD1	4.2100e-004	1.3300e-004
tblVehicleEF	LHD1	3.6860e-003	3.1700e-003
tblVehicleEF	LHD1	0.13	0.11
tblVehicleEF	LHD1	0.03	0.03
tblVehicleEF	LHD1	2.0330e-003	1.7530e-003
tblVehicleEF	LHD1	0.10	0.07
tblVehicleEF	LHD1	0.35	0.70
tblVehicleEF	LHD1	0.36	0.11
tblVehicleEF	LHD2	4.6500e-003	4.3800e-003
tblVehicleEF	LHD2	5.8620e-003	5.0500e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	0.14	0.16
tblVehicleEF	LHD2	0.45	0.57
tblVehicleEF	LHD2	1.67	0.89
tblVehicleEF	LHD2	13.53	13.42
tblVehicleEF	LHD2	634.55	698.02
tblVehicleEF	LHD2	30.01	10.61
tblVehicleEF	LHD2	0.10	0.09
tblVehicleEF	LHD2	0.88	1.08
tblVehicleEF	LHD2	0.66	0.27
tblVehicleEF	LHD2	1.1790e-003	1.1740e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	9.7680e-003	0.01
tblVehicleEF	LHD2	5.5800e-004	1.9100e-004

tblVehicleEF	LHD2	1.1280e-003	1.1230e-003
tblVehicleEF	LHD2	2.6300e-003	2.5990e-003
tblVehicleEF	LHD2	9.3300e-003	0.01
tblVehicleEF	LHD2	5.1400e-004	1.7600e-004
tblVehicleEF	LHD2	1.4140e-003	1.9030e-003
tblVehicleEF	LHD2	0.05	0.06
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	8.8000e-004	1.1330e-003
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tblVehicleEF	LHD2	0.11	0.44
tblVehicleEF	LHD2	0.15	0.07
tblVehicleEF	LHD2	1.3300e-004	1.2900e-004
tblVehicleEF	LHD2	6.1920e-003	6.7670e-003
tblVehicleEF	LHD2	3.3100e-004	1.0500e-004
tblVehicleEF	LHD2	1.4140e-003	1.9030e-003
tblVehicleEF	LHD2	0.05	0.06
tblVehicleEF	LHD2	0.02	0.03
tblVehicleEF	LHD2	8.8000e-004	1.1330e-003
tblVehicleEF	LHD2	0.06	0.07
tblVehicleEF	LHD2	0.11	0.44
tblVehicleEF	LHD2	0.17	0.07
tblVehicleEF	LHD2	4.6500e-003	4.3900e-003
tblVehicleEF	LHD2	5.9540e-003	5.1160e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	0.14	0.16
tblVehicleEF	LHD2	0.46	0.58
tblVehicleEF	LHD2	1.60	0.85

tblVehicleEF	LHD2	13.53	13.42
tblVehicleEF	LHD2	634.55	698.03
tblVehicleEF	LHD2	30.01	10.54
tblVehicleEF	LHD2	0.10	0.09
tblVehicleEF	LHD2	0.83	1.02
tblVehicleEF	LHD2	0.63	0.26
tblVehicleEF	LHD2	1.1790e-003	1.1740e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	9.7680e-003	0.01
tblVehicleEF	LHD2	5.5800e-004	1.9100e-004
tblVehicleEF	LHD2	1.1280e-003	1.1230e-003
tblVehicleEF	LHD2	2.6300e-003	2.5990e-003
tblVehicleEF	LHD2	9.3300e-003	0.01
tblVehicleEF	LHD2	5.1400e-004	1.7600e-004
tblVehicleEF	LHD2	2.1090e-003	2.8050e-003
tblVehicleEF	LHD2	0.05	0.07
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	1.2380e-003	1.5800e-003
tblVehicleEF	LHD2	0.05	0.06
tblVehicleEF	LHD2	0.10	0.42
tblVehicleEF	LHD2	0.15	0.07
tblVehicleEF	LHD2	1.3300e-004	1.2900e-004
tblVehicleEF	LHD2	6.1920e-003	6.7670e-003
tblVehicleEF	LHD2	3.3000e-004	1.0400e-004
tblVehicleEF	LHD2	2.1090e-003	2.8050e-003
tblVehicleEF	LHD2	0.05	0.07
tblVehicleEF	LHD2	0.02	0.03

tblVehicleEF	LHD2	1.2380e-003	1.5800e-003
tblVehicleEF	LHD2	0.06	0.07
tblVehicleEF	LHD2	0.10	0.42
tblVehicleEF	LHD2	0.16	0.07
tblVehicleEF	LHD2	4.6500e-003	4.3790e-003
tblVehicleEF	LHD2	5.8380e-003	5.0320e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	0.14	0.16
tblVehicleEF	LHD2	0.45	0.57
tblVehicleEF	LHD2	1.68	0.90
tblVehicleEF	LHD2	13.53	13.42
tblVehicleEF	LHD2	634.55	698.01
tblVehicleEF	LHD2	30.01	10.62
tblVehicleEF	LHD2	0.10	0.09
tblVehicleEF	LHD2	0.87	1.06
tblVehicleEF	LHD2	0.67	0.27
tblVehicleEF	LHD2	1.1790e-003	1.1740e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	9.7680e-003	0.01
tblVehicleEF	LHD2	5.5800e-004	1.9100e-004
tblVehicleEF	LHD2	1.1280e-003	1.1230e-003
tblVehicleEF	LHD2	2.6300e-003	2.5990e-003
tblVehicleEF	LHD2	9.3300e-003	0.01
tblVehicleEF	LHD2	5.1400e-004	1.7600e-004
tblVehicleEF	LHD2	1.4720e-003	2.0040e-003
tblVehicleEF	LHD2	0.05	0.07
tblVehicleEF	LHD2	0.02	0.02

tblVehicleEF	LHD2	8.5900e-004	1.1070e-003
tblVehicleEF	LHD2	0.05	0.06
tblVehicleEF	LHD2	0.12	0.48
tblVehicleEF	LHD2	0.16	0.07
tblVehicleEF	LHD2	1.3300e-004	1.2900e-004
tblVehicleEF	LHD2	6.1910e-003	6.7670e-003
tblVehicleEF	LHD2	3.3100e-004	1.0500e-004
tblVehicleEF	LHD2	1.4720e-003	2.0040e-003
tblVehicleEF	LHD2	0.05	0.07
tblVehicleEF	LHD2	0.02	0.03
tblVehicleEF	LHD2	8.5900e-004	1.1070e-003
tblVehicleEF	LHD2	0.06	0.07
tblVehicleEF	LHD2	0.12	0.48
tblVehicleEF	LHD2	0.17	0.08
tblVehicleEF	MCY	0.53	0.38
tblVehicleEF	MCY	0.15	0.24
tblVehicleEF	MCY	19.48	19.74
tblVehicleEF	MCY	9.63	8.47
tblVehicleEF	MCY	187.52	223.45
tblVehicleEF	MCY	45.30	60.30
tblVehicleEF	MCY	1.13	1.13
tblVehicleEF	MCY	0.31	0.26
tblVehicleEF	MCY	2.3100e-003	2.3150e-003
tblVehicleEF	MCY	4.0640e-003	3.4460e-003
tblVehicleEF	MCY	2.1620e-003	2.1660e-003
tblVehicleEF	MCY	3.8350e-003	3.2510e-003
tblVehicleEF	MCY	1.07	1.10

tblVehicleEF	MCY	0.66	0.69
tblVehicleEF	MCY	0.66	0.68
tblVehicleEF	MCY	2.62	2.65
tblVehicleEF	MCY	0.63	2.16
tblVehicleEF	MCY	2.08	1.84
tblVehicleEF	MCY	2.2730e-003	2.2110e-003
tblVehicleEF	MCY	6.7100e-004	5.9700e-004
tblVehicleEF	MCY	1.07	1.10
tblVehicleEF	MCY	0.66	0.69
tblVehicleEF	MCY	0.66	0.68
tblVehicleEF	MCY	3.25	3.27
tblVehicleEF	MCY	0.63	2.16
tblVehicleEF	MCY	2.26	2.00
tblVehicleEF	MCY	0.52	0.38
tblVehicleEF	MCY	0.14	0.21
tblVehicleEF	MCY	18.74	18.94
tblVehicleEF	MCY	8.81	7.73
tblVehicleEF	MCY	187.52	221.94
tblVehicleEF	MCY	45.30	58.43
tblVehicleEF	MCY	0.99	0.99
tblVehicleEF	MCY	0.29	0.25
tblVehicleEF	MCY	2.3100e-003	2.3150e-003
tblVehicleEF	MCY	4.0640e-003	3.4460e-003
tblVehicleEF	MCY	2.1620e-003	2.1660e-003
tblVehicleEF	MCY	3.8350e-003	3.2510e-003
tblVehicleEF	MCY	1.74	1.75
tblVehicleEF	MCY	0.72	0.75

tblVehicleEF	MCY	1.10	1.09
tblVehicleEF	MCY	2.56	2.58
tblVehicleEF	MCY	0.60	2.03
tblVehicleEF	MCY	1.85	1.63
tblVehicleEF	MCY	2.2590e-003	2.1960e-003
tblVehicleEF	MCY	6.5100e-004	5.7800e-004
tblVehicleEF	MCY	1.74	1.75
tblVehicleEF	MCY	0.72	0.75
tblVehicleEF	MCY	1.10	1.09
tblVehicleEF	MCY	3.17	3.18
tblVehicleEF	MCY	0.60	2.03
tblVehicleEF	MCY	2.01	1.77
tblVehicleEF	MCY	0.53	0.39
tblVehicleEF	MCY	0.16	0.24
tblVehicleEF	MCY	19.59	19.90
tblVehicleEF	MCY	9.76	8.61
tblVehicleEF	MCY	187.52	223.76
tblVehicleEF	MCY	45.30	60.68
tblVehicleEF	MCY	1.11	1.11
tblVehicleEF	MCY	0.31	0.27
tblVehicleEF	MCY	2.3100e-003	2.3150e-003
tblVehicleEF	MCY	4.0640e-003	3.4460e-003
tblVehicleEF	MCY	2.1620e-003	2.1660e-003
tblVehicleEF	MCY	3.8350e-003	3.2510e-003
tblVehicleEF	MCY	1.17	1.19
tblVehicleEF	MCY	0.86	0.89
tblVehicleEF	MCY	0.63	0.65

tblVehicleEF	MCY	2.64	2.66
tblVehicleEF	MCY	0.73	2.48
tblVehicleEF	MCY	2.12	1.88
tblVehicleEF	MCY	2.2750e-003	2.2140e-003
tblVehicleEF	MCY	6.7500e-004	6.0000e-004
tblVehicleEF	MCY	1.17	1.19
tblVehicleEF	MCY	0.86	0.89
tblVehicleEF	MCY	0.63	0.65
tblVehicleEF	MCY	3.26	3.29
tblVehicleEF	MCY	0.73	2.48
tblVehicleEF	MCY	2.31	2.05
tblVehicleEF	MDV	0.02	9.2300e-003
tblVehicleEF	MDV	0.02	0.10
tblVehicleEF	MDV	1.77	1.63
tblVehicleEF	MDV	3.11	3.48
tblVehicleEF	MDV	543.27	449.17
tblVehicleEF	MDV	109.34	89.67
tblVehicleEF	MDV	0.19	0.16
tblVehicleEF	MDV	0.29	0.42
tblVehicleEF	MDV	2.4830e-003	2.3870e-003
tblVehicleEF	MDV	2.6470e-003	2.3460e-003
tblVehicleEF	MDV	2.2920e-003	2.2020e-003
tblVehicleEF	MDV	2.4370e-003	2.1600e-003
tblVehicleEF	MDV	0.07	0.09
tblVehicleEF	MDV	0.17	0.16
tblVehicleEF	MDV	0.07	0.10
tblVehicleEF	MDV	0.05	0.05

tblVehicleEF	MDV	0.09	0.47
tblVehicleEF	MDV	0.25	0.49
tblVehicleEF	MDV	5.4490e-003	4.4410e-003
tblVehicleEF	MDV	1.1480e-003	8.8700e-004
tblVehicleEF	MDV	0.07	0.09
tblVehicleEF	MDV	0.17	0.16
tblVehicleEF	MDV	0.07	0.10
tblVehicleEF	MDV	0.07	0.06
tblVehicleEF	MDV	0.09	0.47
tblVehicleEF	MDV	0.27	0.54
tblVehicleEF	MDV	0.02	9.6790e-003
tblVehicleEF	MDV	0.02	0.09
tblVehicleEF	MDV	1.90	1.75
tblVehicleEF	MDV	2.66	2.97
tblVehicleEF	MDV	567.14	462.77
tblVehicleEF	MDV	109.34	88.67
tblVehicleEF	MDV	0.17	0.14
tblVehicleEF	MDV	0.26	0.39
tblVehicleEF	MDV	2.4830e-003	2.3870e-003
tblVehicleEF	MDV	2.6470e-003	2.3460e-003
tblVehicleEF	MDV	2.2920e-003	2.2020e-003
tblVehicleEF	MDV	2.4370e-003	2.1600e-003
tblVehicleEF	MDV	0.11	0.14
tblVehicleEF	MDV	0.17	0.16
tblVehicleEF	MDV	0.10	0.13
tblVehicleEF	MDV	0.05	0.05
tblVehicleEF	MDV	0.09	0.44

tblVehicleEF	MDV	0.22	0.44
tblVehicleEF	MDV	5.6890e-003	4.5760e-003
tblVehicleEF	MDV	1.1400e-003	8.7700e-004
tblVehicleEF	MDV	0.11	0.14
tblVehicleEF	MDV	0.17	0.16
tblVehicleEF	MDV	0.10	0.13
tblVehicleEF	MDV	0.07	0.06
tblVehicleEF	MDV	0.09	0.44
tblVehicleEF	MDV	0.24	0.48
tblVehicleEF	MDV	0.02	9.0790e-003
tblVehicleEF	MDV	0.02	0.10
tblVehicleEF	MDV	1.72	1.59
tblVehicleEF	MDV	3.20	3.60
tblVehicleEF	MDV	534.52	444.14
tblVehicleEF	MDV	109.34	89.90
tblVehicleEF	MDV	0.19	0.15
tblVehicleEF	MDV	0.29	0.43
tblVehicleEF	MDV	2.4830e-003	2.3870e-003
tblVehicleEF	MDV	2.6470e-003	2.3460e-003
tblVehicleEF	MDV	2.2920e-003	2.2020e-003
tblVehicleEF	MDV	2.4370e-003	2.1600e-003
tblVehicleEF	MDV	0.07	0.09
tblVehicleEF	MDV	0.18	0.17
tblVehicleEF	MDV	0.07	0.09
tblVehicleEF	MDV	0.05	0.04
tblVehicleEF	MDV	0.11	0.55
tblVehicleEF	MDV	0.25	0.50

tblVehicleEF	MDV	5.3610e-003	4.3920e-003
tblVehicleEF	MDV	1.1500e-003	8.9000e-004
tblVehicleEF	MDV	0.07	0.09
tblVehicleEF	MDV	0.18	0.17
tblVehicleEF	MDV	0.07	0.09
tblVehicleEF	MDV	0.07	0.06
tblVehicleEF	MDV	0.11	0.55
tblVehicleEF	MDV	0.28	0.55
tblVehicleEF	MH	0.04	3.4340e-003
tblVehicleEF	MH	0.03	0.00
tblVehicleEF	MH	3.53	0.31
tblVehicleEF	MH	7.14	0.00
tblVehicleEF	MH	1,138.98	992.05
tblVehicleEF	MH	63.70	0.00
tblVehicleEF	MH	1.26	3.85
tblVehicleEF	MH	0.90	0.00
tblVehicleEF	MH	0.01	0.02
tblVehicleEF	MH	0.02	0.09
tblVehicleEF	MH	1.5790e-003	0.00
tblVehicleEF	MH	3.1950e-003	4.0000e-003
tblVehicleEF	MH	0.02	0.09
tblVehicleEF	MH	1.4630e-003	0.00
tblVehicleEF	MH	1.18	0.00
tblVehicleEF	MH	0.08	0.00
tblVehicleEF	MH	0.49	0.00
tblVehicleEF	MH	0.13	0.07
tblVehicleEF	MH	0.02	0.00

tblVehicleEF	MH	0.43	0.00
tblVehicleEF	MH	0.01	9.3780e-003
tblVehicleEF	MH	7.6200e-004	0.00
tblVehicleEF	MH	1.18	0.00
tblVehicleEF	MH	0.08	0.00
tblVehicleEF	MH	0.49	0.00
tblVehicleEF	MH	0.18	0.08
tblVehicleEF	MH	0.02	0.00
tblVehicleEF	MH	0.47	0.00
tblVehicleEF	MH	0.04	3.4340e-003
tblVehicleEF	MH	0.03	0.00
tblVehicleEF	MH	3.59	0.31
tblVehicleEF	MH	6.72	0.00
tblVehicleEF	MH	1,138.98	992.05
tblVehicleEF	MH	63.70	0.00
tblVehicleEF	MH	1.15	3.64
tblVehicleEF	MH	0.86	0.00
tblVehicleEF	MH	0.01	0.02
tblVehicleEF	MH	0.02	0.09
tblVehicleEF	MH	1.5790e-003	0.00
tblVehicleEF	MH	3.1950e-003	4.0000e-003
tblVehicleEF	MH	0.02	0.09
tblVehicleEF	MH	1.4630e-003	0.00
tblVehicleEF	MH	1.74	0.00
tblVehicleEF	MH	0.08	0.00
tblVehicleEF	MH	0.71	0.00
tblVehicleEF	MH	0.13	0.07

tblVehicleEF	MH	0.02	0.00
tblVehicleEF	MH	0.41	0.00
tblVehicleEF	MH	0.01	9.3780e-003
tblVehicleEF	MH	7.5500e-004	0.00
tblVehicleEF	MH	1.74	0.00
tblVehicleEF	MH	0.08	0.00
tblVehicleEF	MH	0.71	0.00
tblVehicleEF	MH	0.18	0.08
tblVehicleEF	MH	0.02	0.00
tblVehicleEF	MH	0.45	0.00
tblVehicleEF	MH	0.04	3.4340e-003
tblVehicleEF	MH	0.03	0.00
tblVehicleEF	MH	3.51	0.31
tblVehicleEF	MH	7.19	0.00
tblVehicleEF	MH	1,138.98	992.05
tblVehicleEF	MH	63.70	0.00
tblVehicleEF	MH	1.23	3.78
tblVehicleEF	MH	0.91	0.00
tblVehicleEF	MH	0.01	0.02
tblVehicleEF	MH	0.02	0.09
tblVehicleEF	MH	1.5790e-003	0.00
tblVehicleEF	MH	3.1950e-003	4.0000e-003
tblVehicleEF	MH	0.02	0.09
tblVehicleEF	MH	1.4630e-003	0.00
tblVehicleEF	MH	1.35	0.00
tblVehicleEF	MH	0.10	0.00
tblVehicleEF	MH	0.51	0.00

tblVehicleEF	MH	0.13	0.07
tblVehicleEF	MH	0.02	0.00
tblVehicleEF	MH	0.43	0.00
tblVehicleEF	MH	0.01	9.3780e-003
tblVehicleEF	MH	7.6300e-004	0.00
tblVehicleEF	MH	1.35	0.00
tblVehicleEF	MH	0.10	0.00
tblVehicleEF	MH	0.51	0.00
tblVehicleEF	MH	0.18	0.08
tblVehicleEF	MH	0.02	0.00
tblVehicleEF	MH	0.47	0.00
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tblVehicleEF	MHD	0.44	0.40
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tblVehicleEF	MHD	2.2420e-003	2.2340e-003
tblVehicleEF	MHD	0.04	0.07
tblVehicleEF	MHD	9.3600e-004	1.5500e-004
tblVehicleEF	MHD	2.1450e-003	2.1380e-003

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tblVehicleEF	MHD	8.6100e-004	1.4200e-004
tblVehicleEF	MHD	1.3410e-003	8.0900e-004
tblVehicleEF	MHD	0.05	0.03
tblVehicleEF	MHD	0.03	0.02
tblVehicleEF	MHD	8.3700e-004	4.9900e-004
tblVehicleEF	MHD	0.09	0.15
tblVehicleEF	MHD	0.03	0.17
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tblVehicleEF	MHD	1.2830e-003	6.6600e-004
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tblVehicleEF	MHD	7.8800e-004	1.2700e-004
tblVehicleEF	MHD	1.3410e-003	8.0900e-004
tblVehicleEF	MHD	0.05	0.03
tblVehicleEF	MHD	0.04	0.03
tblVehicleEF	MHD	8.3700e-004	4.9900e-004
tblVehicleEF	MHD	0.11	0.17
tblVehicleEF	MHD	0.03	0.17
tblVehicleEF	MHD	0.50	0.08
tblVehicleEF	MHD	0.02	4.2550e-003
tblVehicleEF	MHD	8.7760e-003	9.5510e-003
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tblVehicleEF	MHD	0.32	0.32
tblVehicleEF	MHD	0.62	0.88
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tblVehicleEF	MHD	1,158.03	1,130.52

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tblVehicleEF	MHD	1.8900e-003	1.8860e-003
tblVehicleEF	MHD	0.04	0.07
tblVehicleEF	MHD	9.3600e-004	1.5500e-004
tblVehicleEF	MHD	1.8090e-003	1.8040e-003
tblVehicleEF	MHD	0.04	0.07
tblVehicleEF	MHD	8.6100e-004	1.4200e-004
tblVehicleEF	MHD	2.0150e-003	1.2070e-003
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tblVehicleEF	MHD	0.03	0.02
tblVehicleEF	MHD	1.1980e-003	7.1000e-004
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tblVehicleEF	MHD	0.02	0.16
tblVehicleEF	MHD	0.44	0.07
tblVehicleEF	MHD	1.3570e-003	6.8100e-004
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tblVehicleEF	MHD	7.8100e-004	1.2600e-004
tblVehicleEF	MHD	2.0150e-003	1.2070e-003
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tblVehicleEF	MHD	0.04	0.03
tblVehicleEF	MHD	1.1980e-003	7.1000e-004
tblVehicleEF	MHD	0.11	0.18
tblVehicleEF	MHD	0.02	0.16
tblVehicleEF	MHD	0.48	0.08

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tblVehicleEF	MHD	2.6110e-003	2.5980e-003
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tblVehicleEF	MHD	0.04	0.03
tblVehicleEF	MHD	8.2400e-004	4.9200e-004
tblVehicleEF	MHD	0.09	0.15
tblVehicleEF	MHD	0.03	0.18
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tblVehicleEF	MHD	1.1810e-003	6.4400e-004
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tblVehicleEF	MHD	0.06	0.03
tblVehicleEF	MHD	0.05	0.04
tblVehicleEF	MHD	8.2400e-004	4.9200e-004
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tblVehicleEF	OBUS	0.03	0.02
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tblVehicleEF	OBUS	0.01	0.05
tblVehicleEF	OBUS	7.8200e-004	1.9900e-004
tblVehicleEF	OBUS	2.8700e-004	3.2150e-003
tblVehicleEF	OBUS	9.9080e-003	0.05
tblVehicleEF	OBUS	7.2000e-004	1.8300e-004
tblVehicleEF	OBUS	1.4950e-003	1.8640e-003

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tblVehicleEF	OBUS	0.04	0.07
tblVehicleEF	OBUS	7.8100e-004	9.3200e-004
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tblVehicleEF	OBUS	1.4950e-003	1.8640e-003
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tblVehicleEF	OBUS	7.8100e-004	9.3200e-004
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tblVehicleEF	SBUS	0.03	0.03		
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tblVehicleEF	SBUS	2.6880e-003	2.6870e-003		
tblVehicleEF	SBUS	0.03	0.03		
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tblVehicleEF	SBUS	0.03	0.03		
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tblVehicleEF	SBUS	0.03	0.03		
tblVehicleEF	SBUS	6.8700e-004	4.2000e-005		
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tblVehicleEF	SBUS	0.03	8.1040e-003		
tblVehicleEF	SBUS	0.95	0.31		
tblVehicleEF	SBUS	2.4200e-003	6.5900e-004		
tblVehicleEF	SBUS	0.12	0.10 0.05 0.03 3.4610e-003		
tblVehicleEF	SBUS	0.01			
tblVehicleEF	SBUS	0.36			
tblVehicleEF	SBUS	0.01			
tblVehicleEF	SBUS	0.01	0.01		
tblVehicleEF	SBUS	6.2900e-004	4.9000e-005		
tblVehicleEF	SBUS	5.0870e-003	1.3450e-003		
tblVehicleEF	SBUS	0.03	8.1040e-003		
tblVehicleEF	SBUS	1.37	0.44		
tblVehicleEF	SBUS	2.4200e-003	6.5900e-004		
tblVehicleEF	SBUS	0.14	0.13		
tblVehicleEF	SBUS	0.01	0.05		
tblVehicleEF	SBUS	0.39	0.03		
tblVehicleEF	SBUS	0.88	0.07		
tblVehicleEF	SBUS	0.01	7.9430e-003		

tblVehicleEF	SBUS	0.07	6.3030e-003		
tblVehicleEF	SBUS	8.07	2.73		
tblVehicleEF	SBUS	0.84	0.67		
tblVehicleEF	SBUS	7.93	0.89		
tblVehicleEF	SBUS	1,079.68	341.91		
tblVehicleEF	SBUS	1,098.50	1,133.33		
tblVehicleEF	SBUS	52.01	5.27		
tblVehicleEF	SBUS	10.15	3.25		
tblVehicleEF	SBUS	4.85	5.14		
tblVehicleEF	SBUS	12.73	0.80		
tblVehicleEF	SBUS	0.01	5.9420e-003		
tblVehicleEF	SBUS	0.01	0.01		
tblVehicleEF	SBUS	0.03	0.03 4.5000e-005 5.6850e-003 2.6870e-003		
tblVehicleEF	SBUS	7.4700e-004			
tblVehicleEF	SBUS	0.01			
tblVehicleEF	SBUS	2.6880e-003			
tblVehicleEF	SBUS	0.03	0.03		
tblVehicleEF	SBUS	6.8700e-004	4.2000e-005		
tblVehicleEF	SBUS	3.6280e-003	9.7000e-004		
tblVehicleEF	SBUS	0.03	8.6170e-003		
tblVehicleEF	SBUS	0.96	0.31		
tblVehicleEF	SBUS	1.6230e-003	4.5900e-004		
tblVehicleEF	SBUS	0.12	0.10		
tblVehicleEF	SBUS	0.02	0.07		
tblVehicleEF	SBUS	0.41	0.04		
tblVehicleEF	SBUS	0.01	3.2620e-003		
tblVehicleEF	SBUS	0.01	0.01		

tblVehicleEF	SBUS	6.5700e-004	5.2000e-005
tblVehicleEF	SBUS	3.6280e-003	9.7000e-004
tblVehicleEF	SBUS	0.03	8.6170e-003
tblVehicleEF	SBUS	1.38	0.44
tblVehicleEF	SBUS	1.6230e-003	4.5900e-004
tblVehicleEF	SBUS	0.14	0.12
tblVehicleEF	SBUS	0.02	0.07
tblVehicleEF	SBUS	0.45	0.04
tblVehicleEF	UBUS	2.95	6.22
tblVehicleEF	UBUS	0.05	0.01
tblVehicleEF	UBUS	12.36	42.74
tblVehicleEF	UBUS	8.85	0.71
tblVehicleEF	UBUS	2,008.92	1,985.10
tblVehicleEF	UBUS	88.02	8.74
tblVehicleEF	UBUS	11.49	1.21
tblVehicleEF	UBUS	15.98	0.08
tblVehicleEF	UBUS	0.64	0.07
tblVehicleEF	UBUS	0.01	0.03
tblVehicleEF	UBUS	0.15	3.6950e-003
tblVehicleEF	UBUS	9.7400e-004	3.6000e-005
tblVehicleEF	UBUS	0.27	0.03
tblVehicleEF	UBUS	3.0000e-003	7.9690e-003
tblVehicleEF	UBUS	0.14	3.5330e-003
tblVehicleEF	UBUS	8.9600e-004	3.3000e-005
tblVehicleEF	UBUS	4.1600e-003	6.1300e-004
tblVehicleEF	UBUS	0.07	7.6310e-003
tblVehicleEF	UBUS	2.3210e-003	4.5000e-004

tblVehicleEF	UBUS	0.96	0.16		
tblVehicleEF	UBUS	0.02	0.05		
tblVehicleEF	UBUS	0.66	0.05		
tblVehicleEF	UBUS	0.01	1.4780e-003		
tblVehicleEF	UBUS	1.0390e-003	8.7000e-005		
tblVehicleEF	UBUS	4.1600e-003	6.1300e-004		
tblVehicleEF	UBUS	0.07	7.6310e-003		
tblVehicleEF	UBUS	2.3210e-003	4.5000e-004		
tblVehicleEF	UBUS	4.03	6.42		
tblVehicleEF	UBUS	0.02	0.05		
tblVehicleEF	UBUS	0.72	0.05		
tblVehicleEF	UBUS	2.95	6.22		
tblVehicleEF	UBUS	0.04	0.01 42.74 0.63 1,985.10		
tblVehicleEF	UBUS	12.41			
tblVehicleEF	UBUS	7.66			
tblVehicleEF	UBUS	2,008.92			
tblVehicleEF	UBUS	88.02	8.60		
tblVehicleEF	UBUS	10.84	1.20		
tblVehicleEF	UBUS	15.93	0.08		
tblVehicleEF	UBUS	0.64	0.07		
tblVehicleEF	UBUS	0.01	0.03		
tblVehicleEF	UBUS	0.15	3.6950e-003		
tblVehicleEF	UBUS	9.7400e-004	3.6000e-005		
tblVehicleEF	UBUS	0.27	0.03		
tblVehicleEF	UBUS	3.0000e-003	7.9690e-003		
tblVehicleEF	UBUS	0.14	3.5330e-003		
tblVehicleEF	UBUS	8.9600e-004	3.3000e-005		

tblVehicleEF	UBUS	5.9230e-003	8.9000e-004
tblVehicleEF	UBUS	0.07	7.8710e-003
tblVehicleEF	UBUS	3.1960e-003	6.2100e-004
tblVehicleEF	UBUS	0.97	0.16
tblVehicleEF	UBUS	0.02	0.04
tblVehicleEF	UBUS	0.60	0.04
tblVehicleEF	UBUS	0.01	1.4780e-003
tblVehicleEF	UBUS	1.0190e-003	8.5000e-005
tblVehicleEF	UBUS	5.9230e-003	8.9000e-004
tblVehicleEF	UBUS	0.07	7.8710e-003
tblVehicleEF	UBUS	3.1960e-003	6.2100e-004
tblVehicleEF	UBUS	4.04	6.42
tblVehicleEF	UBUS	0.02	0.04
tblVehicleEF	UBUS	0.66	0.05
tblVehicleEF	UBUS	2.95	6.22
tblVehicleEF	UBUS	0.05	0.01
tblVehicleEF	UBUS	12.34	42.74
tblVehicleEF	UBUS	9.07	0.73
tblVehicleEF	UBUS	2,008.92	1,985.10
tblVehicleEF	UBUS	88.02	8.77
tblVehicleEF	UBUS	11.27	1.20
tblVehicleEF	UBUS	15.99	0.08
tblVehicleEF	UBUS	0.64	0.07
tblVehicleEF	UBUS	0.01	0.03
tblVehicleEF	UBUS	0.15	3.6950e-003
tblVehicleEF	UBUS	9.7400e-004	3.6000e-005
tblVehicleEF	UBUS	0.27	0.03

tblVehicleEF	UBUS	3.0000e-003	7.9690e-003
tblVehicleEF	UBUS	0.14	3.5330e-003
tblVehicleEF	UBUS	8.9600e-004	3.3000e-005
tblVehicleEF	UBUS	4.7740e-003	6.0100e-004
tblVehicleEF	UBUS	0.09	8.1480e-003
tblVehicleEF	UBUS	2.4590e-003	4.2800e-004
tblVehicleEF	UBUS	0.96	0.16
tblVehicleEF	UBUS	0.03	0.06
tblVehicleEF	UBUS	0.67	0.05
tblVehicleEF	UBUS	0.01	1.4780e-003
tblVehicleEF	UBUS	1.0430e-003	8.7000e-005
tblVehicleEF	UBUS	4.7740e-003	6.0100e-004
tblVehicleEF	UBUS	0.09	8.1480e-003
tblVehicleEF	UBUS	2.4590e-003	4.2800e-004
tblVehicleEF	UBUS	4.02	6.42
tblVehicleEF	UBUS	0.03	0.06
tblVehicleEF	UBUS	0.74	0.05
tblVehicleTrips	ST_TR	177.59	177.62
tblVehicleTrips	SU_TR	166.44	166.47
tblVehicleTrips	WD_TR	102.24	106.78
tblWater	AerobicPercent	87.46	100.00
tblWater	AnaerobicandFacultativeLagoonsPerce	2.21	0.00
tblWater	nt IndoorWaterUseRate	1,121,740.76	1,047,779.83
tblWater	OutdoorWaterUseRate	34,693.01	32,405.56
tblWater	SepticTankPercent	10.33	0.00

## 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				MT	/yr						
Area	0.0371	0.0000	1.3000e- 004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.6000e- 004	2.6000e- 004	0.0000	0.0000	2.8000e- 004
Energy	1.1400e- 003	0.0104	8.7300e- 003	6.0000e- 005		7.9000e- 004	7.9000e- 004		7.9000e- 004	7.9000e- 004	0.0000	99.2837	99.2837	5.0200e- 003	1.2000e- 003	99.7670
Mobile	0.5070	0.7576	3.2994	6.7700e- 003	0.5695	0.0105	0.5800	0.1523	9.8700e- 003	0.1622	0.0000	635.0793	635.0793	0.0645	0.0000	636.6919
Waste		0	0	0	]	0.0000	0.0000		0.0000	0.0000	9.7314	0.0000	9.7314	0.5751	0.0000	24.1091
Water						0.0000	0.0000		0.0000	0.0000	0.3707	3.3756	3.7463	1.4600e- 003	8.4000e- 004	4.0344
Total	0.5452	0.7680	3.3082	6.8300e- 003	0.5695	0.0113	0.5808	0.1523	0.0107	0.1630	10.1021	737.7389	747.8410	0.6461	2.0400e- 003	764.6026

#### **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	0.0371	0.0000	1.3000e- 004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.6000e- 004	2.6000e- 004	0.0000	0.0000	2.8000e- 004
Energy	1.1400e- 003	0.0104	8.7300e- 003	6.0000e- 005		7.9000e- 004	7.9000e- 004		7.9000e- 004	7.9000e- 004	0.0000	99.2837	99.2837	5.0200e- 003	1.2000e- 003	99.7670
Mobile	0.5070	0.7576	3.2994	6.7700e- 003	0.5695	0.0105	0.5800	0.1523	9.8700e- 003	0.1622	0.0000	635.0793	635.0793	0.0645	0.0000	636.6919
Waste	D			)		0.0000	0.0000		0.0000	0.0000	9.7314	0.0000	9.7314	0.5751	0.0000	24.1091
Water	D		D	0		0.0000	0.0000		0.0000	0.0000	0.3707	3.3756	3.7463	1.4600e- 003	8.4000e- 004	4.0344
Total	0.5452	0.7680	3.3082	6.8300e- 003	0.5695	0.0113	0.5808	0.1523	0.0107	0.1630	10.1021	737.7389	747.8410	0.6461	2.0400e- 003	764.6026

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

## 4.0 Operational Detail - Mobile

#### **4.1 Mitigation Measures Mobile**

	ROG	NOx	СО	SO2	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	0.5070	0.7576	3.2994	6.7700e- 003	0.5695	0.0105	0.5800	0.1523	9.8700e- 003	0.1622	0.0000	635.0793	635.0793	0.0645	0.0000	636.6919
Unmitigated	0.5070	0.7576	3.2994	6.7700e- 003	0.5695	0.0105	0.5800	0.1523	9.8700e- 003	0.1622	0.0000	635.0793	635.0793	0.0645	0.0000	636.6919

### **4.2 Trip Summary Information**

	Aver	age Daily Trip F	Rate	Unmitigated	Mitigated	
Land Use	Weekday	Saturday Sunday		Annual VMT	Annual VMT	
Other Asphalt Surfaces	0.00	0.00	0.00			
Supermarket	971.70	1,616.34	1514.88	1,506,027	1,506,027	
Total	971.70	1,616.34	1,514.88	1,506,027	1,506,027	

# 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		
Other Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0		
Supermarket	16.60	8.40	6.90	6.50	74.50	19.00	34	30	36		

### 4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Other Asphalt Surfaces	0.547726	0.045437	0.201480	0.122768	0.016614	0.006090	0.019326	0.029174	0.002438	0.002359	0.005005	0.000677	0.000907
Supermarket	0.547726	0.045437	0.201480	0.122768	0.016614	0.006090	0.019326	0.029174	0.002438	0.002359	0.005005	0.000677	0.000907

## 5.0 Energy Detail

Historical Energy Use: Y

## **5.1 Mitigation Measures Energy**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr												MT	/yr		
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	87.9642	87.9642	4.8000e- 003	9.9000e- 004	88.3801
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	87.9642	87.9642	4.8000e- 003	9.9000e- 004	88.3801
NaturalGas Mitigated	1.1400e- 003	0.0104	8.7300e- 003	6.0000e- 005		7.9000e- 004	7.9000e- 004		7.9000e- 004	7.9000e- 004	0.0000	11.3196	11.3196	2.2000e- 004	2.1000e- 004	11.3869
NaturalGas Unmitigated	1.1400e- 003	0.0104	8.7300e- 003	6.0000e- 005		7.9000e- 004	7.9000e- 004		7.9000e- 004	7.9000e- 004	0.0000	11.3196	11.3196	2.2000e- 004	2.1000e- 004	11.3869

## 5.2 Energy by Land Use - NaturalGas <u>Unmitigated</u>

	NaturalGa s Use	ROG	NOx	СО	SO2	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											M	Γ/yr		
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Supermarket	212121	1.1400e- 003	0.0104	8.7300e- 003	6.0000e- 005		7.9000e- 004	7.9000e- 004		7.9000e- 004	7.9000e- 004	0.0000	11.3196	11.3196	2.2000e- 004	2.1000e- 004	11.3869
Total		1.1400e- 003	0.0104	8.7300e- 003	6.0000e- 005		7.9000e- 004	7.9000e- 004		7.9000e- 004	7.9000e- 004	0.0000	11.3196	11.3196	2.2000e- 004	2.1000e- 004	11.3869

### **Mitigated**

	NaturalGa s Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr													МТ	-/yr		
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Supermarket	212121	1.1400e- 003	0.0104	8.7300e- 003	6.0000e- 005		7.9000e- 004	7.9000e- 004		7.9000e- 004	7.9000e- 004	0.0000	11.3196	11.3196	2.2000e- 004	2.1000e- 004	11.3869
Total		1.1400e- 003	0.0104	8.7300e- 003	6.0000e- 005		7.9000e- 004	7.9000e- 004		7.9000e- 004	7.9000e- 004	0.0000	11.3196	11.3196	2.2000e- 004	2.1000e- 004	11.3869

## 5.3 Energy by Land Use - Electricity <u>Unmitigated</u>

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr		M	Γ/yr	
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Supermarket	364910	87.9642	4.8000e- 003	9.9000e- 004	88.3801
Total		87.9642	4.8000e- 003	9.9000e- 004	88.3801

### **Mitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr		M	Г/уг	
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Supermarket	364910	87.9642	4.8000e- 003	9.9000e- 004	88.3801
Total		87.9642	4.8000e- 003	9.9000e- 004	88.3801

### 6.0 Area Detail

## **6.1 Mitigation Measures Area**

	ROG	NOx	СО	SO2	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	s/yr							MT	/yr		
Mitigated	0.0371	0.0000	1.3000e- 004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.6000e- 004	2.6000e- 004	0.0000	0.0000	2.8000e- 004
Unmitigated	0.0371	0.0000	1.3000e- 004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.6000e- 004	2.6000e- 004	0.0000	0.0000	2.8000e- 004

## 6.2 Area by SubCategory

### **Unmitigated**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr												MT	/yr		
Architectural Coating	4.2200e- 003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0329					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.0000e- 005	0.0000	1.3000e- 004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.6000e- 004	2.6000e- 004	0.0000	0.0000	2.8000e- 004
Total	0.0371	0.0000	1.3000e- 004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.6000e- 004	2.6000e- 004	0.0000	0.0000	2.8000e- 004

### **Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory		tons/yr											MT	/yr		
Architectural Coating	4.2200e- 003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0329					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.0000e- 005	0.0000	1.3000e- 004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.6000e- 004	2.6000e- 004	0.0000	0.0000	2.8000e- 004
Total	0.0371	0.0000	1.3000e- 004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.6000e- 004	2.6000e- 004	0.0000	0.0000	2.8000e- 004

## 7.0 Water Detail

## 7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category		MT	/yr	
Mitigated	3.7463	003	8.4000e- 004	
Unmitigated	3.7463		8.4000e- 004	4.0344

## 7.2 Water by Land Use <u>Unmitigated</u>

	Indoor/Out door Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal		M	Г/уг	
Other Asphalt Surfaces	0/0	0.0000	0.0000	0.0000	0.0000
Supermarket	1.04778 / 0.0324056	3.7463	1.4600e- 003	8.4000e- 004	4.0344
Total		3.7463	1.4600e- 003	8.4000e- 004	4.0344

### **Mitigated**

	Indoor/Out door Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal		M٦	Г/уг	
Other Asphalt Surfaces	0/0	0.0000	0.0000	0.0000	0.0000
Supermarket	1.04778 / 0.0324056	3.7463	1.4600e- 003	8.4000e- 004	4.0344
Total		3.7463	1.4600e- 003	8.4000e- 004	4.0344

### 8.0 Waste Detail

## 8.1 Mitigation Measures Waste

### Category/Year

	Total CO2	CH4	N2O	CO2e
		МТ	/yr	
Mitigated	9.7314	0.5751	0.0000	
	9.7314	0.5751	0.0000	24.1091

## 8.2 Waste by Land Use <u>Unmitigated</u>

		T / 1000	2111		200
	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons		M	Γ/yr	
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Supermarket	47.94	9.7314	0.5751	0.0000	24.1091
Total		9.7314	0.5751	0.0000	24.1091

### **Mitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons		M	Г/уг	
Surfaces	0	0.0000	0.0000	0.0000	0.0000
Supermarket	47.94	9.7314	0.5751	0.0000	24.1091
Total		9.7314	0.5751	0.0000	24.1091

## 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

CalEEMod Output: Existing Operation: Year 2023

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CalEEMod Version: CalEEMod.2016.3.2

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Existing\_Year 2023 - Los Angeles-South Coast County, Summer

# Existing\_Year 2023

### Los Angeles-South Coast County, Summer

### 1.0 Project Characteristics

### 1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Asphalt Surfaces	1.31	Acre	1.31	0.00	0
Supermarket	9.10	1000sqft	0.28	9,100.00	0

#### **1.2 Other Project Characteristics**

UrbanizationUrbanWind Speed (m/s)2.2Precipitation Freq (Days)33Climate Zone9Operational Year2023

**Utility Company** Southern California Edison

 CO2 Intensity
 531.44
 CH4 Intensity
 0.029
 N2O Intensity
 0.006

 (Ib/MWhr)
 (Ib/MWhr)
 (Ib/MWhr)

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

Project Characteristics - See assumptions file.

Land Use - See assumptions file.

Construction Phase -

Vehicle Trips - See assumptions file

Area Coating - Assumes no striping

Energy Use -Water And Wastewater - Assumes 100% aerobic. Fleet Mix -

Table Name	Column Name	Default Value	New Value
tblLandUse	LandUseSquareFeet	57,063.60	0.00
tblLandUse	LotAcreage	0.21	0.28
tblProjectCharacteristics	CO2IntensityFactor	702.44	531.44
tblSolidWaste	SolidWasteGenerationRate	51.32	47.94
tblVehicleEF	HHD	0.48	0.03
tblVehicleEF	HHD	0.09	0.08
tblVehicleEF	HHD	0.07	5.3770e-007
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tblVehicleEF	HHD	1.06	0.46
tblVehicleEF	HHD	3.33	9.5442e-003
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tblVehicleEF	HHD	1,572.96	1,398.54
tblVehicleEF	HHD	10.75	0.08
tblVehicleEF	HHD	14.30	5.75
tblVehicleEF	HHD	2.12	2.71
tblVehicleEF	HHD	19.50	2.35
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tblVehicleEF	HHD	0.06	0.06
tblVehicleEF	HHD	0.04	0.04
tblVehicleEF	HHD	6.2960e-003	0.02
tblVehicleEF	HHD	9.1000e-005	1.3513e-006
tblVehicleEF	HHD	9.6000e-003	3.0540e-003
tblVehicleEF	HHD	0.03	0.03

tblVehicleEF	HHD	8.8400e-003	8.8984e-003
tblVehicleEF	HHD	6.0240e-003	0.02
tblVehicleEF	HHD	8.3000e-005	1.2425e-006
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tblVehicleEF	HHD	1.07	0.46
tblVehicleEF	HHD	3.16	9.0653e-003
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tblVehicleEF	LDA	2.0000e-003	2.0000e-003
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tblVehicleEF	LDA	2.0590e-003	1.6174e-003
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tblVehicleEF	LDA	0.10	0.10
tblVehicleEF	LDA	0.05	0.06
tblVehicleEF	LDA	0.01	0.01
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tblVehicleEF	LDA	0.10	0.10
tblVehicleEF	LDA	0.05	0.06
tblVehicleEF	LDA	0.02	0.02
tblVehicleEF	LDA	0.04	0.19
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tblVehicleEF	LDA	0.06	0.17
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tblVehicleEF	LDA	0.01	0.01
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tblVehicleEF	LDT1	0.25	0.18
tblVehicleEF	LDT1	0.10	0.10
tblVehicleEF	LDT1	0.05	0.04

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tblVehicleEF	LDT1	0.02	0.02
tblVehicleEF	LDT1	2.0000e-003	2.0000e-003
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tblVehicleEF	LDT1	3.0150e-003	2.2505e-003
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tblVehicleEF	LDT1	0.28	0.20
tblVehicleEF	LDT1	0.10	0.10
tblVehicleEF	LDT1	0.03	0.03
tblVehicleEF	LDT1	0.19	0.76
tblVehicleEF	LDT1	0.17	0.33
		Ī	

tblVehicleEF	LDT1	3.2700e-003	3.0190e-003
tblVehicleEF	LDT1	7.1900e-004	6.0927e-004
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tblVehicleEF	LDT2	0.09	0.25
tblVehicleEF	LDT2	0.04	0.04
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tblVehicleEF	LDT2	0.09	0.12
tblVehicleEF	LDT2	0.04	0.07

tblVehicleEF	LDT2	0.02	0.02
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tblVehicleEF	LDT2	0.09	0.12
tblVehicleEF	LDT2	0.04	0.07
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tblVehicleEF	LDT2	0.04	0.04
tblVehicleEF	LDT2	8.0000e-003	8.0000e-003
tblVehicleEF	LDT2	2.1490e-003	1.8228e-003
tblVehicleEF	LDT2	2.3760e-003	1.8152e-003
tblVehicleEF	LDT2	0.02	0.02
tblVehicleEF	LDT2	2.0000e-003	2.0000e-003
tblVehicleEF	LDT2	1.9770e-003	1.6777e-003
tblVehicleEF	LDT2	2.1840e-003	1.6691e-003

tblVehicleEF	LDT2	0.07	0.11
tblVehicleEF	LDT2	0.10	0.12
tblVehicleEF	LDT2	0.06	0.10
tblVehicleEF	LDT2	0.02	0.02
tblVehicleEF	LDT2	0.06	0.36
tblVehicleEF	LDT2	0.07	0.26
tblVehicleEF	LDT2	3.8550e-003	3.3624e-003
tblVehicleEF	LDT2	7.7200e-004	6.4329e-004
tblVehicleEF	LDT2	0.07	0.11
tblVehicleEF	LDT2	0.10	0.12
tblVehicleEF	LDT2	0.06	0.10
tblVehicleEF	LDT2	0.03	0.03
tblVehicleEF	LDT2	0.06	0.36
tblVehicleEF	LDT2	0.07	0.28
tblVehicleEF	LDT2	6.4820e-003	4.3362e-003
tblVehicleEF	LDT2	5.8190e-003	0.06
tblVehicleEF	LDT2	0.76	0.91
tblVehicleEF	LDT2	1.27	2.64
tblVehicleEF	LDT2	362.26	328.44
tblVehicleEF	LDT2	75.43	66.69
tblVehicleEF	LDT2	0.07	0.07
tblVehicleEF	LDT2	0.09	0.26
tblVehicleEF	LDT2	0.04	0.04
tblVehicleEF	LDT2	8.0000e-003	8.0000e-003
tblVehicleEF	LDT2	2.1490e-003	1.8228e-003
tblVehicleEF	LDT2	2.3760e-003	1.8152e-003
tblVehicleEF	LDT2	0.02	0.02

tblVehicleEF	LDT2	2.0000e-003	2.0000e-003
tblVehicleEF	LDT2	1.9770e-003	1.6777e-003
tblVehicleEF	LDT2	2.1840e-003	1.6691e-003
tblVehicleEF	LDT2	0.04	0.07
tblVehicleEF	LDT2	0.10	0.13
tblVehicleEF	LDT2	0.04	0.07
tblVehicleEF	LDT2	0.02	0.02
tblVehicleEF	LDT2	0.07	0.46
tblVehicleEF	LDT2	0.08	0.29
tblVehicleEF	LDT2	3.6280e-003	3.2090e-003
tblVehicleEF	LDT2	7.7500e-004	6.5178e-004
tblVehicleEF	LDT2	0.04	0.07
tblVehicleEF	LDT2	0.10	0.13
tblVehicleEF	LDT2	0.04	0.07
tblVehicleEF	LDT2	0.02	0.03
tblVehicleEF	LDT2	0.07	0.46
tblVehicleEF	LDT2	0.09	0.32
tblVehicleEF	LHD1	5.2860e-003	5.3646e-003
tblVehicleEF	LHD1	0.01	4.9911e-003
tblVehicleEF	LHD1	0.02	0.01
tblVehicleEF	LHD1	0.15	0.19
tblVehicleEF	LHD1	0.75	0.57
tblVehicleEF	LHD1	2.58	1.08
tblVehicleEF	LHD1	8.94	8.81
tblVehicleEF	LHD1	595.21	652.98
tblVehicleEF	LHD1	32.17	12.06
tblVehicleEF	LHD1	0.07	0.05

tblVehicleEF	LHD1	0.86	0.55
tblVehicleEF	LHD1	0.95	0.32
tblVehicleEF	LHD1	8.3300e-004	7.8359e-004
tblVehicleEF	LHD1	0.08	0.08
tblVehicleEF	LHD1	0.01	9.7291e-003
tblVehicleEF	LHD1	8.8370e-003	5.9884e-003
tblVehicleEF	LHD1	9.4800e-004	2.6819e-004
tblVehicleEF	LHD1	7.9700e-004	7.4969e-004
tblVehicleEF	LHD1	0.03	0.03
tblVehicleEF	LHD1	2.5350e-003	2.4323e-003
tblVehicleEF	LHD1	8.4300e-003	5.7009e-003
tblVehicleEF	LHD1	8.7200e-004	2.4659e-004
tblVehicleEF	LHD1	2.9730e-003	2.3517e-003
tblVehicleEF	LHD1	0.10	0.07
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	1.8290e-003	1.4551e-003
tblVehicleEF	LHD1	0.06	0.04
tblVehicleEF	LHD1	0.30	0.51
tblVehicleEF	LHD1	0.24	0.07
tblVehicleEF	LHD1	9.0000e-005	8.5605e-005
tblVehicleEF	LHD1	5.8400e-003	6.3743e-003
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tblVehicleEF	LHD1	2.9730e-003	2.3517e-003
tblVehicleEF	LHD1	0.10	0.07
tblVehicleEF	LHD1	0.02	0.03
tblVehicleEF	LHD1	1.8290e-003	1.4551e-003
tblVehicleEF	LHD1	0.07	0.06

tblVehicleEF	LHD1	0.30	0.51
tblVehicleEF	LHD1	0.27	0.08
tblVehicleEF	LHD1	5.2860e-003	5.3761e-003
tblVehicleEF	LHD1	0.01	5.0878e-003
tblVehicleEF	LHD1	0.02	0.01
tblVehicleEF	LHD1	0.15	0.19
tblVehicleEF	LHD1	0.76	0.58
tblVehicleEF	LHD1	2.46	1.03
tblVehicleEF	LHD1	8.94	8.81
tblVehicleEF	LHD1	595.21	653.00
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tblVehicleEF	LHD1	0.07	0.05
tblVehicleEF	LHD1	0.81	0.52
tblVehicleEF	LHD1	0.91	0.30
tblVehicleEF	LHD1	8.3300e-004	7.8359e-004
tblVehicleEF	LHD1	0.08	0.08
tblVehicleEF	LHD1	0.01	9.7291e-003
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tblVehicleEF	LHD1	9.4800e-004	2.6819e-004
tblVehicleEF	LHD1	7.9700e-004	7.4969e-004
tblVehicleEF	LHD1	0.03	0.03
tblVehicleEF	LHD1	2.5350e-003	2.4323e-003
tblVehicleEF	LHD1	8.4300e-003	5.7009e-003
tblVehicleEF	LHD1	8.7200e-004	2.4659e-004
tblVehicleEF	LHD1	4.4450e-003	3.4572e-003
tblVehicleEF	LHD1	0.10	0.08
tblVehicleEF	LHD1	0.02	0.02

tblVehicleEF	LHD1	2.5600e-003	2.0042e-003
tblVehicleEF	LHD1	0.06	0.05
tblVehicleEF	LHD1	0.29	0.50
tblVehicleEF	LHD1	0.23	0.07
tblVehicleEF	LHD1	9.0000e-005	8.5605e-005
tblVehicleEF	LHD1	5.8400e-003	6.3745e-003
tblVehicleEF	LHD1	3.6700e-004	1.1848e-004
tblVehicleEF	LHD1	4.4450e-003	3.4572e-003
tblVehicleEF	LHD1	0.10	0.08
tblVehicleEF	LHD1	0.02	0.03
tblVehicleEF	LHD1	2.5600e-003	2.0042e-003
tblVehicleEF	LHD1	0.08	0.06
tblVehicleEF	LHD1	0.29	0.50
tblVehicleEF	LHD1	0.26	0.08
tblVehicleEF	LHD1	5.2860e-003	5.3623e-003
tblVehicleEF	LHD1	0.01	4.9648e-003
tblVehicleEF	LHD1	0.02	0.01
tblVehicleEF	LHD1	0.15	0.19
tblVehicleEF	LHD1	0.74	0.56
tblVehicleEF	LHD1	2.59	1.09
tblVehicleEF	LHD1	8.94	8.81
tblVehicleEF	LHD1	595.21	652.97
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tblVehicleEF	LHD1	0.07	0.05
tblVehicleEF	LHD1	0.85	0.54
tblVehicleEF	LHD1	0.95	0.32
tblVehicleEF	LHD1	8.3300e-004	7.8359e-004

tblVehicleEF	LHD1	0.08	0.08
tblVehicleEF	LHD1	0.01	9.7291e-003
tblVehicleEF	LHD1	8.8370e-003	5.9884e-003
tblVehicleEF	LHD1	9.4800e-004	2.6819e-004
tblVehicleEF	LHD1	7.9700e-004	7.4969e-004
tblVehicleEF	LHD1	0.03	0.03
tblVehicleEF	LHD1	2.5350e-003	2.4323e-003
tblVehicleEF	LHD1	8.4300e-003	5.7009e-003
tblVehicleEF	LHD1	8.7200e-004	2.4659e-004
tblVehicleEF	LHD1	3.1110e-003	2.4634e-003
tblVehicleEF	LHD1	0.11	0.09
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	1.7990e-003	1.4332e-003
tblVehicleEF	LHD1	0.06	0.04
tblVehicleEF	LHD1	0.32	0.56
tblVehicleEF	LHD1	0.25	0.07
tblVehicleEF	LHD1	9.0000e-005	8.5605e-005
tblVehicleEF	LHD1	5.8400e-003	6.3742e-003
tblVehicleEF	LHD1	3.7000e-004	1.1947e-004
tblVehicleEF	LHD1	3.1110e-003	2.4634e-003
tblVehicleEF	LHD1	0.11	0.09
tblVehicleEF	LHD1	0.02	0.03
tblVehicleEF	LHD1	1.7990e-003	1.4332e-003
tblVehicleEF	LHD1	0.07	0.06
tblVehicleEF	LHD1	0.32	0.56
tblVehicleEF	LHD1	0.27	0.08
tblVehicleEF	LHD2	3.7460e-003	3.7399e-003

tblVehicleEF	LHD2	3.7700e-003	3.5361e-003
tblVehicleEF	LHD2	7.4580e-003	0.01
tblVehicleEF	LHD2	0.13	0.15
tblVehicleEF	LHD2	0.31	0.39
tblVehicleEF	LHD2	1.26	0.72
tblVehicleEF	LHD2	13.57	13.36
tblVehicleEF	LHD2	610.80	654.07
tblVehicleEF	LHD2	26.97	9.22
tblVehicleEF	LHD2	0.09	0.08
tblVehicleEF	LHD2	0.55	0.71
tblVehicleEF	LHD2	0.50	0.22
tblVehicleEF	LHD2	1.1440e-003	1.2759e-003
tblVehicleEF	LHD2	0.09	0.09
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	8.4330e-003	9.6267e-003
tblVehicleEF	LHD2	4.4100e-004	1.5202e-004
tblVehicleEF	LHD2	1.0950e-003	1.2207e-003
tblVehicleEF	LHD2	0.04	0.04
tblVehicleEF	LHD2	2.6630e-003	2.6429e-003
tblVehicleEF	LHD2	8.0540e-003	9.1939e-003
tblVehicleEF	LHD2	4.0500e-004	1.3978e-004
tblVehicleEF	LHD2	1.0290e-003	1.4322e-003
tblVehicleEF	LHD2	0.03	0.05
tblVehicleEF	LHD2	0.01	0.02
tblVehicleEF	LHD2	6.8900e-004	9.0786e-004
tblVehicleEF	LHD2	0.04	0.05
tblVehicleEF	LHD2	0.07	0.32

tblVehicleEF	LHD2	0.10	0.05
tblVehicleEF	LHD2	1.3300e-004	1.2803e-004
tblVehicleEF	LHD2	5.9490e-003	6.3286e-003
tblVehicleEF	LHD2	2.9200e-004	9.1193e-005
tblVehicleEF	LHD2	1.0290e-003	1.4322e-003
tblVehicleEF	LHD2	0.03	0.05
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	6.8900e-004	9.0786e-004
tblVehicleEF	LHD2	0.05	0.06
tblVehicleEF	LHD2	0.07	0.32
tblVehicleEF	LHD2	0.11	0.05
tblVehicleEF	LHD2	3.7460e-003	3.7479e-003
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tblVehicleEF	LHD2	7.2080e-003	9.7971e-003
tblVehicleEF	LHD2	0.13	0.15
tblVehicleEF	LHD2	0.31	0.39
tblVehicleEF	LHD2	1.20	0.69
tblVehicleEF	LHD2	13.57	13.36
tblVehicleEF	LHD2	610.80	654.07
tblVehicleEF	LHD2	26.97	9.16
tblVehicleEF	LHD2	0.09	0.08
tblVehicleEF	LHD2	0.52	0.67
tblVehicleEF	LHD2	0.49	0.21
tblVehicleEF	LHD2	1.1440e-003	1.2759e-003
tblVehicleEF	LHD2	0.09	0.09
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	8.4330e-003	9.6267e-003

tblVehicleEF	LHD2	4.4100e-004	1.5202e-004
tblVehicleEF	LHD2	1.0950e-003	1.2207e-003
tblVehicleEF	LHD2	0.04	0.04
tblVehicleEF	LHD2	2.6630e-003	2.6429e-003
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tblVehicleEF	LHD2	1.5320e-003	2.1079e-003
tblVehicleEF	LHD2	0.04	0.05
tblVehicleEF	LHD2	0.01	0.02
tblVehicleEF	LHD2	9.5700e-004	1.2531e-003
tblVehicleEF	LHD2	0.04	0.05
tblVehicleEF	LHD2	0.07	0.30
tblVehicleEF	LHD2	0.10	0.05
tblVehicleEF	LHD2	1.3300e-004	1.2803e-004
tblVehicleEF	LHD2	5.9490e-003	6.3287e-003
tblVehicleEF	LHD2	2.9100e-004	9.0638e-005
tblVehicleEF	LHD2	1.5320e-003	2.1079e-003
tblVehicleEF	LHD2	0.04	0.05
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	9.5700e-004	1.2531e-003
tblVehicleEF	LHD2	0.05	0.06
tblVehicleEF	LHD2	0.07	0.30
tblVehicleEF	LHD2	0.11	0.05
tblVehicleEF	LHD2	3.7460e-003	3.7382e-003
tblVehicleEF	LHD2	3.7580e-003	3.5259e-003
tblVehicleEF	LHD2	7.5080e-003	0.01
tblVehicleEF	LHD2	0.13	0.15

tblVehicleEF	LHD2	0.31	0.38
tblVehicleEF	LHD2	1.27	0.72
tblVehicleEF	LHD2	13.57	13.36
tblVehicleEF	LHD2	610.80	654.06
tblVehicleEF	LHD2	26.97	9.23
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tblVehicleEF	LHD2	0.54	0.69
tblVehicleEF	LHD2	0.51	0.22
tblVehicleEF	LHD2	1.1440e-003	1.2759e-003
tblVehicleEF	LHD2	0.09	0.09
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	8.4330e-003	9.6267e-003
tblVehicleEF	LHD2	4.4100e-004	1.5202e-004
tblVehicleEF	LHD2	1.0950e-003	1.2207e-003
tblVehicleEF	LHD2	0.04	0.04
tblVehicleEF	LHD2	2.6630e-003	2.6429e-003
tblVehicleEF	LHD2	8.0540e-003	9.1939e-003
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tblVehicleEF	LHD2	1.0410e-003	1.4722e-003
tblVehicleEF	LHD2	0.04	0.06
tblVehicleEF	LHD2	0.01	0.02
tblVehicleEF	LHD2	6.6600e-004	8.7944e-004
tblVehicleEF	LHD2	0.04	0.05
tblVehicleEF	LHD2	0.08	0.34
tblVehicleEF	LHD2	0.10	0.05
tblVehicleEF	LHD2	1.3300e-004	1.2803e-004
tblVehicleEF	LHD2	5.9490e-003	6.3286e-003

tblVehicleEF	LHD2	2.9200e-004	9.1296e-005
tblVehicleEF	LHD2	1.0410e-003	1.4722e-003
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tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	6.6600e-004	8.7944e-004
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tblVehicleEF	LHD2	0.11	0.05
tblVehicleEF	MCY	0.54	0.38
tblVehicleEF	MCY	0.15	0.23
tblVehicleEF	MCY	18.72	18.86
tblVehicleEF	MCY	9.68	8.54
tblVehicleEF	MCY	189.29	223.65
tblVehicleEF	MCY	44.13	59.21
tblVehicleEF	MCY	1.13	1.13
tblVehicleEF	MCY	0.31	0.26
tblVehicleEF	MCY	0.01	0.01
tblVehicleEF	MCY	4.0000e-003	4.0000e-003
tblVehicleEF	MCY	2.4730e-003	2.4798e-003
tblVehicleEF	MCY	3.6800e-003	3.1545e-003
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tblVehicleEF	MCY	1.0000e-003	1.0000e-003
tblVehicleEF	MCY	2.3100e-003	2.3160e-003
tblVehicleEF	MCY	3.4590e-003	2.9646e-003
tblVehicleEF	MCY	1.06	1.07
tblVehicleEF	MCY	0.62	0.64
tblVehicleEF	MCY	0.64	0.65

tblVehicleEF	MCY	2.58	2.60
tblVehicleEF	MCY	0.58	1.88
tblVehicleEF	MCY	2.04	1.80
tblVehicleEF	MCY	2.2780e-003	2.2132e-003
tblVehicleEF	MCY	6.5900e-004	5.8591e-004
tblVehicleEF	MCY	1.06	1.07
tblVehicleEF	MCY	0.62	0.64
tblVehicleEF	MCY	0.64	0.65
tblVehicleEF	MCY	3.22	3.23
tblVehicleEF	MCY	0.58	1.88
tblVehicleEF	MCY	2.22	1.96
tblVehicleEF	MCY	0.53	0.37
tblVehicleEF	MCY	0.13	0.21
tblVehicleEF	MCY	18.05	18.15
tblVehicleEF	MCY	8.84	7.77
tblVehicleEF	MCY	189.29	222.30
tblVehicleEF	MCY	44.13	57.32
tblVehicleEF	MCY	0.99	0.99
tblVehicleEF	MCY	0.29	0.25
tblVehicleEF	MCY	0.01	0.01
tblVehicleEF	MCY	4.0000e-003	4.0000e-003
tblVehicleEF	MCY	2.4730e-003	2.4798e-003
tblVehicleEF	MCY	3.6800e-003	3.1545e-003
tblVehicleEF	MCY	5.0400e-003	5.0400e-003
tblVehicleEF	MCY	1.0000e-003	1.0000e-003
tblVehicleEF	MCY	2.3100e-003	2.3160e-003
tblVehicleEF	MCY	3.4590e-003	2.9646e-003

tblVehicleEF	MCY	1.72	1.71
tblVehicleEF	MCY	0.68	0.69
tblVehicleEF	MCY	1.06	1.05
tblVehicleEF	MCY	2.52	2.54
tblVehicleEF	MCY	0.54	1.76
tblVehicleEF	MCY	1.82	1.60
tblVehicleEF	MCY	2.2650e-003	2.1999e-003
tblVehicleEF	MCY	6.3900e-004	5.6721e-004
tblVehicleEF	MCY	1.72	1.71
tblVehicleEF	MCY	0.68	0.69
tblVehicleEF	MCY	1.06	1.05
tblVehicleEF	MCY	3.15	3.16
tblVehicleEF	MCY	0.54	1.76
tblVehicleEF	MCY	1.98	1.74
tblVehicleEF	MCY	0.54	0.38
tblVehicleEF	MCY	0.15	0.24
tblVehicleEF	MCY	18.82	19.00
tblVehicleEF	MCY	9.83	8.69
tblVehicleEF	MCY	189.29	223.92
tblVehicleEF	MCY	44.13	59.59
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tblVehicleEF	MCY	0.31	0.27
tblVehicleEF	MCY	0.01	0.01
tblVehicleEF	MCY	4.0000e-003	4.0000e-003
tblVehicleEF	MCY	2.4730e-003	2.4798e-003
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tblVehicleEF	MCY	5.0400e-003	5.0400e-003

tblVehicleEF	MCY	1.0000e-003	1.0000e-003
tblVehicleEF	MCY	2.3100e-003	2.3160e-003
tblVehicleEF	MCY	3.4590e-003	2.9646e-003
tblVehicleEF	MCY	1.15	1.17
tblVehicleEF	MCY	0.80	0.82
tblVehicleEF	MCY	0.61	0.63
tblVehicleEF	MCY	2.59	2.61
tblVehicleEF	MCY	0.67	2.18
tblVehicleEF	MCY	2.08	1.85
tblVehicleEF	MCY	2.2800e-003	2.2159e-003
tblVehicleEF	MCY	6.6300e-004	5.8968e-004
tblVehicleEF	MCY	1.15	1.17
tblVehicleEF	MCY	0.80	0.82
tblVehicleEF	MCY	0.61	0.63
tblVehicleEF	MCY	3.23	3.25
tblVehicleEF	MCY	0.67	2.18
tblVehicleEF	MCY	2.26	2.01
tblVehicleEF	MDV	0.01	5.6774e-003
tblVehicleEF	MDV	0.01	0.07
tblVehicleEF	MDV	1.21	1.09
tblVehicleEF	MDV	2.22	2.92
tblVehicleEF	MDV	495.22	408.75
tblVehicleEF	MDV	99.91	80.84
tblVehicleEF	MDV	0.13	0.10
tblVehicleEF	MDV	0.19	0.31
tblVehicleEF	MDV	0.04	0.04
tblVehicleEF	MDV	8.0000e-003	8.0000e-003

tblVehicleEF	MDV	2.2990e-003	1.9552e-003
tblVehicleEF	MDV	2.4650e-003	1.9340e-003
tblVehicleEF	MDV	0.02	0.02
tblVehicleEF	MDV	2.0000e-003	2.0000e-003
tblVehicleEF	MDV	2.1190e-003	1.8024e-003
tblVehicleEF	MDV	2.2660e-003	1.7785e-003
tblVehicleEF	MDV	0.06	0.08
tblVehicleEF	MDV	0.15	0.13
tblVehicleEF	MDV	0.07	0.09
tblVehicleEF	MDV	0.03	0.02
tblVehicleEF	MDV	0.09	0.41
tblVehicleEF	MDV	0.17	0.36
tblVehicleEF	MDV	4.9590e-003	3.9917e-003
tblVehicleEF	MDV	1.0380e-003	7.9003e-004
tblVehicleEF	MDV	0.06	0.08
tblVehicleEF	MDV	0.15	0.13
tblVehicleEF	MDV	0.07	0.09
tblVehicleEF	MDV	0.04	0.04
tblVehicleEF	MDV	0.09	0.41
tblVehicleEF	MDV	0.18	0.39
tblVehicleEF	MDV	0.01	6.0286e-003
tblVehicleEF	MDV	0.01	0.07
tblVehicleEF	MDV	1.32	1.19
tblVehicleEF	MDV	1.90	2.49
tblVehicleEF	MDV	516.89	420.70
tblVehicleEF	MDV	99.91	80.01
tblVehicleEF	MDV	0.11	0.08

tblVehicleEF	MDV	0.18	0.29
tblVehicleEF	MDV	0.04	0.04
tblVehicleEF	MDV	8.0000e-003	8.0000e-003
tblVehicleEF	MDV	2.2990e-003	1.9552e-003
tblVehicleEF	MDV	2.4650e-003	1.9340e-003
tblVehicleEF	MDV	0.02	0.02
tblVehicleEF	MDV	2.0000e-003	2.0000e-003
tblVehicleEF	MDV	2.1190e-003	1.8024e-003
tblVehicleEF	MDV	2.2660e-003	1.7785e-003
tblVehicleEF	MDV	0.10	0.12
tblVehicleEF	MDV	0.15	0.14
tblVehicleEF	MDV	0.09	0.12
tblVehicleEF	MDV	0.03	0.03
tblVehicleEF	MDV	0.08	0.38
tblVehicleEF	MDV	0.15	0.32
tblVehicleEF	MDV	5.1770e-003	4.1085e-003
tblVehicleEF	MDV	1.0320e-003	7.8193e-004
tblVehicleEF	MDV	0.10	0.12
tblVehicleEF	MDV	0.15	0.14
tblVehicleEF	MDV	0.09	0.12
tblVehicleEF	MDV	0.05	0.04
tblVehicleEF	MDV	0.08	0.38
tblVehicleEF	MDV	0.16	0.35
tblVehicleEF	MDV	0.01	5.5643e-003
tblVehicleEF	MDV	0.01	0.08
tblVehicleEF	MDV	1.17	1.05
tblVehicleEF	MDV	2.29	3.02

tblVehicleEF	MDV	487.26	404.33
tblVehicleEF	MDV	99.91	81.03
tblVehicleEF	MDV	0.13	0.09
tblVehicleEF	MDV	0.20	0.31
tblVehicleEF	MDV	0.04	0.04
tblVehicleEF	MDV	8.0000e-003	8.0000e-003
tblVehicleEF	MDV	2.2990e-003	1.9552e-003
tblVehicleEF	MDV	2.4650e-003	1.9340e-003
tblVehicleEF	MDV	0.02	0.02
tblVehicleEF	MDV	2.0000e-003	2.0000e-003
tblVehicleEF	MDV	2.1190e-003	1.8024e-003
tblVehicleEF	MDV	2.2660e-003	1.7785e-003
tblVehicleEF	MDV	0.06	0.08
tblVehicleEF	MDV	0.16	0.14
tblVehicleEF	MDV	0.06	0.08
tblVehicleEF	MDV	0.03	0.02
tblVehicleEF	MDV	0.10	0.48
tblVehicleEF	MDV	0.17	0.37
tblVehicleEF	MDV	4.8790e-003	3.9485e-003
tblVehicleEF	MDV	1.0390e-003	7.9190e-004
tblVehicleEF	MDV	0.06	0.08
tblVehicleEF	MDV	0.16	0.14
tblVehicleEF	MDV	0.06	0.08
tbIVehicleEF	MDV	0.04	0.03
tbIVehicleEF	MDV	0.10	0.48
tbIVehicleEF	MDV	0.19	0.40
tblVehicleEF	MH	0.02	2.9973e-003

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tblVehicleEF	MH	59.88	0.00
tblVehicleEF	MH	1.00	3.27
tblVehicleEF	MH	0.75	0.00
tblVehicleEF	MH	0.13	0.13
tblVehicleEF	MH	0.01	0.02
tblVehicleEF	MH	0.02	0.07
tblVehicleEF	MH	1.0430e-003	0.00
tblVehicleEF	MH	0.06	0.06
tblVehicleEF	MH	3.2050e-003	4.0000e-003
tblVehicleEF	MH	0.02	0.07
tblVehicleEF	MH	9.5900e-004	0.00
tblVehicleEF	MH	0.84	0.00
tblVehicleEF	MH	0.06	0.00
tblVehicleEF	MH	0.36	0.00
tblVehicleEF	MH	0.07	0.06
tblVehicleEF	MH	0.02	0.00
tblVehicleEF	MH	0.30	0.00
tblVehicleEF	MH	0.01	9.0156e-003
tblVehicleEF	MH	6.9000e-004	0.00
tblVehicleEF	MH	0.84	0.00
tblVehicleEF	MH	0.06	0.00
tblVehicleEF	MH	0.36	0.00
tblVehicleEF	MH	0.10	0.07

tblVehicleEF	MH	0.02	0.00
tblVehicleEF	MH	0.33	0.00
tblVehicleEF	MH	0.02	2.9973e-003
tblVehicleEF	MH	0.02	0.00
tblVehicleEF	MH	1.81	0.25
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tblVehicleEF	MH	1,125.05	953.67
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tblVehicleEF	MH	0.92	3.09
tblVehicleEF	MH	0.71	0.00
tblVehicleEF	MH	0.13	0.13
tblVehicleEF	MH	0.01	0.02
tblVehicleEF	MH	0.02	0.07
tblVehicleEF	MH	1.0430e-003	0.00
tblVehicleEF	MH	0.06	0.06
tblVehicleEF	MH	3.2050e-003	4.0000e-003
tblVehicleEF	MH	0.02	0.07
tblVehicleEF	MH	9.5900e-004	0.00
tblVehicleEF	MH	1.24	0.00
tblVehicleEF	MH	0.06	0.00
tblVehicleEF	MH	0.51	0.00
tblVehicleEF	MH	0.07	0.06
tblVehicleEF	MH	0.02	0.00
tblVehicleEF	MH	0.29	0.00
tblVehicleEF	MH	0.01	9.0156e-003
tblVehicleEF	MH	6.8400e-004	0.00
tblVehicleEF	MH	1.24	0.00

tblVehicleEF	MH	0.06	0.00
tblVehicleEF	MH	0.51	0.00
tblVehicleEF	MH	0.10	0.07
tblVehicleEF	MH	0.02	0.00
tblVehicleEF	MH	0.31	0.00
tblVehicleEF	MH	0.02	2.9973e-003
tblVehicleEF	MH	0.02	0.00
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tblVehicleEF	MH	0.01	0.02
tblVehicleEF	MH	0.02	0.07
tblVehicleEF	MH	1.0430e-003	0.00
tblVehicleEF	MH	0.06	0.06
tblVehicleEF	MH	3.2050e-003	4.0000e-003
tblVehicleEF	MH	0.02	0.07
tblVehicleEF	MH	9.5900e-004	0.00
tblVehicleEF	MH	0.95	0.00
tblVehicleEF	MH	0.07	0.00
tblVehicleEF	MH	0.37	0.00
tblVehicleEF	MH	0.07	0.06
tblVehicleEF	MH	0.02	0.00
tblVehicleEF	MH	0.30	0.00

tblVehicleEF	MH	0.01	9.0156e-003
tblVehicleEF	MH	6.9000e-004	0.00
tblVehicleEF	MH	0.95	0.00
tblVehicleEF	MH	0.07	0.00
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tblVehicleEF	MH	0.10	0.07
tblVehicleEF	MH	0.02	0.00
tblVehicleEF	MH	0.33	0.00
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tblVehicleEF	MHD	3.8910e-003	2.0984e-003
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tblVehicleEF	MHD	0.36	0.40
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tblVehicleEF	MHD	1,141.08	1,030.64
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tblVehicleEF	MHD	0.76	1.08
tblVehicleEF	MHD	9.98	1.58
tblVehicleEF	MHD	1.0200e-004	3.2629e-004
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tblVehicleEF	MHD	0.01	0.01
tblVehicleEF	MHD	2.8420e-003	6.1299e-003
tblVehicleEF	MHD	8.1400e-004	1.3466e-004
tblVehicleEF	MHD	9.7000e-005	3.1218e-004
tblVehicleEF	MHD	0.06	0.06

tblVehicleEF	MHD	3.0000e-003	3.0000e-003
tblVehicleEF	MHD	2.7140e-003	5.8582e-003
tblVehicleEF	MHD	7.4900e-004	1.2382e-004
tblVehicleEF	MHD	1.0540e-003	6.2271e-004
tblVehicleEF	MHD	0.04	0.03
tblVehicleEF	MHD	0.02	0.02
tblVehicleEF	MHD	7.0500e-004	4.1013e-004
tblVehicleEF	MHD	0.04	0.02
tblVehicleEF	MHD	0.02	0.14
tblVehicleEF	MHD	0.34	0.06
tblVehicleEF	MHD	1.2580e-003	6.1463e-004
tblVehicleEF	MHD	0.01	9.8543e-003
tblVehicleEF	MHD	7.2700e-004	1.1932e-004
tblVehicleEF	MHD	1.0540e-003	6.2271e-004
tblVehicleEF	MHD	0.04	0.03
tblVehicleEF	MHD	0.04	0.03
tblVehicleEF	MHD	7.0500e-004	4.1013e-004
tblVehicleEF	MHD	0.04	0.02
tblVehicleEF	MHD	0.02	0.14
tblVehicleEF	MHD	0.38	0.07
tblVehicleEF	MHD	0.01	4.2036e-003
tblVehicleEF	MHD	3.9490e-003	2.1413e-003
tblVehicleEF	MHD	0.04	0.01
tblVehicleEF	MHD	0.26	0.34
tblVehicleEF	MHD	0.32	0.28
tblVehicleEF	MHD	5.34	1.31
tblVehicleEF	MHD	138.27	64.73

tblVehicleEF	MHD	1,141.08	1,030.65
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tblVehicleEF	MHD	9.94	1.58
tblVehicleEF	MHD	8.6000e-005	2.7779e-004
tblVehicleEF	MHD	0.13	0.13
tblVehicleEF	MHD	0.01	0.01
tblVehicleEF	MHD	2.8420e-003	6.1299e-003
tblVehicleEF	MHD	8.1400e-004	1.3466e-004
tblVehicleEF	MHD	8.2000e-005	2.6577e-004
tblVehicleEF	MHD	0.06	0.06
tblVehicleEF	MHD	3.0000e-003	3.0000e-003
tblVehicleEF	MHD	2.7140e-003	5.8582e-003
tblVehicleEF	MHD	7.4900e-004	1.2382e-004
tblVehicleEF	MHD	1.5770e-003	9.2475e-004
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tblVehicleEF	MHD	0.02	0.02
tblVehicleEF	MHD	9.9000e-004	5.7330e-004
tblVehicleEF	MHD	0.04	0.02
tblVehicleEF	MHD	0.02	0.13
tblVehicleEF	MHD	0.33	0.06
tblVehicleEF	MHD	1.3310e-003	6.1548e-004
tblVehicleEF	MHD	0.01	9.8544e-003
tblVehicleEF	MHD	7.2200e-004	1.1815e-004
tblVehicleEF	MHD	1.5770e-003	9.2475e-004
tblVehicleEF	MHD	0.05	0.03

tblVehicleEF	MHD	0.03	0.03
tblVehicleEF	MHD	9.9000e-004	5.7330e-004
tblVehicleEF	MHD	0.04	0.02
tblVehicleEF	MHD	0.02	0.13
tblVehicleEF	MHD	0.36	0.07
tblVehicleEF	MHD	0.02	4.7556e-003
tblVehicleEF	MHD	3.8750e-003	2.0848e-003
tblVehicleEF	MHD	0.05	0.01
tblVehicleEF	MHD	0.50	0.49
tblVehicleEF	MHD	0.32	0.28
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tblVehicleEF	MHD	1,141.08	1,030.64
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tblVehicleEF	MHD	9.99	1.58
tblVehicleEF	MHD	1.2400e-004	3.9328e-004
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tblVehicleEF	MHD	0.01	0.01
tblVehicleEF	MHD	2.8420e-003	6.1299e-003
tblVehicleEF	MHD	8.1400e-004	1.3466e-004
tblVehicleEF	MHD	1.1800e-004	3.7627e-004
tblVehicleEF	MHD	0.06	0.06
tblVehicleEF	MHD	3.0000e-003	3.0000e-003
tblVehicleEF	MHD	2.7140e-003	5.8582e-003
tblVehicleEF	MHD	7.4900e-004	1.2382e-004

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tblVehicleEF	MHD	0.03	0.02
tblVehicleEF	MHD	6.8500e-004	3.9956e-004
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tblVehicleEF	MHD	0.02	0.15
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tblVehicleEF	MHD	1.1580e-003	6.1340e-004
tblVehicleEF	MHD	0.01	9.8543e-003
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tblVehicleEF	MHD	1.0750e-003	6.3848e-004
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tblVehicleEF	MHD	0.04	0.03
tblVehicleEF	MHD	6.8500e-004	3.9956e-004
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tblVehicleEF	OBUS	6.0280e-003	4.9407e-003
tblVehicleEF	OBUS	0.03	0.02
tblVehicleEF	OBUS	0.25	0.61
tblVehicleEF	OBUS	0.45	0.61
tblVehicleEF	OBUS	5.18	2.34
tblVehicleEF	OBUS	101.82	90.17
tblVehicleEF	OBUS	1,246.68	1,355.70
tblVehicleEF	OBUS	67.80	19.02
tblVehicleEF	OBUS	0.22	0.35

tblVehicleEF	OBUS	0.69	1.16
tblVehicleEF	OBUS	2.52	0.84
tblVehicleEF	OBUS	2.0000e-005	1.1818e-004
tblVehicleEF	OBUS	0.13	0.13
tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	2.6330e-003	7.0871e-003
tblVehicleEF	OBUS	8.2900e-004	2.0001e-004
tblVehicleEF	OBUS	1.9000e-005	1.1307e-004
tblVehicleEF	OBUS	0.06	0.06
tblVehicleEF	OBUS	3.0000e-003	3.0000e-003
tblVehicleEF	OBUS	2.5030e-003	6.7657e-003
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tblVehicleEF	OBUS	0.03	0.05
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tblVehicleEF	OBUS	0.32	0.11
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tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	7.6900e-004	1.8827e-004
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tblVehicleEF	OBUS	0.05	0.07
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tblVehicleEF	OBUS	1.7000e-005	1.0501e-004
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tblVehicleEF	OBUS	0.01	0.01
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tblVehicleEF	OBUS	0.04	0.26
tblVehicleEF	OBUS	0.34	0.12
tblVehicleEF	OBUS	0.01	8.2137e-003
tblVehicleEF	OBUS	5.9990e-003	4.9102e-003
tblVehicleEF	OBUS	0.03	0.02
tblVehicleEF	OBUS	0.26	0.62
tblVehicleEF	OBUS	0.45	0.61
tblVehicleEF	OBUS	5.23	2.37
tblVehicleEF	OBUS	94.83	91.59
tblVehicleEF	OBUS	1,246.68	1,355.70
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tblVehicleEF	OBUS	8.2900e-004	2.0001e-004
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tblVehicleEF	OBUS	0.06	0.06
tblVehicleEF	OBUS	3.0000e-003	3.0000e-003
tblVehicleEF	OBUS	2.5030e-003	6.7657e-003
tblVehicleEF	OBUS	7.6200e-004	1.8390e-004
tblVehicleEF	OBUS	1.4400e-003	1.9124e-003
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tblVehicleEF	OBUS	0.03	0.05
tblVehicleEF	OBUS	7.4400e-004	9.3077e-004
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tblVehicleEF	OBUS	0.04	0.29
tblVehicleEF	OBUS	0.33	0.11
tblVehicleEF	OBUS	9.1700e-004	8.7139e-004
tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	7.7000e-004	1.8872e-004
tblVehicleEF	OBUS	1.4400e-003	1.9124e-003
tblVehicleEF	OBUS	0.02	0.02
tblVehicleEF	OBUS	0.05	0.07
tblVehicleEF	OBUS	7.4400e-004	9.3077e-004
tblVehicleEF	OBUS	0.05	0.04
tblVehicleEF	OBUS	0.04	0.29
tblVehicleEF	OBUS	0.36	0.12
tblVehicleEF	SBUS	0.84	0.08

tblVehicleEF	SBUS	0.01	6.7075e-003
tblVehicleEF	SBUS	0.06	7.0645e-003
tblVehicleEF	SBUS	8.28	3.14
tblVehicleEF	SBUS	0.67	0.57
tblVehicleEF	SBUS	7.16	0.97
tblVehicleEF	SBUS	1,105.31	354.45
tblVehicleEF	SBUS	1,070.53	1,085.99
tblVehicleEF	SBUS	56.44	5.97
tblVehicleEF	SBUS	8.50	3.03
tblVehicleEF	SBUS	3.81	4.38
tblVehicleEF	SBUS	11.84	0.95
tblVehicleEF	SBUS	8.1160e-003	3.5863e-003
tblVehicleEF	SBUS	0.74	0.74
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.02	0.03
tblVehicleEF	SBUS	8.5300e-004	6.0241e-005
tblVehicleEF	SBUS	7.7650e-003	3.4312e-003
tblVehicleEF	SBUS	0.32	0.32
tblVehicleEF	SBUS	2.6580e-003	2.6525e-003
tblVehicleEF	SBUS	0.02	0.02
tblVehicleEF	SBUS	7.8400e-004	5.5389e-005
tblVehicleEF	SBUS	3.3720e-003	1.0292e-003
tblVehicleEF	SBUS	0.03	8.9743e-003
tblVehicleEF	SBUS	0.99	0.36
tblVehicleEF	SBUS	1.8240e-003	5.5949e-004
tblVehicleEF	SBUS	0.10	0.09
tblVehicleEF	SBUS	0.01	0.06

tblVehicleEF	SBUS	0.38	0.04
tblVehicleEF	SBUS	0.01	3.3855e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	6.8800e-004	5.9097e-005
tblVehicleEF	SBUS	3.3720e-003	1.0292e-003
tblVehicleEF	SBUS	0.03	8.9743e-003
tblVehicleEF	SBUS	1.43	0.52
tblVehicleEF	SBUS	1.8240e-003	5.5949e-004
tblVehicleEF	SBUS	0.12	0.10
tblVehicleEF	SBUS	0.01	0.06
tblVehicleEF	SBUS	0.41	0.04
tblVehicleEF	SBUS	0.84	0.08
tblVehicleEF	SBUS	0.01	6.7846e-003
tblVehicleEF	SBUS	0.05	6.3039e-003
tblVehicleEF	SBUS	8.18	3.11
tblVehicleEF	SBUS	0.68	0.58
tblVehicleEF	SBUS	5.81	0.79
tblVehicleEF	SBUS	1,154.44	361.51
tblVehicleEF	SBUS	1,070.53	1,086.01
tblVehicleEF	SBUS	56.44	5.68
tblVehicleEF	SBUS	8.77	3.09
tblVehicleEF	SBUS	3.59	4.13
tblVehicleEF	SBUS	11.81	0.95
tblVehicleEF	SBUS	6.8420e-003	3.0311e-003
tblVehicleEF	SBUS	0.74	0.74
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.02	0.03

tblVehicleEF	SBUS	8.5300e-004	6.0241e-005
tblVehicleEF	SBUS	6.5460e-003	2.9000e-003
tblVehicleEF	SBUS	0.32	0.32
tblVehicleEF	SBUS	2.6580e-003	2.6525e-003
tblVehicleEF	SBUS	0.02	0.02
tblVehicleEF	SBUS	7.8400e-004	5.5389e-005
tblVehicleEF	SBUS	4.9610e-003	1.4874e-003
tblVehicleEF	SBUS	0.03	9.1168e-003
tblVehicleEF	SBUS	0.98	0.36
tblVehicleEF	SBUS	2.5750e-003	7.7378e-004
tblVehicleEF	SBUS	0.10	0.09
tblVehicleEF	SBUS	0.01	0.05
tblVehicleEF	SBUS	0.34	0.04
tblVehicleEF	SBUS	0.01	3.4522e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	6.6600e-004	5.6163e-005
tblVehicleEF	SBUS	4.9610e-003	1.4874e-003
tblVehicleEF	SBUS	0.03	9.1168e-003
tblVehicleEF	SBUS	1.42	0.52
tblVehicleEF	SBUS	2.5750e-003	7.7378e-004
tblVehicleEF	SBUS	0.12	0.11
tblVehicleEF	SBUS	0.01	0.05
tblVehicleEF	SBUS	0.37	0.04
tblVehicleEF	SBUS	0.84	0.08
tblVehicleEF	SBUS	0.01	6.6841e-003
tblVehicleEF	SBUS	0.06	7.2391e-003
tblVehicleEF	SBUS	8.43	3.19

tblVehicleEF	SBUS	0.66	0.57
tblVehicleEF	SBUS	7.40	1.00
tblVehicleEF	SBUS	1,037.46	344.71
tblVehicleEF	SBUS	1,070.53	1,085.99
tblVehicleEF	SBUS	56.44	6.03
tblVehicleEF	SBUS	8.13	2.95
tblVehicleEF	SBUS	3.74	4.30
tblVehicleEF	SBUS	11.85	0.96
tblVehicleEF	SBUS	9.8760e-003	4.3531e-003
tblVehicleEF	SBUS	0.74	0.74
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.02	0.03
tblVehicleEF	SBUS	8.5300e-004	6.0241e-005
tblVehicleEF	SBUS	9.4480e-003	4.1648e-003
tblVehicleEF	SBUS	0.32	0.32
tblVehicleEF	SBUS	2.6580e-003	2.6525e-003
tblVehicleEF	SBUS	0.02	0.02
tblVehicleEF	SBUS	7.8400e-004	5.5389e-005
tblVehicleEF	SBUS	3.3940e-003	1.0334e-003
tblVehicleEF	SBUS	0.03	9.3494e-003
tblVehicleEF	SBUS	0.99	0.36
tblVehicleEF	SBUS	1.7490e-003	5.3556e-004
tblVehicleEF	SBUS	0.10	0.09
tblVehicleEF	SBUS	0.02	0.07
tblVehicleEF	SBUS	0.39	0.04
tblVehicleEF	SBUS	0.01	3.2934e-003
tblVehicleEF	SBUS	0.01	0.01

tblVehicleEF	SBUS	6.9200e-004	5.9658e-005
tblVehicleEF	SBUS	3.3940e-003	1.0334e-003
tblVehicleEF	SBUS	0.03	9.3494e-003
tblVehicleEF	SBUS	1.43	0.52
tblVehicleEF	SBUS	1.7490e-003	5.3556e-004
tblVehicleEF	SBUS	0.12	0.10
tblVehicleEF	SBUS	0.02	0.07
tblVehicleEF	SBUS	0.42	0.05
tblVehicleEF	UBUS	2.44	5.85
tblVehicleEF	UBUS	0.05	0.01
tblVehicleEF	UBUS	10.68	45.42
tblVehicleEF	UBUS	8.84	0.71
tblVehicleEF	UBUS	1,951.45	1,987.99
tblVehicleEF	UBUS	100.38	8.42
tblVehicleEF	UBUS	9.33	0.47
tblVehicleEF	UBUS	15.09	0.08
tblVehicleEF	UBUS	0.60	0.07
tblVehicleEF	UBUS	0.01	0.03
tblVehicleEF	UBUS	0.12	3.2067e-003
tblVehicleEF	UBUS	1.1360e-003	5.6569e-005
tblVehicleEF	UBUS	0.26	0.03
tblVehicleEF	UBUS	3.0000e-003	7.9689e-003
tblVehicleEF	UBUS	0.12	3.0642e-003
tblVehicleEF	UBUS	1.0450e-003	5.2013e-005
tblVehicleEF	UBUS	4.1100e-003	5.9331e-004
tblVehicleEF	UBUS	0.07	7.4130e-003
tblVehicleEF	UBUS	2.4100e-003	4.3392e-004

tblVehicleEF	UBUS	0.79	0.09
tblVehicleEF	UBUS	0.02	0.05
tblVehicleEF	UBUS	0.68	0.05
tblVehicleEF	UBUS	9.8060e-003	1.4048e-003
tblVehicleEF	UBUS	1.1630e-003	8.3318e-005
tblVehicleEF	UBUS	4.1100e-003	5.9331e-004
tblVehicleEF	UBUS	0.07	7.4130e-003
tblVehicleEF	UBUS	2.4100e-003	4.3392e-004
tblVehicleEF	UBUS	3.32	5.97
tblVehicleEF	UBUS	0.02	0.05
tblVehicleEF	UBUS	0.75	0.05
tblVehicleEF	UBUS	2.44	5.85
tblVehicleEF	UBUS	0.05	9.9367e-003
tblVehicleEF	UBUS	10.72	45.42
tblVehicleEF	UBUS	7.66	0.63
tblVehicleEF	UBUS	1,951.45	1,987.99
tblVehicleEF	UBUS	100.38	8.27
tblVehicleEF	UBUS	8.79	0.47
tblVehicleEF	UBUS	15.04	0.08
tblVehicleEF	UBUS	0.60	0.07
tblVehicleEF	UBUS	0.01	0.03
tblVehicleEF	UBUS	0.12	3.2067e-003
tblVehicleEF	UBUS	1.1360e-003	5.6569e-005
tblVehicleEF	UBUS	0.26	0.03
tblVehicleEF	UBUS	3.0000e-003	7.9689e-003
tblVehicleEF	UBUS	0.12	3.0642e-003
tblVehicleEF	UBUS	1.0450e-003	5.2013e-005
		·····	

tblVehicleEF	UBUS	5.8640e-003	8.6079e-004
tblVehicleEF	UBUS	0.07	7.6581e-003
tblVehicleEF	UBUS	3.3120e-003	5.9984e-004
tblVehicleEF	UBUS	0.80	0.09
tblVehicleEF	UBUS	0.02	0.04
tblVehicleEF	UBUS	0.63	0.04
tblVehicleEF	UBUS	9.8070e-003	1.4048e-003
tblVehicleEF	UBUS	1.1430e-003	8.1863e-005
tblVehicleEF	UBUS	5.8640e-003	8.6079e-004
tblVehicleEF	UBUS	0.07	7.6581e-003
tblVehicleEF	UBUS	3.3120e-003	5.9984e-004
tblVehicleEF	UBUS	3.33	5.97
tblVehicleEF	UBUS	0.02	0.04
tblVehicleEF	UBUS	0.69	0.05
tblVehicleEF	UBUS	2.44	5.85
tblVehicleEF	UBUS	0.05	0.01
tblVehicleEF	UBUS	10.66	45.42
tblVehicleEF	UBUS	9.05	0.73
tblVehicleEF	UBUS	1,951.45	1,987.99
tblVehicleEF	UBUS	100.38	8.45
tblVehicleEF	UBUS	9.15	0.47
tblVehicleEF	UBUS	15.10	0.08
tblVehicleEF	UBUS	0.60	0.07
tblVehicleEF	UBUS	0.01	0.03
tblVehicleEF	UBUS	0.12	3.2067e-003
tblVehicleEF	UBUS	1.1360e-003	5.6569e-005
tblVehicleEF	UBUS	0.26	0.03

tblVehicleEF	UBUS	3.0000e-003	7.9689e-003
tblVehicleEF	UBUS	0.12	3.0642e-003
tblVehicleEF	UBUS	1.0450e-003	5.2013e-005
tblVehicleEF	UBUS	4.6290e-003	5.8312e-004
tblVehicleEF	UBUS	0.08	7.9413e-003
tblVehicleEF	UBUS	2.5090e-003	4.1273e-004
tblVehicleEF	UBUS	0.79	0.09
tblVehicleEF	UBUS	0.03	0.06
tblVehicleEF	UBUS	0.70	0.05
tblVehicleEF	UBUS	9.8060e-003	1.4048e-003
tblVehicleEF	UBUS	1.1670e-003	8.3611e-005
tblVehicleEF	UBUS	4.6290e-003	5.8312e-004
tblVehicleEF	UBUS	0.08	7.9413e-003
tblVehicleEF	UBUS	2.5090e-003	4.1273e-004
tblVehicleEF	UBUS	3.31	5.97
tblVehicleEF	UBUS	0.03	0.06
tblVehicleEF	UBUS	0.76	0.05
tblVehicleTrips	ST_TR	177.59	177.62
tblVehicleTrips	SU_TR	166.44	166.47
tblVehicleTrips	WD_TR	102.24	106.78
tblWater	AerobicPercent	87.46	100.00
tblWater	AnaerobicandFacultativeLagoonsPerce	2.21	0.00
tblWater	nt IndoorWaterUseRate	1,121,740.76	1,047,779.83
tblWater	OutdoorWaterUseRate	34,693.01	32,405.56
tblWater	SepticTankPercent	10.33	0.00

## 2.0 Emissions Summary

## 2.1 Overall Construction (Maximum Daily Emission)

## **Unmitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year					lb/d	lay							lb/d	lay		
2020	2.1860	20.9889	15.2265	0.0256	0.1453	1.1537	1.2990	0.0385	1.0773	1.1158	0.0000	2,475.207 3	2,475.2073	0.6018	0.0000	2,490.251 5
Maximum	2.1860	20.9889	15.2265	0.0256	0.1453	1.1537	1.2990	0.0385	1.0773	1.1158	0.0000	2,475.207 3	2,475.2073	0.6018	0.0000	2,490.251 5

## 2.2 Overall Operational

#### **Unmitigated Operational**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/c	lay							lb/d	ay		
Area	0.2034	1.0000e- 005	1.0600e- 003	0.0000		0.0000	0.0000		0.0000	0.0000		2.2800e- 003	2.2800e- 003	1.0000e- 005		2.4300e- 003
Energy	6.2700e- 003	0.0570	0.0479	3.4000e- 004		4.3300e- 003	4.3300e- 003		4.3300e- 003	4.3300e- 003		68.3710	68.3710	1.3100e- 003	1.2500e- 003	68.7773
Mobile	3.1867	3.9324	20.8865	0.0496	4.5211	0.0404	4.5614	1.2075	0.0376	1.2451		5,185.234 0	5,185.2340	0.4355		5,196.122 6
Total	3.3964	3.9894	20.9355	0.0500	4.5211	0.0447	4.5658	1.2075	0.0419	1.2495		5,253.607 3	5,253.6073	0.4369	1.2500e- 003	5,264.902 3

#### **Mitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5			PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day								lb/d	day		
Area	0.2034	1.0000e- 005	1.0600e- 003	0.0000		0.0000	0.0000		0.00	000	0.0000		2.2800e- 003	2.2800e- 003	1.0000e- 005		2.4300e- 003
Energy	6.2700e- 003	0.0570	0.0479	3.4000e- 004		4.3300e- 003	4.3300e- 003		4.330 00	=	1.3300e- 003		68.3710	68.3710	1.3100e- 003	1.2500e- 003	68.7773
Mobile	3.1867	3.9324	20.8865	0.0496	4.5211	0.0404	4.5614	1.2075	0.03	376	1.2451		5,185.234 0	5,185.2340	0.4355		5,196.122 6
Total	3.3964	3.9894	20.9355	0.0500	4.5211	0.0447	4.5658	1.2075	0.04	119	1.2495		5,253.607 3	5,253.6073	0.4369	1.2500e- 003	5,264.902 3
	ROG	N	lOx (	co s					ugitive PM2.5	Exhau PM2.			CO2 NBio	-CO2 Total	CO2 CI	14 N	20 CO2e
Percent Reduction	0.00	0	.00 0	.00 0.	00 0	.00 0	.00 0	.00	0.00	0.00	0.0	00 0.	00 0.	00 0.0	0.0	00 0.	0.00

## 4.0 Operational Detail - Mobile

## 4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	lay							lb/d	ay		
Mitigated	3.1867	3.9324	20.8865	0.0496	4.5211	0.0404	4.5614	1.2075	0.0376	1.2451		5,185.234 0	5,185.2340	0.4355		5,196.122 6
Unmitigated	3.1867	3.9324	20.8865	0.0496	4.5211	0.0404	4.5614	1.2075	0.0376	1.2451		5,185.234 0	5,185.2340	0.4355		5,196.122 6

## **4.2 Trip Summary Information**

	Aver	age Daily Trip F	Rate	Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Other Asphalt Surfaces	0.00	0.00	0.00		
Supermarket	971.70	1,616.34	1514.88	1,506,027	1,506,027
Total	971.70	1,616.34	1,514.88	1,506,027	1,506,027

## **4.3 Trip Type Information**

		Miles			Trip %			Trip Purpos	e %
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
Other Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Supermarket	16.60	8.40	6.90	6.50	74.50	19.00	34	30	36

#### 4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Other Asphalt Surfaces	0.545842	0.044768	0.205288	0.119317	0.015350	0.006227	0.020460	0.031333	0.002546	0.002133	0.005184	0.000692	0.000862
Supermarket	0.545842	0.044768	0.205288	0.119317	0.015350	0.006227	0.020460	0.031333	0.002546	0.002133	0.005184	0.000692	0.000862

## 5.0 Energy Detail

Historical Energy Use: Y

## **5.1 Mitigation Measures Energy**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	ay							lb/d	ay		
NaturalGas Mitigated	6.2700e- 003	0.0570	0.0479	3.4000e- 004		4.3300e- 003	4.3300e- 003		4.3300e- 003	4.3300e- 003		68.3710	68.3710	1.3100e- 003	1.2500e- 003	68.7773
NaturalGas Unmitigated	6.2700e- 003	0.0570	0.0479	3.4000e- 004		4.3300e- 003	4.3300e- 003		4.3300e- 003	4.3300e- 003		68.3710	68.3710	1.3100e- 003	1.2500e- 003	68.7773

## 5.2 Energy by Land Use - NaturalGas <u>Unmitigated</u>

	NaturalGa s Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr					lb/e	day							lb/d	day		
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Supermarket	581.153	6.2700e- 003	0.0570	0.0479	3.4000e- 004		4.3300e- 003	4.3300e- 003		4.3300e- 003	4.3300e- 003		68.3710	68.3710	1.3100e- 003	1.2500e- 003	68.7773
Total		6.2700e- 003	0.0570	0.0479	3.4000e- 004		4.3300e- 003	4.3300e- 003		4.3300e- 003	4.3300e- 003		68.3710	68.3710	1.3100e- 003	1.2500e- 003	68.7773

#### **Mitigated**

	NaturalGa s Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr					lb/d	day							lb/d	day		
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Supermarket	0.581153	6.2700e- 003	0.0570	0.0479	3.4000e- 004		4.3300e- 003	4.3300e- 003		4.3300e- 003	4.3300e- 003		68.3710	68.3710	1.3100e- 003	1.2500e- 003	68.7773
Total		6.2700e- 003	0.0570	0.0479	3.4000e- 004		4.3300e- 003	4.3300e- 003		4.3300e- 003	4.3300e- 003		68.3710	68.3710	1.3100e- 003	1.2500e- 003	68.7773

#### 6.0 Area Detail

## 6.1 Mitigation Measures Area

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	lay							lb/d	ay		
Mitigated	0.2034	1.0000e- 005	1.0600e- 003	0.0000		0.0000	0.0000		0.0000	0.0000		2.2800e- 003	2.2800e- 003	1.0000e- 005		2.4300e- 003
Unmitigated	0.2034	1.0000e- 005	1.0600e- 003	0.0000		0.0000	0.0000		0.0000	0.0000		2.2800e- 003	2.2800e- 003	1.0000e- 005		2.4300e- 003

## 6.2 Area by SubCategory

## **Unmitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory					lb/d	lay							lb/d	lay		
Architectural Coating	0.0231					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.1802	D				0.0000	0.0000	D	0.0000	0.0000			0.0000	)	0	0.0000
Landscaping	1.0000e- 004	1.0000e- 005	1.0600e- 003	0.0000		0.0000	0.0000	D	0.0000	0.0000		2.2800e- 003	2.2800e- 003	1.0000e- 005	Outries (100 to 100 to	2.4300e- 003
Total	0.2034	1.0000e- 005	1.0600e- 003	0.0000		0.0000	0.0000		0.0000	0.0000		2.2800e- 003	2.2800e- 003	1.0000e- 005		2.4300e- 003

#### **Mitigated**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory					lb/d	lay							lb/d	lay		
Architectural Coating	0.0231					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.1802					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.0000e- 004	1.0000e- 005	1.0600e- 003	0.0000		0.0000	0.0000		0.0000	0.0000		2.2800e- 003	2.2800e- 003	1.0000e- 005		2.4300e- 003
Total	0.2034	1.0000e- 005	1.0600e- 003	0.0000		0.0000	0.0000		0.0000	0.0000		2.2800e- 003	2.2800e- 003	1.0000e- 005		2.4300e- 003

## 7.0 Water Detail

## 7.1 Mitigation Measures Water

## 8.0 Waste Detail

## 8.1 Mitigation Measures Waste

## 9.0 Operational Offroad

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

## 10.0 Stationary Equipment

#### **Fire Pumps and Emergency Generators**

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

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

## **User Defined Equipment**

Equipment Type	Number

## 11.0 Vegetation

CalEEMod Version: CalEEMod.2016.3.2

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Date: 7/18/2020 6:12 PM

#### Existing\_Year 2023 - Los Angeles-South Coast County, Winter

# Existing\_Year 2023 Los Angeles-South Coast County, Winter

#### 1.0 Project Characteristics

#### 1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Asphalt Surfaces	1.31	Acre	1.31	0.00	0
Supermarket	9.10	1000sqft	0.28	9,100.00	0

#### **1.2 Other Project Characteristics**

 Urbanization
 Urban
 Wind Speed (m/s)
 2.2
 Precipitation Freq (Days)
 33

 Climate Zone
 9
 Operational Year
 2023

Utility Company Southern California Edison

 CO2 Intensity
 531.44
 CH4 Intensity
 0.029
 N2O Intensity
 0.006

 (Ib/MWhr)
 (Ib/MWhr)
 (Ib/MWhr)

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

Project Characteristics - See assumptions file.

Land Use - See assumptions file.

Construction Phase -

Vehicle Trips - See assumptions file

Area Coating - Assumes no striping

Energy Use -Water And Wastewater - Assumes 100% aerobic. Fleet Mix -

Table Name	Column Name	Default Value	New Value
tblLandUse	LandUseSquareFeet	57,063.60	0.00
tblLandUse	LotAcreage	0.21	0.28
tblProjectCharacteristics	CO2IntensityFactor	702.44	531.44
tblSolidWaste	SolidWasteGenerationRate	51.32	47.94
tblVehicleEF	HHD	0.48	0.03
tblVehicleEF	HHD	0.09	0.08
tblVehicleEF	HHD	0.07	5.3770e-007
tblVehicleEF	HHD	1.63	6.71
tblVehicleEF	HHD	1.06	0.46
tblVehicleEF	HHD	3.33	9.5442e-003
tblVehicleEF	HHD	4,465.78	1,125.75
tblVehicleEF	HHD	1,572.96	1,398.54
tblVehicleEF	HHD	10.75	0.08
tblVehicleEF	HHD	14.30	5.75
tblVehicleEF	HHD	2.12	2.71
tblVehicleEF	HHD	19.50	2.35
tblVehicleEF	HHD	0.01	3.1921e-003
tblVehicleEF	HHD	0.06	0.06
tblVehicleEF	HHD	0.04	0.04
tblVehicleEF	HHD	6.2960e-003	0.02
tblVehicleEF	HHD	9.1000e-005	1.3513e-006
tblVehicleEF	HHD	9.6000e-003	3.0540e-003
tblVehicleEF	HHD	0.03	0.03

tblVehicleEF	HHD	8.8400e-003	8.8984e-003
tblVehicleEF	HHD	6.0240e-003	0.02
tblVehicleEF	HHD	8.3000e-005	1.2425e-006
tblVehicleEF	HHD	1.0300e-004	5.8985e-006
tblVehicleEF	HHD	4.5010e-003	2.2896e-004
tblVehicleEF	HHD	0.41	0.45
tblVehicleEF	HHD	7.8000e-005	4.1733e-006
tblVehicleEF	HHD	0.09	0.02
tblVehicleEF	HHD	3.7200e-004	1.1922e-003
tblVehicleEF	HHD	0.08	2.8340e-006
tblVehicleEF	HHD	0.04	0.01
tblVehicleEF	HHD	0.01	0.01
tblVehicleEF	HHD	1.6200e-004	8.4026e-007
tblVehicleEF	HHD	1.0300e-004	5.8985e-006
tblVehicleEF	HHD	4.5010e-003	2.2896e-004
tblVehicleEF	HHD	0.49	0.52
tblVehicleEF	HHD	7.8000e-005	4.1733e-006
tblVehicleEF	HHD	0.20	0.11
tblVehicleEF	HHD	3.7200e-004	1.1922e-003
tblVehicleEF	HHD	0.08	3.1029e-006
tblVehicleEF	HHD	0.45	0.03
tblVehicleEF	HHD	0.09	0.08
tblVehicleEF	HHD	0.07	5.1512e-007
tblVehicleEF	HHD	1.19	6.61
tblVehicleEF	HHD	1.07	0.46
tblVehicleEF	HHD	3.16	9.0653e-003
tblVehicleEF	HHD	4,731.10	1,113.07

tblVehicleEF	HHD	1,572.96	1,398.54
tblVehicleEF	HHD	10.75	0.08
tblVehicleEF	HHD	14.76	5.50
tblVehicleEF	HHD	2.01	2.56
tblVehicleEF	HHD	19.49	2.35
tblVehicleEF	HHD	8.4600e-003	2.7790e-003
tblVehicleEF	HHD	0.06	0.06
tblVehicleEF	HHD	0.04	0.04
tblVehicleEF	HHD	6.2960e-003	0.02
tblVehicleEF	HHD	9.1000e-005	1.3513e-006
tblVehicleEF	HHD	8.0940e-003	2.6588e-003
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	8.8400e-003	8.8984e-003
tblVehicleEF	HHD	6.0240e-003	0.02
tblVehicleEF	HHD	8.3000e-005	1.2425e-006
tblVehicleEF	HHD	1.5600e-004	9.2271e-006
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tblVehicleEF	HHD	1.1200e-004	6.2951e-006
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tblVehicleEF	HHD	3.6000e-004	1.1727e-003
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tblVehicleEF	HHD	0.01	0.01
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tblVehicleEF	HHD	1.5600e-004	9.2271e-006
tblVehicleEF	HHD	4.6140e-003	2.3361e-004

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tblVehicleEF	HHD	1.1200e-004	6.2951e-006
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tblVehicleEF	HHD	3.6000e-004	1.1727e-003
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tblVehicleEF	HHD	0.09	9.8236e-004
tblVehicleEF	HHD	0.07	5.4302e-007
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tblVehicleEF	HHD	2.09	2.62
tblVehicleEF	HHD	19.50	2.35
tblVehicleEF	HHD	0.01	3.5325e-003
tblVehicleEF	HHD	0.06	0.06
tblVehicleEF	HHD	0.04	0.04
tblVehicleEF	HHD	6.2960e-003	0.02
tblVehicleEF	HHD	9.1000e-005	1.3513e-006
tblVehicleEF	HHD	0.01	3.3797e-003
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	8.8400e-003	8.7534e-003
tblVehicleEF	HHD	6.0240e-003	0.02
tblVehicleEF	HHD	8.3000e-005	1.2425e-006

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tblVehicleEF	HHD	4.0500e-004	1.2682e-003
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tblVehicleEF	HHD	0.04	0.01
tblVehicleEF	HHD	0.01	0.01
tblVehicleEF	HHD	1.6300e-004	8.4175e-007
tblVehicleEF	HHD	1.0000e-004	6.1295e-006
tblVehicleEF	HHD	4.7840e-003	2.5916e-004
tblVehicleEF	HHD	0.53	0.47
tblVehicleEF	HHD	7.6000e-005	4.1548e-006
tblVehicleEF	HHD	0.20	0.02
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tblVehicleEF	HHD	0.08	3.1310e-006
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tblVehicleEF	LDA	4.7360e-003	0.05
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tblVehicleEF	LDA	1.04	2.04
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tblVehicleEF	LDA	54.94	52.30
tblVehicleEF	LDA	0.05	0.04
tblVehicleEF	LDA	0.06	0.17
tblVehicleEF	LDA	0.04	0.04
tblVehicleEF	LDA	8.0000e-003	8.0000e-003

tblVehicleEF	LDA	2.1170e-003	1.7096e-003
tblVehicleEF	LDA	2.2400e-003	1.7590e-003
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tblVehicleEF	LDA	2.0000e-003	2.0000e-003
tblVehicleEF	LDA	1.9520e-003	1.5748e-003
tblVehicleEF	LDA	2.0590e-003	1.6174e-003
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tblVehicleEF	LDA	0.10	0.09
tblVehicleEF	LDA	0.03	0.05
tblVehicleEF	LDA	0.01	0.01
tblVehicleEF	LDA	0.04	0.20
tblVehicleEF	LDA	0.06	0.20
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tblVehicleEF	LDA	0.10	0.09
tblVehicleEF	LDA	0.03	0.05
tblVehicleEF	LDA	0.02	0.01
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tblVehicleEF	LDA	0.07	0.22
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tblVehicleEF	LDA	0.04	0.03

tblVehicleEF	LDA	0.06	0.16
tblVehicleEF	LDA	0.04	0.04
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tblVehicleEF	LDA	2.1170e-003	1.7096e-003
tblVehicleEF	LDA	2.2400e-003	1.7590e-003
tblVehicleEF	LDA	0.02	0.02
tblVehicleEF	LDA	2.0000e-003	2.0000e-003
tblVehicleEF	LDA	1.9520e-003	1.5748e-003
tblVehicleEF	LDA	2.0590e-003	1.6174e-003
tblVehicleEF	LDA	0.06	0.07
tblVehicleEF	LDA	0.10	0.10
tblVehicleEF	LDA	0.05	0.06
tblVehicleEF	LDA	0.01	0.01
tblVehicleEF	LDA	0.04	0.19
tblVehicleEF	LDA	0.06	0.18
tblVehicleEF	LDA	2.7590e-003	2.7078e-003
tblVehicleEF	LDA	5.6400e-004	5.0571e-004
tblVehicleEF	LDA	0.06	0.07
tblVehicleEF	LDA	0.10	0.10
tblVehicleEF	LDA	0.05	0.06
tblVehicleEF	LDA	0.02	0.02
tblVehicleEF	LDA	0.04	0.19
tblVehicleEF	LDA	0.06	0.20
tblVehicleEF	LDA	4.7330e-003	2.5922e-003
tblVehicleEF	LDA	4.8460e-003	0.05
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tblVehicleEF	LDA	1.08	2.10

tblVehicleEF	LDA	258.68	261.25
tblVehicleEF	LDA	54.94	52.42
tblVehicleEF	LDA	0.05	0.03
tblVehicleEF	LDA	0.06	0.17
tblVehicleEF	LDA	0.04	0.04
tblVehicleEF	LDA	8.0000e-003	8.0000e-003
tblVehicleEF	LDA	2.1170e-003	1.7096e-003
tblVehicleEF	LDA	2.2400e-003	1.7590e-003
tblVehicleEF	LDA	0.02	0.02
tblVehicleEF	LDA	2.0000e-003	2.0000e-003
tblVehicleEF	LDA	1.9520e-003	1.5748e-003
tblVehicleEF	LDA	2.0590e-003	1.6174e-003
tblVehicleEF	LDA	0.04	0.05
tblVehicleEF	LDA	0.10	0.10
tblVehicleEF	LDA	0.03	0.04
tblVehicleEF	LDA	0.01	0.01
tblVehicleEF	LDA	0.04	0.23
tblVehicleEF	LDA	0.07	0.21
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tblVehicleEF	LDA	5.6700e-004	5.1232e-004
tblVehicleEF	LDA	0.04	0.05
tblVehicleEF	LDA	0.10	0.10
tblVehicleEF	LDA	0.03	0.04
tblVehicleEF	LDA	0.02	0.01
tblVehicleEF	LDA	0.04	0.23
tblVehicleEF	LDA	0.07	0.23
tblVehicleEF	LDT1	0.01	6.7162e-003

tblVehicleEF	LDT1	0.01	0.06
tblVehicleEF	LDT1	1.52	1.30
tblVehicleEF	LDT1	2.49	2.19
tblVehicleEF	LDT1	330.49	313.30
tblVehicleEF	LDT1	67.47	62.20
tblVehicleEF	LDT1	0.14	0.10
tblVehicleEF	LDT1	0.14	0.24
tblVehicleEF	LDT1	0.04	0.04
tblVehicleEF	LDT1	8.0000e-003	8.0000e-003
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tblVehicleEF	LDT1	3.2790e-003	2.4475e-003
tblVehicleEF	LDT1	0.02	0.02
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tblVehicleEF	LDT1	3.0870e-003	2.3022e-003
tblVehicleEF	LDT1	3.0150e-003	2.2505e-003
tblVehicleEF	LDT1	0.12	0.12
tblVehicleEF	LDT1	0.25	0.18
tblVehicleEF	LDT1	0.10	0.10
tblVehicleEF	LDT1	0.03	0.03
tblVehicleEF	LDT1	0.16	0.64
tblVehicleEF	LDT1	0.17	0.32
tblVehicleEF	LDT1	3.3240e-003	3.0617e-003
tblVehicleEF	LDT1	7.1800e-004	6.0783e-004
tblVehicleEF	LDT1	0.12	0.12
tblVehicleEF	LDT1	0.25	0.18
tblVehicleEF	LDT1	0.10	0.10
tblVehicleEF	LDT1	0.05	0.04

tblVehicleEF	LDT1	0.16	0.64
tblVehicleEF	LDT1	0.18	0.35
tblVehicleEF	LDT1	0.01	7.1128e-003
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tblVehicleEF	LDT1	67.47	61.56
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tblVehicleEF	LDT1	0.13	0.22
tblVehicleEF	LDT1	0.04	0.04
tblVehicleEF	LDT1	8.0000e-003	8.0000e-003
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tblVehicleEF	LDT1	3.2790e-003	2.4475e-003
tblVehicleEF	LDT1	0.02	0.02
tblVehicleEF	LDT1	2.0000e-003	2.0000e-003
tblVehicleEF	LDT1	3.0870e-003	2.3022e-003
tblVehicleEF	LDT1	3.0150e-003	2.2505e-003
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tblVehicleEF	LDT1	0.14	0.14
tblVehicleEF	LDT1	0.04	0.03
tblVehicleEF	LDT1	0.15	0.59
tblVehicleEF	LDT1	0.15	0.28
tblVehicleEF	LDT1	3.4700e-003	3.1774e-003
tblVehicleEF	LDT1	7.1200e-004	6.0161e-004
tblVehicleEF	LDT1	0.19	0.18

tblVehicleEF	LDT1	0.26	0.19
tblVehicleEF	LDT1	0.14	0.14
tblVehicleEF	LDT1	0.05	0.05
tblVehicleEF	LDT1	0.15	0.59
tblVehicleEF	LDT1	0.16	0.31
tblVehicleEF	LDT1	0.01	6.5898e-003
tblVehicleEF	LDT1	0.01	0.07
tblVehicleEF	LDT1	1.47	1.26
tblVehicleEF	LDT1	2.57	2.26
tblVehicleEF	LDT1	325.20	308.93
tblVehicleEF	LDT1	67.47	62.34
tblVehicleEF	LDT1	0.14	0.10
tblVehicleEF	LDT1	0.15	0.24
tblVehicleEF	LDT1	0.04	0.04
tblVehicleEF	LDT1	8.0000e-003	8.0000e-003
tblVehicleEF	LDT1	3.3520e-003	2.5018e-003
tblVehicleEF	LDT1	3.2790e-003	2.4475e-003
tblVehicleEF	LDT1	0.02	0.02
tblVehicleEF	LDT1	2.0000e-003	2.0000e-003
tblVehicleEF	LDT1	3.0870e-003	2.3022e-003
tblVehicleEF	LDT1	3.0150e-003	2.2505e-003
tblVehicleEF	LDT1	0.12	0.12
tblVehicleEF	LDT1	0.28	0.20
tblVehicleEF	LDT1	0.10	0.10
tblVehicleEF	LDT1	0.03	0.03
tblVehicleEF	LDT1	0.19	0.76
tblVehicleEF	LDT1	0.17	0.33
		Ī	

tblVehicleEF	LDT1	3.2700e-003	3.0190e-003
tblVehicleEF	LDT1	7.1900e-004	6.0927e-004
tblVehicleEF	LDT1	0.12	0.12
tblVehicleEF	LDT1	0.28	0.20
tblVehicleEF	LDT1	0.10	0.10
tblVehicleEF	LDT1	0.05	0.04
tblVehicleEF	LDT1	0.19	0.76
tblVehicleEF	LDT1	0.19	0.36
tblVehicleEF	LDT2	6.6130e-003	4.4259e-003
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tblVehicleEF	LDT2	1.23	2.55
tblVehicleEF	LDT2	368.32	332.67
tblVehicleEF	LDT2	75.43	66.53
tblVehicleEF	LDT2	0.07	0.07
tblVehicleEF	LDT2	0.09	0.25
tblVehicleEF	LDT2	0.04	0.04
tblVehicleEF	LDT2	8.0000e-003	8.0000e-003
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tblVehicleEF	LDT2	2.3760e-003	1.8152e-003
tblVehicleEF	LDT2	0.02	0.02
tblVehicleEF	LDT2	2.0000e-003	2.0000e-003
tblVehicleEF	LDT2	1.9770e-003	1.6777e-003
tblVehicleEF	LDT2	2.1840e-003	1.6691e-003
tblVehicleEF	LDT2	0.04	0.07
tblVehicleEF	LDT2	0.09	0.12
tblVehicleEF	LDT2	0.04	0.07

tblVehicleEF	LDT2	0.02	0.02
tblVehicleEF	LDT2	0.06	0.39
tblVehicleEF	LDT2	0.08	0.29
tblVehicleEF	LDT2	3.6890e-003	3.2504e-003
tblVehicleEF	LDT2	7.7500e-004	6.5019e-004
tblVehicleEF	LDT2	0.04	0.07
tblVehicleEF	LDT2	0.09	0.12
tblVehicleEF	LDT2	0.04	0.07
tblVehicleEF	LDT2	0.02	0.03
tblVehicleEF	LDT2	0.06	0.39
tblVehicleEF	LDT2	0.08	0.31
tblVehicleEF	LDT2	7.0150e-003	4.7109e-003
tblVehicleEF	LDT2	5.0630e-003	0.06
tblVehicleEF	LDT2	0.87	1.03
tblVehicleEF	LDT2	1.06	2.18
tblVehicleEF	LDT2	384.82	344.13
tblVehicleEF	LDT2	75.43	65.83
tblVehicleEF	LDT2	0.06	0.07
tblVehicleEF	LDT2	0.09	0.24
tblVehicleEF	LDT2	0.04	0.04
tblVehicleEF	LDT2	8.0000e-003	8.0000e-003
tblVehicleEF	LDT2	2.1490e-003	1.8228e-003
tblVehicleEF	LDT2	2.3760e-003	1.8152e-003
tblVehicleEF	LDT2	0.02	0.02
tblVehicleEF	LDT2	2.0000e-003	2.0000e-003
tblVehicleEF	LDT2	1.9770e-003	1.6777e-003
tblVehicleEF	LDT2	2.1840e-003	1.6691e-003

tblVehicleEF	LDT2	0.07	0.11
tblVehicleEF	LDT2	0.10	0.12
tblVehicleEF	LDT2	0.06	0.10
tblVehicleEF	LDT2	0.02	0.02
tblVehicleEF	LDT2	0.06	0.36
tblVehicleEF	LDT2	0.07	0.26
tblVehicleEF	LDT2	3.8550e-003	3.3624e-003
tblVehicleEF	LDT2	7.7200e-004	6.4329e-004
tblVehicleEF	LDT2	0.07	0.11
tblVehicleEF	LDT2	0.10	0.12
tblVehicleEF	LDT2	0.06	0.10
tblVehicleEF	LDT2	0.03	0.03
tblVehicleEF	LDT2	0.06	0.36
tblVehicleEF	LDT2	0.07	0.28
tblVehicleEF	LDT2	6.4820e-003	4.3362e-003
tblVehicleEF	LDT2	5.8190e-003	0.06
tblVehicleEF	LDT2	0.76	0.91
tblVehicleEF	LDT2	1.27	2.64
tblVehicleEF	LDT2	362.26	328.44
tblVehicleEF	LDT2	75.43	66.69
tblVehicleEF	LDT2	0.07	0.07
tblVehicleEF	LDT2	0.09	0.26
tblVehicleEF	LDT2	0.04	0.04
tblVehicleEF	LDT2	8.0000e-003	8.0000e-003
tblVehicleEF	LDT2	2.1490e-003	1.8228e-003
tblVehicleEF	LDT2	2.3760e-003	1.8152e-003
tblVehicleEF	LDT2	0.02	0.02

tblVehicleEF	LDT2	2.0000e-003	2.0000e-003
tblVehicleEF	LDT2	1.9770e-003	1.6777e-003
tblVehicleEF	LDT2	2.1840e-003	1.6691e-003
tblVehicleEF	LDT2	0.04	0.07
tblVehicleEF	LDT2	0.10	0.13
tblVehicleEF	LDT2	0.04	0.07
tblVehicleEF	LDT2	0.02	0.02
tblVehicleEF	LDT2	0.07	0.46
tblVehicleEF	LDT2	0.08	0.29
tblVehicleEF	LDT2	3.6280e-003	3.2090e-003
tblVehicleEF	LDT2	7.7500e-004	6.5178e-004
tblVehicleEF	LDT2	0.04	0.07
tblVehicleEF	LDT2	0.10	0.13
tblVehicleEF	LDT2	0.04	0.07
tblVehicleEF	LDT2	0.02	0.03
tblVehicleEF	LDT2	0.07	0.46
tblVehicleEF	LDT2	0.09	0.32
tblVehicleEF	LHD1	5.2860e-003	5.3646e-003
tblVehicleEF	LHD1	0.01	4.9911e-003
tblVehicleEF	LHD1	0.02	0.01
tblVehicleEF	LHD1	0.15	0.19
tblVehicleEF	LHD1	0.75	0.57
tblVehicleEF	LHD1	2.58	1.08
tblVehicleEF	LHD1	8.94	8.81
tblVehicleEF	LHD1	595.21	652.98
tblVehicleEF	LHD1	32.17	12.06
tblVehicleEF	LHD1	0.07	0.05

tblVehicleEF	LHD1	0.86	0.55
tblVehicleEF	LHD1	0.95	0.32
tblVehicleEF	LHD1	8.3300e-004	7.8359e-004
tblVehicleEF	LHD1	0.08	0.08
tblVehicleEF	LHD1	0.01	9.7291e-003
tblVehicleEF	LHD1	8.8370e-003	5.9884e-003
tblVehicleEF	LHD1	9.4800e-004	2.6819e-004
tblVehicleEF	LHD1	7.9700e-004	7.4969e-004
tblVehicleEF	LHD1	0.03	0.03
tblVehicleEF	LHD1	2.5350e-003	2.4323e-003
tblVehicleEF	LHD1	8.4300e-003	5.7009e-003
tblVehicleEF	LHD1	8.7200e-004	2.4659e-004
tblVehicleEF	LHD1	2.9730e-003	2.3517e-003
tblVehicleEF	LHD1	0.10	0.07
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	1.8290e-003	1.4551e-003
tblVehicleEF	LHD1	0.06	0.04
tblVehicleEF	LHD1	0.30	0.51
tblVehicleEF	LHD1	0.24	0.07
tblVehicleEF	LHD1	9.0000e-005	8.5605e-005
tblVehicleEF	LHD1	5.8400e-003	6.3743e-003
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tblVehicleEF	LHD1	2.9730e-003	2.3517e-003
tblVehicleEF	LHD1	0.10	0.07
tblVehicleEF	LHD1	0.02	0.03
tblVehicleEF	LHD1	1.8290e-003	1.4551e-003
tblVehicleEF	LHD1	0.07	0.06

tbIVehicleEF	LHD1	0.30	0.51
tblVehicleEF	LHD1	0.27	0.08
tblVehicleEF	LHD1	5.2860e-003	5.3761e-003
tblVehicleEF	LHD1	0.01	5.0878e-003
tblVehicleEF	LHD1	0.02	0.01
tblVehicleEF	LHD1	0.15	0.19
tblVehicleEF	LHD1	0.76	0.58
tblVehicleEF	LHD1	2.46	1.03
tblVehicleEF	LHD1	8.94	8.81
tbIVehicleEF	LHD1	595.21	653.00
tbIVehicleEF	LHD1	32.17	11.97
tbIVehicleEF	LHD1	0.07	0.05
tblVehicleEF	LHD1	0.81	0.52
tblVehicleEF	LHD1	0.91	0.30
tblVehicleEF	LHD1	8.3300e-004	7.8359e-004
tblVehicleEF	LHD1	0.08	0.08
tblVehicleEF	LHD1	0.01	9.7291e-003
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tblVehicleEF	LHD1	9.4800e-004	2.6819e-004
tblVehicleEF	LHD1	7.9700e-004	7.4969e-004
tblVehicleEF	LHD1	0.03	0.03
tblVehicleEF	LHD1	2.5350e-003	2.4323e-003
tblVehicleEF	LHD1	8.4300e-003	5.7009e-003
tblVehicleEF	LHD1	8.7200e-004	2.4659e-004
tblVehicleEF	LHD1	4.4450e-003	3.4572e-003
tblVehicleEF	LHD1	0.10	0.08
tblVehicleEF	LHD1	0.02	0.02

tblVehicleEF	LHD1	2.5600e-003	2.0042e-003
tblVehicleEF	LHD1	0.06	0.05
tblVehicleEF	LHD1	0.29	0.50
tblVehicleEF	LHD1	0.23	0.07
tblVehicleEF	LHD1	9.0000e-005	8.5605e-005
tblVehicleEF	LHD1	5.8400e-003	6.3745e-003
tblVehicleEF	LHD1	3.6700e-004	1.1848e-004
tblVehicleEF	LHD1	4.4450e-003	3.4572e-003
tblVehicleEF	LHD1	0.10	0.08
tblVehicleEF	LHD1	0.02	0.03
tblVehicleEF	LHD1	2.5600e-003	2.0042e-003
tblVehicleEF	LHD1	0.08	0.06
tblVehicleEF	LHD1	0.29	0.50
tblVehicleEF	LHD1	0.26	0.08
tblVehicleEF	LHD1	5.2860e-003	5.3623e-003
tblVehicleEF	LHD1	0.01	4.9648e-003
tblVehicleEF	LHD1	0.02	0.01
tblVehicleEF	LHD1	0.15	0.19
tblVehicleEF	LHD1	0.74	0.56
tblVehicleEF	LHD1	2.59	1.09
tblVehicleEF	LHD1	8.94	8.81
tblVehicleEF	LHD1	595.21	652.97
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tblVehicleEF	LHD1	0.07	0.05
tblVehicleEF	LHD1	0.85	0.54
tblVehicleEF	LHD1	0.95	0.32
tblVehicleEF	LHD1	8.3300e-004	7.8359e-004

tblVehicleEF	LHD1	0.08	0.08
tblVehicleEF	LHD1	0.01	9.7291e-003
tblVehicleEF	LHD1	8.8370e-003	5.9884e-003
tblVehicleEF	LHD1	9.4800e-004	2.6819e-004
tblVehicleEF	LHD1	7.9700e-004	7.4969e-004
tblVehicleEF	LHD1	0.03	0.03
tblVehicleEF	LHD1	2.5350e-003	2.4323e-003
tblVehicleEF	LHD1	8.4300e-003	5.7009e-003
tblVehicleEF	LHD1	8.7200e-004	2.4659e-004
tblVehicleEF	LHD1	3.1110e-003	2.4634e-003
tblVehicleEF	LHD1	0.11	0.09
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	1.7990e-003	1.4332e-003
tblVehicleEF	LHD1	0.06	0.04
tblVehicleEF	LHD1	0.32	0.56
tblVehicleEF	LHD1	0.25	0.07
tblVehicleEF	LHD1	9.0000e-005	8.5605e-005
tblVehicleEF	LHD1	5.8400e-003	6.3742e-003
tblVehicleEF	LHD1	3.7000e-004	1.1947e-004
tblVehicleEF	LHD1	3.1110e-003	2.4634e-003
tblVehicleEF	LHD1	0.11	0.09
tblVehicleEF	LHD1	0.02	0.03
tblVehicleEF	LHD1	1.7990e-003	1.4332e-003
tblVehicleEF	LHD1	0.07	0.06
tblVehicleEF	LHD1	0.32	0.56
tblVehicleEF	LHD1	0.27	0.08
tblVehicleEF	LHD2	3.7460e-003	3.7399e-003

tblVehicleEF	LHD2	3.7700e-003	3.5361e-003
tblVehicleEF	LHD2	7.4580e-003	0.01
tblVehicleEF	LHD2	0.13	0.15
tblVehicleEF	LHD2	0.31	0.39
tblVehicleEF	LHD2	1.26	0.72
tblVehicleEF	LHD2	13.57	13.36
tblVehicleEF	LHD2	610.80	654.07
tblVehicleEF	LHD2	26.97	9.22
tblVehicleEF	LHD2	0.09	0.08
tblVehicleEF	LHD2	0.55	0.71
tblVehicleEF	LHD2	0.50	0.22
tblVehicleEF	LHD2	1.1440e-003	1.2759e-003
tblVehicleEF	LHD2	0.09	0.09
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	8.4330e-003	9.6267e-003
tblVehicleEF	LHD2	4.4100e-004	1.5202e-004
tblVehicleEF	LHD2	1.0950e-003	1.2207e-003
tblVehicleEF	LHD2	0.04	0.04
tblVehicleEF	LHD2	2.6630e-003	2.6429e-003
tblVehicleEF	LHD2	8.0540e-003	9.1939e-003
tblVehicleEF	LHD2	4.0500e-004	1.3978e-004
tblVehicleEF	LHD2	1.0290e-003	1.4322e-003
tblVehicleEF	LHD2	0.03	0.05
tblVehicleEF	LHD2	0.01	0.02
tblVehicleEF	LHD2	6.8900e-004	9.0786e-004
tblVehicleEF	LHD2	0.04	0.05
tblVehicleEF	LHD2	0.07	0.32

tblVehicleEF	LHD2	0.10	0.05
tblVehicleEF	LHD2	1.3300e-004	1.2803e-004
tblVehicleEF	LHD2	5.9490e-003	6.3286e-003
tblVehicleEF	LHD2	2.9200e-004	9.1193e-005
tblVehicleEF	LHD2	1.0290e-003	1.4322e-003
tblVehicleEF	LHD2	0.03	0.05
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	6.8900e-004	9.0786e-004
tblVehicleEF	LHD2	0.05	0.06
tblVehicleEF	LHD2	0.07	0.32
tblVehicleEF	LHD2	0.11	0.05
tblVehicleEF	LHD2	3.7460e-003	3.7479e-003
tblVehicleEF	LHD2	3.8180e-003	3.5743e-003
tblVehicleEF	LHD2	7.2080e-003	9.7971e-003
tblVehicleEF	LHD2	0.13	0.15
tblVehicleEF	LHD2	0.31	0.39
tblVehicleEF	LHD2	1.20	0.69
tblVehicleEF	LHD2	13.57	13.36
tblVehicleEF	LHD2	610.80	654.07
tblVehicleEF	LHD2	26.97	9.16
tblVehicleEF	LHD2	0.09	0.08
tblVehicleEF	LHD2	0.52	0.67
tblVehicleEF	LHD2	0.49	0.21
tblVehicleEF	LHD2	1.1440e-003	1.2759e-003
tblVehicleEF	LHD2	0.09	0.09
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	8.4330e-003	9.6267e-003

tblVehicleEF	LHD2	4.4100e-004	1.5202e-004
tblVehicleEF	LHD2	1.0950e-003	1.2207e-003
tblVehicleEF	LHD2	0.04	0.04
tblVehicleEF	LHD2	2.6630e-003	2.6429e-003
tblVehicleEF	LHD2	8.0540e-003	9.1939e-003
tblVehicleEF	LHD2	4.0500e-004	1.3978e-004
tblVehicleEF	LHD2	1.5320e-003	2.1079e-003
tblVehicleEF	LHD2	0.04	0.05
tblVehicleEF	LHD2	0.01	0.02
tblVehicleEF	LHD2	9.5700e-004	1.2531e-003
tblVehicleEF	LHD2	0.04	0.05
tblVehicleEF	LHD2	0.07	0.30
tblVehicleEF	LHD2	0.10	0.05
tblVehicleEF	LHD2	1.3300e-004	1.2803e-004
tblVehicleEF	LHD2	5.9490e-003	6.3287e-003
tblVehicleEF	LHD2	2.9100e-004	9.0638e-005
tblVehicleEF	LHD2	1.5320e-003	2.1079e-003
tblVehicleEF	LHD2	0.04	0.05
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	9.5700e-004	1.2531e-003
tblVehicleEF	LHD2	0.05	0.06
tblVehicleEF	LHD2	0.07	0.30
tblVehicleEF	LHD2	0.11	0.05
tblVehicleEF	LHD2	3.7460e-003	3.7382e-003
tblVehicleEF	LHD2	3.7580e-003	3.5259e-003
tblVehicleEF	LHD2	7.5080e-003	0.01
tblVehicleEF	LHD2	0.13	0.15

tblVehicleEF	LHD2	0.31	0.38
tblVehicleEF	LHD2	1.27	0.72
tblVehicleEF	LHD2	13.57	13.36
tblVehicleEF	LHD2	610.80	654.06
tblVehicleEF	LHD2	26.97	9.23
tblVehicleEF	LHD2	0.09	0.08
tblVehicleEF	LHD2	0.54	0.69
tblVehicleEF	LHD2	0.51	0.22
tblVehicleEF	LHD2	1.1440e-003	1.2759e-003
tblVehicleEF	LHD2	0.09	0.09
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	8.4330e-003	9.6267e-003
tblVehicleEF	LHD2	4.4100e-004	1.5202e-004
tbIVehicleEF	LHD2	1.0950e-003	1.2207e-003
tblVehicleEF	LHD2	0.04	0.04
tblVehicleEF	LHD2	2.6630e-003	2.6429e-003
tblVehicleEF	LHD2	8.0540e-003	9.1939e-003
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tblVehicleEF	LHD2	1.0410e-003	1.4722e-003
tblVehicleEF	LHD2	0.04	0.06
tblVehicleEF	LHD2	0.01	0.02
tblVehicleEF	LHD2	6.6600e-004	8.7944e-004
tblVehicleEF	LHD2	0.04	0.05
tblVehicleEF	LHD2	0.08	0.34
tbIVehicleEF	LHD2	0.10	0.05
tblVehicleEF	LHD2	1.3300e-004	1.2803e-004
tbIVehicleEF	LHD2	5.9490e-003	6.3286e-003

tblVehicleEF	LHD2	2.9200e-004	9.1296e-005
tblVehicleEF	LHD2	1.0410e-003	1.4722e-003
tblVehicleEF	LHD2	0.04	0.06
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	6.6600e-004	8.7944e-004
tblVehicleEF	LHD2	0.05	0.06
tblVehicleEF	LHD2	0.08	0.34
tblVehicleEF	LHD2	0.11	0.05
tblVehicleEF	MCY	0.54	0.38
tblVehicleEF	MCY	0.15	0.23
tblVehicleEF	MCY	18.72	18.86
tblVehicleEF	MCY	9.68	8.54
tblVehicleEF	MCY	189.29	223.65
tblVehicleEF	MCY	44.13	59.21
tblVehicleEF	MCY	1.13	1.13
tblVehicleEF	MCY	0.31	0.26
tblVehicleEF	MCY	0.01	0.01
tblVehicleEF	MCY	4.0000e-003	4.0000e-003
tblVehicleEF	MCY	2.4730e-003	2.4798e-003
tblVehicleEF	MCY	3.6800e-003	3.1545e-003
tblVehicleEF	MCY	5.0400e-003	5.0400e-003
tblVehicleEF	MCY	1.0000e-003	1.0000e-003
tblVehicleEF	MCY	2.3100e-003	2.3160e-003
tblVehicleEF	MCY	3.4590e-003	2.9646e-003
tblVehicleEF	MCY	1.06	1.07
tblVehicleEF	MCY	0.62	0.64
tblVehicleEF	MCY	0.64	0.65

tblVehicleEF	MCY	2.58	2.60
tblVehicleEF	MCY	0.58	1.88
tblVehicleEF	MCY	2.04	1.80
tblVehicleEF	MCY	2.2780e-003	2.2132e-003
tblVehicleEF	MCY	6.5900e-004	5.8591e-004
tblVehicleEF	MCY	1.06	1.07
tblVehicleEF	MCY	0.62	0.64
tblVehicleEF	MCY	0.64	0.65
tblVehicleEF	MCY	3.22	3.23
tblVehicleEF	MCY	0.58	1.88
tblVehicleEF	MCY	2.22	1.96
tblVehicleEF	MCY	0.53	0.37
tblVehicleEF	MCY	0.13	0.21
tblVehicleEF	MCY	18.05	18.15
tblVehicleEF	MCY	8.84	7.77
tblVehicleEF	MCY	189.29	222.30
tblVehicleEF	MCY	44.13	57.32
tblVehicleEF	MCY	0.99	0.99
tblVehicleEF	MCY	0.29	0.25
tblVehicleEF	MCY	0.01	0.01
tblVehicleEF	MCY	4.0000e-003	4.0000e-003
tblVehicleEF	MCY	2.4730e-003	2.4798e-003
tblVehicleEF	MCY	3.6800e-003	3.1545e-003
tblVehicleEF	MCY	5.0400e-003	5.0400e-003
tblVehicleEF	MCY	1.0000e-003	1.0000e-003
tblVehicleEF	MCY	2.3100e-003	2.3160e-003
tblVehicleEF	MCY	3.4590e-003	2.9646e-003

tblVehicleEF	MCY	1.72	1.71
tblVehicleEF	MCY	0.68	0.69
tblVehicleEF	MCY	1.06	1.05
tblVehicleEF	MCY	2.52	2.54
tblVehicleEF	MCY	0.54	1.76
tblVehicleEF	MCY	1.82	1.60
tblVehicleEF	MCY	2.2650e-003	2.1999e-003
tblVehicleEF	MCY	6.3900e-004	5.6721e-004
tblVehicleEF	MCY	1.72	1.71
tblVehicleEF	MCY	0.68	0.69
tblVehicleEF	MCY	1.06	1.05
tblVehicleEF	MCY	3.15	3.16
tblVehicleEF	MCY	0.54	1.76
tblVehicleEF	MCY	1.98	1.74
tblVehicleEF	MCY	0.54	0.38
tblVehicleEF	MCY	0.15	0.24
tblVehicleEF	MCY	18.82	19.00
tblVehicleEF	MCY	9.83	8.69
tblVehicleEF	MCY	189.29	223.92
tblVehicleEF	MCY	44.13	59.59
tblVehicleEF	MCY	1.10	1.10
tblVehicleEF	MCY	0.31	0.27
tblVehicleEF	MCY	0.01	0.01
tblVehicleEF	MCY	4.0000e-003	4.0000e-003
tblVehicleEF	MCY	2.4730e-003	2.4798e-003
tblVehicleEF	MCY	3.6800e-003	3.1545e-003
tblVehicleEF	MCY	5.0400e-003	5.0400e-003

tblVehicleEF	MCY	1.0000e-003	1.0000e-003
tblVehicleEF	MCY	2.3100e-003	2.3160e-003
tblVehicleEF	MCY	3.4590e-003	2.9646e-003
tblVehicleEF	MCY	1.15	1.17
tblVehicleEF	MCY	0.80	0.82
tblVehicleEF	MCY	0.61	0.63
tblVehicleEF	MCY	2.59	2.61
tblVehicleEF	MCY	0.67	2.18
tblVehicleEF	MCY	2.08	1.85
tblVehicleEF	MCY	2.2800e-003	2.2159e-003
tblVehicleEF	MCY	6.6300e-004	5.8968e-004
tblVehicleEF	MCY	1.15	1.17
tblVehicleEF	MCY	0.80	0.82
tblVehicleEF	MCY	0.61	0.63
tblVehicleEF	MCY	3.23	3.25
tblVehicleEF	MCY	0.67	2.18
tblVehicleEF	MCY	2.26	2.01
tblVehicleEF	MDV	0.01	5.6774e-003
tblVehicleEF	MDV	0.01	0.07
tblVehicleEF	MDV	1.21	1.09
tblVehicleEF	MDV	2.22	2.92
tblVehicleEF	MDV	495.22	408.75
tblVehicleEF	MDV	99.91	80.84
tblVehicleEF	MDV	0.13	0.10
tblVehicleEF	MDV	0.19	0.31
tblVehicleEF	MDV	0.04	0.04
tblVehicleEF	MDV	8.0000e-003	8.0000e-003

tblVehicleEF	MDV	2.2990e-003	1.9552e-003
tblVehicleEF	MDV	2.4650e-003	1.9340e-003
tblVehicleEF	MDV	0.02	0.02
tblVehicleEF	MDV	2.0000e-003	2.0000e-003
tblVehicleEF	MDV	2.1190e-003	1.8024e-003
tblVehicleEF	MDV	2.2660e-003	1.7785e-003
tblVehicleEF	MDV	0.06	0.08
tblVehicleEF	MDV	0.15	0.13
tblVehicleEF	MDV	0.07	0.09
tblVehicleEF	MDV	0.03	0.02
tblVehicleEF	MDV	0.09	0.41
tblVehicleEF	MDV	0.17	0.36
tblVehicleEF	MDV	4.9590e-003	3.9917e-003
tblVehicleEF	MDV	1.0380e-003	7.9003e-004
tblVehicleEF	MDV	0.06	0.08
tblVehicleEF	MDV	0.15	0.13
tblVehicleEF	MDV	0.07	0.09
tblVehicleEF	MDV	0.04	0.04
tblVehicleEF	MDV	0.09	0.41
tblVehicleEF	MDV	0.18	0.39
tblVehicleEF	MDV	0.01	6.0286e-003
tblVehicleEF	MDV	0.01	0.07
tblVehicleEF	MDV	1.32	1.19
tblVehicleEF	MDV	1.90	2.49
tblVehicleEF	MDV	516.89	420.70
tblVehicleEF	MDV	99.91	80.01
tblVehicleEF	MDV	0.11	0.08

tblVehicleEF	MDV	0.18	0.29
tblVehicleEF	MDV	0.04	0.04
tblVehicleEF	MDV	8.0000e-003	8.0000e-003
tblVehicleEF	MDV	2.2990e-003	1.9552e-003
tblVehicleEF	MDV	2.4650e-003	1.9340e-003
tblVehicleEF	MDV	0.02	0.02
tblVehicleEF	MDV	2.0000e-003	2.0000e-003
tblVehicleEF	MDV	2.1190e-003	1.8024e-003
tblVehicleEF	MDV	2.2660e-003	1.7785e-003
tblVehicleEF	MDV	0.10	0.12
tblVehicleEF	MDV	0.15	0.14
tblVehicleEF	MDV	0.09	0.12
tblVehicleEF	MDV	0.03	0.03
tblVehicleEF	MDV	0.08	0.38
tblVehicleEF	MDV	0.15	0.32
tblVehicleEF	MDV	5.1770e-003	4.1085e-003
tblVehicleEF	MDV	1.0320e-003	7.8193e-004
tblVehicleEF	MDV	0.10	0.12
tblVehicleEF	MDV	0.15	0.14
tblVehicleEF	MDV	0.09	0.12
tblVehicleEF	MDV	0.05	0.04
tblVehicleEF	MDV	0.08	0.38
tblVehicleEF	MDV	0.16	0.35
tblVehicleEF	MDV	0.01	5.5643e-003
tblVehicleEF	MDV	0.01	0.08
tblVehicleEF	MDV	1.17	1.05
tblVehicleEF	MDV	2.29	3.02

tblVehicleEF	MDV	487.26	404.33
tblVehicleEF	MDV	99.91	81.03
tblVehicleEF	MDV	0.13	0.09
tblVehicleEF	MDV	0.20	0.31
tblVehicleEF	MDV	0.04	0.04
tblVehicleEF	MDV	8.0000e-003	8.0000e-003
tblVehicleEF	MDV	2.2990e-003	1.9552e-003
tblVehicleEF	MDV	2.4650e-003	1.9340e-003
tblVehicleEF	MDV	0.02	0.02
tblVehicleEF	MDV	2.0000e-003	2.0000e-003
tblVehicleEF	MDV	2.1190e-003	1.8024e-003
tblVehicleEF	MDV	2.2660e-003	1.7785e-003
tblVehicleEF	MDV	0.06	0.08
tblVehicleEF	MDV	0.16	0.14
tblVehicleEF	MDV	0.06	0.08
tblVehicleEF	MDV	0.03	0.02
tblVehicleEF	MDV	0.10	0.48
tblVehicleEF	MDV	0.17	0.37
tblVehicleEF	MDV	4.8790e-003	3.9485e-003
tblVehicleEF	MDV	1.0390e-003	7.9190e-004
tblVehicleEF	MDV	0.06	0.08
tblVehicleEF	MDV	0.16	0.14
tblVehicleEF	MDV	0.06	0.08
tbIVehicleEF	MDV	0.04	0.03
tbIVehicleEF	MDV	0.10	0.48
tbIVehicleEF	MDV	0.19	0.40
tblVehicleEF	MH	0.02	2.9973e-003

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tblVehicleEF	MH	5.23	0.00
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tblVehicleEF	MH	59.88	0.00
tblVehicleEF	MH	1.00	3.27
tblVehicleEF	MH	0.75	0.00
tblVehicleEF	MH	0.13	0.13
tblVehicleEF	MH	0.01	0.02
tblVehicleEF	MH	0.02	0.07
tblVehicleEF	MH	1.0430e-003	0.00
tblVehicleEF	MH	0.06	0.06
tblVehicleEF	MH	3.2050e-003	4.0000e-003
tblVehicleEF	MH	0.02	0.07
tblVehicleEF	MH	9.5900e-004	0.00
tblVehicleEF	MH	0.84	0.00
tblVehicleEF	MH	0.06	0.00
tblVehicleEF	MH	0.36	0.00
tblVehicleEF	MH	0.07	0.06
tblVehicleEF	MH	0.02	0.00
tblVehicleEF	MH	0.30	0.00
tblVehicleEF	MH	0.01	9.0156e-003
tblVehicleEF	MH	6.9000e-004	0.00
tblVehicleEF	MH	0.84	0.00
tblVehicleEF	MH	0.06	0.00
tblVehicleEF	MH	0.36	0.00
tblVehicleEF	MH	0.10	0.07

tblVehicleEF	MH	0.02	0.00
tblVehicleEF	MH	0.33	0.00
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tblVehicleEF	MH	0.02	0.00
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tblVehicleEF	MH	0.01	0.02
tblVehicleEF	MH	0.02	0.07
tblVehicleEF	MH	1.0430e-003	0.00
tblVehicleEF	MH	0.06	0.06
tblVehicleEF	MH	3.2050e-003	4.0000e-003
tblVehicleEF	MH	0.02	0.07
tblVehicleEF	MH	9.5900e-004	0.00
tblVehicleEF	MH	1.24	0.00
tblVehicleEF	MH	0.06	0.00
tblVehicleEF	MH	0.51	0.00
tblVehicleEF	MH	0.07	0.06
tblVehicleEF	MH	0.02	0.00
tblVehicleEF	MH	0.29	0.00
tblVehicleEF	MH	0.01	9.0156e-003
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tblVehicleEF	MH	1.24	0.00

tblVehicleEF	MH	0.06	0.00
tblVehicleEF	MH	0.51	0.00
tblVehicleEF	MH	0.10	0.07
tblVehicleEF	MH	0.02	0.00
tblVehicleEF	MH	0.31	0.00
tblVehicleEF	MH	0.02	2.9973e-003
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tblVehicleEF	MH	0.01	0.02
tblVehicleEF	MH	0.02	0.07
tblVehicleEF	MH	1.0430e-003	0.00
tblVehicleEF	MH	0.06	0.06
tblVehicleEF	MH	3.2050e-003	4.0000e-003
tblVehicleEF	MH	0.02	0.07
tblVehicleEF	MH	9.5900e-004	0.00
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tblVehicleEF	MH	0.07	0.00
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tblVehicleEF	MH	0.02	0.00
tblVehicleEF	MH	0.30	0.00

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tblVehicleEF	MH	6.9000e-004	0.00
tblVehicleEF	MH	0.95	0.00
tblVehicleEF	MH	0.07	0.00
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tblVehicleEF	MH	0.02	0.00
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tblVehicleEF	MHD	0.01	0.01
tblVehicleEF	MHD	2.8420e-003	6.1299e-003
tblVehicleEF	MHD	8.1400e-004	1.3466e-004
tblVehicleEF	MHD	9.7000e-005	3.1218e-004
tblVehicleEF	MHD	0.06	0.06

tblVehicleEF	MHD	3.0000e-003	3.0000e-003
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tblVehicleEF	MHD	7.4900e-004	1.2382e-004
tblVehicleEF	MHD	1.0540e-003	6.2271e-004
tblVehicleEF	MHD	0.04	0.03
tblVehicleEF	MHD	0.02	0.02
tblVehicleEF	MHD	7.0500e-004	4.1013e-004
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tblVehicleEF	MHD	0.02	0.14
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tblVehicleEF	MHD	1.2580e-003	6.1463e-004
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tblVehicleEF	MHD	0.04	0.03
tblVehicleEF	MHD	7.0500e-004	4.1013e-004
tblVehicleEF	MHD	0.04	0.02
tblVehicleEF	MHD	0.02	0.14
tblVehicleEF	MHD	0.38	0.07
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tblVehicleEF	MHD	3.9490e-003	2.1413e-003
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tblVehicleEF	MHD	0.32	0.28
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tblVehicleEF	MHD	138.27	64.73

tblVehicleEF	MHD	1,141.08	1,030.65
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tblVehicleEF	MHD	0.13	0.13
tblVehicleEF	MHD	0.01	0.01
tblVehicleEF	MHD	2.8420e-003	6.1299e-003
tblVehicleEF	MHD	8.1400e-004	1.3466e-004
tblVehicleEF	MHD	8.2000e-005	2.6577e-004
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tblVehicleEF	MHD	2.7140e-003	5.8582e-003
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tblVehicleEF	MHD	0.02	0.02
tblVehicleEF	MHD	9.9000e-004	5.7330e-004
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tblVehicleEF	MHD	0.02	0.13
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tblVehicleEF	MHD	1.5770e-003	9.2475e-004
tbIVehicleEF	MHD	0.05	0.03

tblVehicleEF	MHD	0.03	0.03
tblVehicleEF	MHD	9.9000e-004	5.7330e-004
tblVehicleEF	MHD	0.04	0.02
tblVehicleEF	MHD	0.02	0.13
tblVehicleEF	MHD	0.36	0.07
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tblVehicleEF	MHD	0.50	0.49
tblVehicleEF	MHD	0.32	0.28
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tblVehicleEF	MHD	1.2400e-004	3.9328e-004
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tblVehicleEF	MHD	0.01	0.01
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tblVehicleEF	MHD	1.1800e-004	3.7627e-004
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tblVehicleEF	MHD	3.0000e-003	3.0000e-003
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tblVehicleEF	MHD	0.03	0.02
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tblVehicleEF	MHD	1.0750e-003	6.3848e-004
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tblVehicleEF	MHD	6.8500e-004	3.9956e-004
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tblVehicleEF	OBUS	1,246.68	1,355.70
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tblVehicleEF	OBUS	2.52	0.84
tblVehicleEF	OBUS	2.0000e-005	1.1818e-004
tblVehicleEF	OBUS	0.13	0.13
tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	2.6330e-003	7.0871e-003
tblVehicleEF	OBUS	8.2900e-004	2.0001e-004
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tblVehicleEF	OBUS	0.06	0.06
tblVehicleEF	OBUS	3.0000e-003	3.0000e-003
tblVehicleEF	OBUS	2.5030e-003	6.7657e-003
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tblVehicleEF	OBUS	0.05	0.07
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tblVehicleEF	OBUS	0.04	0.27
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tblVehicleEF	OBUS	0.01	0.01
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tblVehicleEF	OBUS	7.6400e-004	1.8613e-004		
tblVehicleEF	OBUS	2.0710e-003	2.6502e-003		
tblVehicleEF	OBUS	0.02	0.02		
tblVehicleEF	OBUS	0.05	0.07		
tblVehicleEF	OBUS	1.0770e-003	1.3153e-003		
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tblVehicleEF	OBUS	0.34	0.12		
tblVehicleEF	OBUS	0.01	8.2137e-003		
tblVehicleEF	OBUS	5.9990e-003	4.9102e-003		
tblVehicleEF	OBUS	0.03	0.02		
tblVehicleEF	OBUS	0.26	0.62		
tblVehicleEF	OBUS	0.45	0.61		
tblVehicleEF	OBUS	5.23	2.37		
tblVehicleEF	OBUS	94.83	91.59		
tblVehicleEF	OBUS	1,246.68	1,355.70		
tblVehicleEF	OBUS	67.80	19.07		
tblVehicleEF	OBUS	0.21	0.37		
tblVehicleEF	OBUS	0.68	1.14		
tblVehicleEF	OBUS	2.53	0.84		
tblVehicleEF	OBUS	2.4000e-005	1.3636e-004		

tblVehicleEF	OBUS	0.13	0.13		
tblVehicleEF	OBUS	0.01	0.01		
tblVehicleEF	OBUS	2.6330e-003	7.0871e-003		
tblVehicleEF	OBUS	8.2900e-004	2.0001e-004		
tblVehicleEF	OBUS	2.3000e-005	1.3046e-004		
tblVehicleEF	OBUS	0.06	0.06		
tblVehicleEF	OBUS	3.0000e-003	3.0000e-003		
tblVehicleEF	OBUS	2.5030e-003	6.7657e-003		
tblVehicleEF	OBUS	7.6200e-004	1.8390e-004		
tblVehicleEF	OBUS	1.4400e-003	1.9124e-003		
tblVehicleEF	OBUS	0.02	0.02		
tblVehicleEF	OBUS	0.03	0.05		
tblVehicleEF	OBUS	7.4400e-004	9.3077e-004		
tblVehicleEF	OBUS	0.04	0.03		
tblVehicleEF	OBUS	0.04	0.29		
tblVehicleEF	OBUS	0.33	0.11		
tblVehicleEF	OBUS	9.1700e-004	8.7139e-004		
tblVehicleEF	OBUS	0.01	0.01		
tblVehicleEF	OBUS	7.7000e-004	1.8872e-004		
tblVehicleEF	OBUS	1.4400e-003	1.9124e-003		
tblVehicleEF	OBUS	0.02	0.02		
tblVehicleEF	OBUS	0.05	0.07		
tblVehicleEF	OBUS	7.4400e-004	9.3077e-004		
tblVehicleEF	OBUS	0.05	0.04		
tblVehicleEF	OBUS	0.04	0.29		
tblVehicleEF	OBUS	0.36	0.12		
tblVehicleEF	SBUS	0.84	0.08		

tblVehicleEF	SBUS	0.01	6.7075e-003		
tblVehicleEF	SBUS	0.06	7.0645e-003		
tblVehicleEF	SBUS	8.28	3.14		
tblVehicleEF	SBUS	0.67	0.57		
tblVehicleEF	SBUS	7.16	0.97		
tblVehicleEF	SBUS	1,105.31	354.45		
tblVehicleEF	SBUS	1,070.53	1,085.99		
tblVehicleEF	SBUS	56.44	5.97		
tblVehicleEF	SBUS	8.50	3.03		
tblVehicleEF	SBUS	3.81	4.38		
tblVehicleEF	SBUS	11.84	0.95		
tblVehicleEF	SBUS	8.1160e-003	3.5863e-003		
tblVehicleEF	SBUS	0.74	0.74		
tblVehicleEF	SBUS	0.01	0.01		
tblVehicleEF	SBUS	0.02	0.03		
tblVehicleEF	SBUS	8.5300e-004	6.0241e-005		
tblVehicleEF	SBUS	7.7650e-003	3.4312e-003		
tblVehicleEF	SBUS	0.32	0.32		
tblVehicleEF	SBUS	2.6580e-003	2.6525e-003		
tblVehicleEF	SBUS	0.02	0.02		
tblVehicleEF	SBUS	7.8400e-004	5.5389e-005		
tblVehicleEF	SBUS	3.3720e-003	1.0292e-003		
tblVehicleEF	SBUS	0.03	8.9743e-003		
tblVehicleEF	SBUS	0.99	0.36		
tblVehicleEF	SBUS	1.8240e-003	5.5949e-004		
tblVehicleEF	SBUS	0.10	0.09		
tblVehicleEF	SBUS	0.01	0.06		

tblVehicleEF	SBUS	0.38	0.04
tblVehicleEF	SBUS	0.01	3.3855e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	6.8800e-004	5.9097e-005
tblVehicleEF	SBUS	3.3720e-003	1.0292e-003
tblVehicleEF	SBUS	0.03	8.9743e-003
tblVehicleEF	SBUS	1.43	0.52
tblVehicleEF	SBUS	1.8240e-003	5.5949e-004
tblVehicleEF	SBUS	0.12	0.10
tblVehicleEF	SBUS	0.01	0.06
tblVehicleEF	SBUS	0.41	0.04
tblVehicleEF	SBUS	0.84	0.08
tblVehicleEF	SBUS	0.01	6.7846e-003
tblVehicleEF	SBUS	0.05	6.3039e-003
tblVehicleEF	SBUS	8.18	3.11
tblVehicleEF	SBUS	0.68	0.58
tblVehicleEF	SBUS	5.81	0.79
tblVehicleEF	SBUS	1,154.44	361.51
tblVehicleEF	SBUS	1,070.53	1,086.01
tblVehicleEF	SBUS	56.44	5.68
tblVehicleEF	SBUS	8.77	3.09
tblVehicleEF	SBUS	3.59	4.13
tblVehicleEF	SBUS	11.81	0.95
tblVehicleEF	SBUS	6.8420e-003	3.0311e-003
tblVehicleEF	SBUS	0.74	0.74
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.02	0.03

tblVehicleEF	SBUS	8.5300e-004	6.0241e-005
tblVehicleEF	SBUS	6.5460e-003	2.9000e-003
tblVehicleEF	SBUS	0.32	0.32
tblVehicleEF	SBUS	2.6580e-003	2.6525e-003
tblVehicleEF	SBUS	0.02	0.02
tblVehicleEF	SBUS	7.8400e-004	5.5389e-005
tblVehicleEF	SBUS	4.9610e-003	1.4874e-003
tblVehicleEF	SBUS	0.03	9.1168e-003
tblVehicleEF	SBUS	0.98	0.36
tblVehicleEF	SBUS	2.5750e-003	7.7378e-004
tblVehicleEF	SBUS	0.10	0.09
tblVehicleEF	SBUS	0.01	0.05
tblVehicleEF	SBUS	0.34	0.04
tblVehicleEF	SBUS	0.01	3.4522e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	6.6600e-004	5.6163e-005
tblVehicleEF	SBUS	4.9610e-003	1.4874e-003
tblVehicleEF	SBUS	0.03	9.1168e-003
tblVehicleEF	SBUS	1.42	0.52
tblVehicleEF	SBUS	2.5750e-003	7.7378e-004
tblVehicleEF	SBUS	0.12	0.11
tblVehicleEF	SBUS	0.01	0.05
tblVehicleEF	SBUS	0.37	0.04
tblVehicleEF	SBUS	0.84	0.08
tblVehicleEF	SBUS	0.01	6.6841e-003
tblVehicleEF	SBUS	0.06	7.2391e-003
tblVehicleEF	SBUS	8.43	3.19

tblVehicleEF	SBUS	0.66	0.57		
tblVehicleEF	SBUS	7.40	1.00		
tblVehicleEF	SBUS	1,037.46	344.71		
tblVehicleEF	SBUS	1,070.53	1,085.99		
tblVehicleEF	SBUS	56.44	6.03		
tblVehicleEF	SBUS	8.13	2.95		
tblVehicleEF	SBUS	3.74	4.30		
tblVehicleEF	SBUS	11.85	0.96		
tblVehicleEF	SBUS	9.8760e-003	4.3531e-003		
tblVehicleEF	SBUS	0.74	0.74		
tblVehicleEF	SBUS	0.01	0.01		
tblVehicleEF	SBUS	0.02	0.03		
tblVehicleEF	SBUS	8.5300e-004	6.0241e-005		
tblVehicleEF	SBUS	9.4480e-003	4.1648e-003		
tblVehicleEF	SBUS	0.32	0.32		
tblVehicleEF	SBUS	2.6580e-003	2.6525e-003		
tblVehicleEF	SBUS	0.02	0.02		
tblVehicleEF	SBUS	7.8400e-004	5.5389e-005		
tblVehicleEF	SBUS	3.3940e-003	1.0334e-003		
tblVehicleEF	SBUS	0.03	9.3494e-003		
tblVehicleEF	SBUS	0.99	0.36		
tblVehicleEF	SBUS	1.7490e-003	5.3556e-004		
tblVehicleEF	SBUS	0.10	0.09		
tblVehicleEF	SBUS	0.02	0.07		
tblVehicleEF	SBUS	0.39	0.04		
tblVehicleEF	SBUS	0.01	3.2934e-003		
tblVehicleEF	SBUS	0.01	0.01		

tblVehicleEF	SBUS	6.9200e-004	5.9658e-005		
tblVehicleEF	SBUS	3.3940e-003	1.0334e-003		
tblVehicleEF	SBUS	0.03	9.3494e-003		
tblVehicleEF	SBUS	1.43	0.52		
tblVehicleEF	SBUS	1.7490e-003	5.3556e-004		
tblVehicleEF	SBUS	0.12	0.10		
tblVehicleEF	SBUS	0.02	0.07		
tblVehicleEF	SBUS	0.42	0.05		
tblVehicleEF	UBUS	2.44	5.85		
tblVehicleEF	UBUS	0.05	0.01		
tblVehicleEF	UBUS	10.68	45.42		
tblVehicleEF	UBUS	8.84	0.71		
tblVehicleEF	UBUS	1,951.45	1,987.99		
tblVehicleEF	UBUS	100.38	8.42		
tblVehicleEF	UBUS	9.33	0.47		
tblVehicleEF	UBUS	15.09			
tblVehicleEF	UBUS	0.60	0.07		
tblVehicleEF	UBUS	0.01	0.03		
tblVehicleEF	UBUS	0.12	3.2067e-003		
tblVehicleEF	UBUS	1.1360e-003	5.6569e-005		
tblVehicleEF	UBUS	0.26	0.03		
tblVehicleEF	UBUS	3.0000e-003	7.9689e-003		
tblVehicleEF	UBUS	0.12	3.0642e-003		
tblVehicleEF	UBUS	1.0450e-003	5.2013e-005		
tblVehicleEF	UBUS	4.1100e-003	5.9331e-004		
tblVehicleEF	UBUS	0.07	7.4130e-003		
tblVehicleEF	UBUS	2.4100e-003	4.3392e-004		

tblVehicleEF	UBUS	0.79	0.09		
tblVehicleEF	UBUS	0.02	0.05		
tblVehicleEF	UBUS	0.68	0.05		
tblVehicleEF	UBUS	9.8060e-003	1.4048e-003		
tblVehicleEF	UBUS	1.1630e-003	8.3318e-005		
tblVehicleEF	UBUS	4.1100e-003	5.9331e-004		
tblVehicleEF	UBUS	0.07	7.4130e-003		
tblVehicleEF	UBUS	2.4100e-003	4.3392e-004		
tblVehicleEF	UBUS	3.32	5.97		
tblVehicleEF	UBUS	0.02	0.05		
tblVehicleEF	UBUS	0.75	0.05		
tblVehicleEF	UBUS	2.44	5.85		
tblVehicleEF	UBUS	0.05	9.9367e-003		
tblVehicleEF	UBUS	10.72	45.42		
tblVehicleEF	UBUS	7.66	0.63		
tblVehicleEF	UBUS	1,951.45	1,987.99		
tblVehicleEF	UBUS	100.38	8.27		
tblVehicleEF	UBUS	8.79	0.47		
tblVehicleEF	UBUS	15.04	0.08		
tblVehicleEF	UBUS	0.60	0.07		
tblVehicleEF	UBUS	0.01	0.03		
tblVehicleEF	UBUS	0.12	3.2067e-003		
tblVehicleEF	UBUS	1.1360e-003	5.6569e-005		
tblVehicleEF	UBUS	0.26	0.03		
tblVehicleEF	UBUS	3.0000e-003	7.9689e-003		
tblVehicleEF	UBUS	0.12	3.0642e-003		
tblVehicleEF	UBUS	1.0450e-003	5.2013e-005		
		·····			

tblVehicleEF	UBUS	5.8640e-003	8.6079e-004
tblVehicleEF	UBUS	0.07	7.6581e-003
tblVehicleEF	UBUS	3.3120e-003	5.9984e-004
tblVehicleEF	UBUS	0.80	0.09
tblVehicleEF	UBUS	0.02	0.04
tblVehicleEF	UBUS	0.63	0.04
tblVehicleEF	UBUS	9.8070e-003	1.4048e-003
tblVehicleEF	UBUS	1.1430e-003	8.1863e-005
tblVehicleEF	UBUS	5.8640e-003	8.6079e-004
tblVehicleEF	UBUS	0.07	7.6581e-003
tblVehicleEF	UBUS	3.3120e-003	5.9984e-004
tblVehicleEF	UBUS	3.33	5.97
tblVehicleEF	UBUS	0.02	0.04
tblVehicleEF	UBUS	0.69	0.05
tblVehicleEF	UBUS	2.44	5.85
tblVehicleEF	UBUS	0.05	0.01
tblVehicleEF	UBUS	10.66	45.42
tblVehicleEF	UBUS	9.05	0.73
tblVehicleEF	UBUS	1,951.45	1,987.99
tblVehicleEF	UBUS	100.38	8.45
tblVehicleEF	UBUS	9.15	0.47
tblVehicleEF	UBUS	15.10	0.08
tblVehicleEF	UBUS	0.60	0.07
tblVehicleEF	UBUS	0.01	0.03
tblVehicleEF	UBUS	0.12	3.2067e-003
tblVehicleEF	UBUS	1.1360e-003	5.6569e-005
tblVehicleEF	UBUS	0.26	0.03

tblVehicleEF	UBUS	3.0000e-003	7.9689e-003		
tblVehicleEF	UBUS	0.12	3.0642e-003		
tblVehicleEF	UBUS	1.0450e-003	5.2013e-005		
tblVehicleEF	UBUS	4.6290e-003	5.8312e-004		
tblVehicleEF	UBUS	0.08	7.9413e-003		
tblVehicleEF	UBUS	2.5090e-003	4.1273e-004		
tblVehicleEF	UBUS	0.79	0.09		
tblVehicleEF	UBUS	0.03	0.06		
tblVehicleEF	UBUS	0.70	0.05		
tblVehicleEF	UBUS	9.8060e-003	1.4048e-003		
tblVehicleEF	UBUS	1.1670e-003	8.3611e-005		
tblVehicleEF	UBUS	4.6290e-003	5.8312e-004		
tblVehicleEF	UBUS	0.08	7.9413e-003		
tblVehicleEF	UBUS	2.5090e-003	4.1273e-004		
tblVehicleEF	UBUS	3.31	5.97		
tblVehicleEF	UBUS	0.03	0.06		
tblVehicleEF	UBUS	0.76	0.05		
tblVehicleTrips	ST_TR	177.59	177.62		
tblVehicleTrips	SU_TR	166.44	166.47		
tblVehicleTrips	WD_TR	102.24	106.78		
tblWater	AerobicPercent	87.46	100.00		
tblWater	AnaerobicandFacultativeLagoonsPerce	2.21	0.00		
tblWater	nt IndoorWaterUseRate	1,121,740.76	1,047,779.83		
tblWater	OutdoorWaterUseRate	34,693.01	32,405.56		
tblWater	SepticTankPercent	10.33	0.00		

# 2.0 Emissions Summary

## 2.2 Overall Operational

## **Unmitigated Operational**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/c	lay							lb/d	ay		
Area	0.2034	1.0000e- 005	1.0600e- 003	0.0000		0.0000	0.0000		0.0000	0.0000		2.2800e- 003	2.2800e- 003	1.0000e- 005		2.4300e- 003
Energy	6.2700e- 003	0.0570	0.0479	3.4000e- 004		4.3300e- 003	4.3300e- 003		4.3300e- 003	4.3300e- 003		68.3710	68.3710	1.3100e- 003	1.2500e- 003	68.7773
Mobile	3.3158	4.1670	21.0226	0.0479	4.5204	0.0404	4.5609	1.2073	0.0377	1.2449		4,978.926 4	4,978.9264	0.4214		4,989.461 0
Total	3.5254	4.2240	21.0716	0.0482	4.5204	0.0447	4.5652	1.2073	0.0420	1.2493		5,047.299 7	5,047.2997	0.4227	1.2500e- 003	5,058.240 7

#### **Mitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/c	ay							lb/d	ay		
Area	0.2034	1.0000e- 005	1.0600e- 003	0.0000		0.0000	0.0000		0.0000	0.0000		2.2800e- 003	2.2800e- 003	1.0000e- 005		2.4300e- 003
Energy	6.2700e- 003	0.0570	0.0479	3.4000e- 004		4.3300e- 003	4.3300e- 003		4.3300e- 003	4.3300e- 003		68.3710	68.3710	1.3100e- 003	1.2500e- 003	68.7773
Mobile	3.3158	4.1670	21.0226	0.0479	4.5204	0.0404	4.5609	1.2073	0.0377	1.2449		4,978.926 4	4,978.9264	0.4214		4,989.461 0
Total	3.5254	4.2240	21.0716	0.0482	4.5204	0.0447	4.5652	1.2073	0.0420	1.2493		5,047.299 7	5,047.2997	0.4227	1.2500e- 003	5,058.240 7

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

# 4.0 Operational Detail - Mobile

# 4.1 Mitigation Measures Mobile

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	lay							lb/d	lay		
Mitigated	3.3158	4.1670	21.0226	0.0479	4.5204	0.0404	4.5609	1.2073	0.0377	1.2449		4,978.926 4	4,978.9264	0.4214		4,989.461 0
Unmitigated	3.3158	4.1670	21.0226	0.0479	4.5204	0.0404	4.5609	1.2073	0.0377	1.2449		4,978.926 4	4,978.9264	0.4214		4,989.461 0

# **4.2 Trip Summary Information**

	Aver	age Daily Trip F	Rate	Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Other Asphalt Surfaces	0.00	0.00	0.00		
Supermarket	971.70	1,616.34	1514.88	1,506,027	1,506,027
Total	971.70	1,616.34	1,514.88	1,506,027	1,506,027

# 4.3 Trip Type Information

		Miles			Trip %			Trip Purpos	e %
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
Other Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Supermarket	16.60	8.40	6.90	6.50	74.50	19.00	34	30	36

# 4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Other Asphalt Surfaces	0.545842	0.044768	0.205288	0.119317	0.015350	0.006227	0.020460	0.031333	0.002546	0.002133	0.005184	0.000692	0.000862
Supermarket	0.545842	0.044768	0.205288	0.119317	0.015350	0.006227	0.020460	0.031333	0.002546	0.002133	0.005184	0.000692	0.000862

# 5.0 Energy Detail

Historical Energy Use: Y

## **5.1 Mitigation Measures Energy**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	ay							lb/d	lay		
NaturalGas Mitigated	6.2700e- 003	0.0570	0.0479	3.4000e- 004		4.3300e- 003	4.3300e- 003		4.3300e- 003	4.3300e- 003		68.3710	68.3710	1.3100e- 003	1.2500e- 003	68.7773
NaturalGas Unmitigated	6.2700e- 003	0.0570	0.0479	3.4000e- 004		4.3300e- 003	4.3300e- 003		4.3300e- 003	4.3300e- 003		68.3710	68.3710	1.3100e- 003	1.2500e- 003	68.7773

# 5.2 Energy by Land Use - NaturalGas

#### **Unmitigated**

	NaturalGa s Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr					lb/e	day							lb/d	day		
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Supermarket	581.153	6.2700e- 003	0.0570	0.0479	3.4000e- 004		4.3300e- 003	4.3300e- 003		4.3300e- 003	4.3300e- 003		68.3710	68.3710	1.3100e- 003	1.2500e- 003	68.7773
Total		6.2700e- 003	0.0570	0.0479	3.4000e- 004		4.3300e- 003	4.3300e- 003		4.3300e- 003	4.3300e- 003		68.3710	68.3710	1.3100e- 003	1.2500e- 003	68.7773

#### **Mitigated**

	NaturalGa s Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr					lb/d	day							lb/d	day		
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Supermarket	0.581153	6.2700e- 003	0.0570	0.0479	3.4000e- 004		4.3300e- 003	4.3300e- 003		4.3300e- 003	4.3300e- 003		68.3710	68.3710	1.3100e- 003	1.2500e- 003	68.7773
Total		6.2700e- 003	0.0570	0.0479	3.4000e- 004		4.3300e- 003	4.3300e- 003		4.3300e- 003	4.3300e- 003		68.3710	68.3710	1.3100e- 003	1.2500e- 003	68.7773

# 6.0 Area Detail

# 6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	lay							lb/d	lay		
Mitigated	0.2034	1.0000e- 005	1.0600e- 003	0.0000		0.0000	0.0000		0.0000	0.0000		2.2800e- 003	2.2800e- 003	1.0000e- 005		2.4300e- 003
Unmitigated	0.2034	1.0000e- 005	1.0600e- 003	0.0000		0.0000	0.0000		0.0000	0.0000		2.2800e- 003	2.2800e- 003	1.0000e- 005		2.4300e- 003

# 6.2 Area by SubCategory <u>Unmitigated</u>

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory					lb/d	lay							lb/d	ay		
Architectural Coating	0.0231					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.1802					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.0000e- 004	1.0000e- 005	1.0600e- 003	0.0000		0.0000	0.0000		0.0000	0.0000		2.2800e- 003	2.2800e- 003	1.0000e- 005		2.4300e- 003
Total	0.2034	1.0000e- 005	1.0600e- 003	0.0000		0.0000	0.0000		0.0000	0.0000		2.2800e- 003	2.2800e- 003	1.0000e- 005		2.4300e- 003

#### **Mitigated**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory					lb/d	lay							lb/c	lay		
Architectural Coating	0.0231					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.1802					0.0000	0.0000		0.0000	0.0000			0.0000	This is the second of the seco	7	0.0000
Landscaping	1.0000e- 004	1.0000e- 005	1.0600e- 003	0.0000		0.0000	0.0000		0.0000	0.0000		2.2800e- 003	2.2800e- 003	1.0000e- 005		2.4300e- 003
Total	0.2034	1.0000e- 005	1.0600e- 003	0.0000		0.0000	0.0000		0.0000	0.0000		2.2800e- 003	2.2800e- 003	1.0000e- 005		2.4300e- 003

7.0 Water Detail							
7.1 Mitigation Measures Water	er						
8.0 Waste Detail							
8.1 Mitigation Measures Was	te						
9.0 Operational Offroad							
Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type	
40.0 Stationary Equipment							
10.0 Stationary Equipment							
Fire Pumps and Emergency Ge	<u>nerators</u>						
Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type	
<u>Boilers</u>							
Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type		
User Defined Equipment						-	

# 11.0 Vegetation

Equipment Type

Number

4. Screening-Level Construction Localized Significance Thresholds Worksheets

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SRA No.	Acres	Source Receptor Distance (meters)	Source Receptor Distance (Feet)	Construction / Project Site Size (Acres)				
4	1.59	25	82	1.59				
Source Receptor	South Coas	tal LA County	Equipment	Acres/8-hr Day		Equipment Used	Daily Hours	Acres
Distance (meters)	25	<b>.</b> ,	Tractors	0.5	0.0625	3	8	1.5
` NOx			Graders	0.5	0.0625			0
co	737		Dozers	0.5	0.0625	1	8	0.5
PM10	5.77		Scrapers	1	0.125			0
PM2.5	4.18		·				Acres	2.00
	Acres	25	50		100		200	500
NOx		57	58		68		90	142
	2	82	80		87		106	151
		72	71		79		99	147
CO	1	585	789		1180		2296	7558
	2	842	1158		1611		2869	8253
		737	1007		1434		2634	7968
PM10	1	4	13		29		61	158
	2	7	21		37		70	167
		6	18		34		66	163
PM2.5	1	3	5		10		26	93
	2	5	7		13		30	101
		4	6		12		28	98
outh Coastal LA Coun	ty							
1.59	Acres							
	25	50	100		200		500	
NOx	72	71	79		99		147	
CO	737	1007	1434		2634		7968	
PM10	6	18	34		66		163	
PM2.5	4	6	12		28		98	
cre Below		Acre Above		1				
SRA No.	Acres	SRA No.	Acres					
4	1	4	2					
Distance Increment Books 25								
Distance Increment A 25	bove		<del></del>	ļ ,	Unalata de A	0/21/2009 - Table C-1		

#### **Construction Localized Significance Thresholds: Site Preparation** Construction / Source Source Receptor SRA No. Receptor Acres Project Site Size Distance (meters) Distance (Feet) (Acres) 1.44 Acres/8-hr Day **Equipment Used** Daily hours Source Receptor **South Coastal LA County** Equipment Acres 0.5 0.0625 0.5 Distance (meters) Tractors NOx Graders 0.5 0.0625 0.4375 co Dozers 0.5 0.0625 0.5 PM10 5.31 Scrapers 0.125 PM2.5 3.87 1.44 Acres Acres NOx CO PM10 PM2.5 South Coastal LA County 1.44 Acres NOx CO PM10 PM2.5 Acre Below Acre Above SRA No. Acres SRA No. Acres Distance Increment Below Distance Increment Above

Updated: 10/21/2009 - Table C-1. 2006 - 2008

SRA No.	Acres	Source Receptor Distance (meters)	Source Receptor Distance (Feet)	Construction / Project Site Size (Acres)				
4	1.19	25	82	1.59				
Source Receptor	South Coas	tal LA County	Equipment	Acres/8-hr Day		Equipment Used	Daily hours	Acres
Distance (meters)	25	···· — · · · · · · · · · · · · · · · ·	Tractors	0.5	0.0625	1	7	0.4375
` NOx			Graders	0.5	0.0625	1	6	0.375
co	633		Dozers	0.5	0.0625	1	6	0.375
PM10	4.56		Scrapers	1	0.125			0
PM2.5	3.37		·				Acres	1.19
	Acres	25	50		100		200	500
NOx		57	58		68		90	142
	2	82	80		87		106	151
		62	62		72		93	144
CO	1	585	789		1180		2296	7558
	2	842	1158		1611		2869	8253
		633	858		1261		2403	7688
PM10	1	4	13		29		61	158
	2	7	21		37		70	167
		5	15		31		63	160
PM2.5		3	5		10		26	93
	2	5	7		13		30	101
		3	5		11		27	95
outh Coastal LA Coun								
1.19	Acres							
	25	50	100		200		500	
NOx		62	72		93		144	
CO	633	858	1261		2403		7688	
PM10	5	15	31		63		160	
PM2.5	3	5	11		27		95	
Acre Below		Acre Above		1				
SRA No.	Acres	SRA No.	Acres					
4	1	4	2	1				
Distance Increment Books 25								
Distance Increment A	bove							
25				1	Updated: 10	0/21/2009 - Table C-1	. 2006 – 2008	

#### **Construction Localized Significance Thresholds: Building Construction** Construction / Source Source Receptor SRA No. Acres Receptor Project Site Size Distance (meters) Distance (Feet) (Acres) 0.38 Acres/8-hr Day Equipment Used Daily Hours Source Receptor **South Coastal LA County** Equipment Acres 0.5 0.0625 0.375 Distance (meters) Tractors NOx Graders 0.5 0.0625 0.0625 co Dozers 0.5 PM10 4.00 Scrapers 0.125 PM2.5 3.00 0.38 Acres Acres NOx CO PM10 PM2.5 South Coastal LA County 0.38 Acres NOx CO PM10 PM2.5 Acre Below Acre Above SRA No. Acres SRA No. Acres Distance Increment Below Distance Increment Above

Updated: 10/21/2009 - Table C-1. 2006 - 2008

<b>Construction L</b>	ocalized	Significance Th	resholds: A	sphalt Pavin	ıg		
SRA No.	Acres	Source Receptor Distance (meters)	Source Receptor Distance (Feet)	Construction / Project Site Size (Acres)			
4	0.50	25	82	1.59			
Source Receptor	South Coas	stal LA County	Equipment	Acres/8-hr Day		Equipment UDaily hours	Acres
Distance (meters)	25	•	Tractors	0.5	0.0625	1 8	0.5
` NOx	57		Graders	0.5	0.0625		0
CO	585		Dozers	0.5	0.0625		0
PM10	4.00		Scrapers	1	0.125		0
PM2.5	3.00		•			Acres	0.50
	Acres	25	50		100	200	500
NOx	1	57	58		68	90	142
	1	57	58		68	90	142
		57	58		68	90	142
CO	1	585	789		1180	2296	7558
	1	585	789		1180	2296	7558
		585	789		1180	2296	7558
PM10	1	4	13		29	61	158
	1	4	13		29	61	158
		4	13		29	61	158
PM2.5	1	3	5		10	26	93
	1	3	5		10	26	93
		3	5		10	26	93
South Coastal LA Coun	ity						
0.50	Acres						
	25	50	100		200	500	
NOx	57	58	68		90	142	
CO	585	789	1180		2296	7558	
PM10	4	13	29		61	158	
PM2.5	3	5	10		26	93	
Acre Below		Acre Above		1			
SRA No.	Acres	SRA No.	Acres				
4	1	4	1				
Distance Increment B 25							
Distance Increment A 25	bove				Updated: 1	0/21/2009 - Table C-1. 2006 – 2	008

<b>Construction L</b>	ocalized.	Significance Th	resholds: A	rchitectural	Coating			
SRA No.	Acres	Source Receptor Distance (meters)	Source Receptor Distance (Feet)		_			
4	0.00	25	82	1.59				
Source Receptor	South Coas	tal LA County	Equipment	Acres/8-hr Day		Daily hours	Equipment Used	Acros
Distance (meters)	25	tui EA County	Tractors	0.5	0.0625	Dully Hours	Equipment 03cu	0
NOx			Graders	0.5	0.0625			0
CO			Dozers	0.5	0.0625			0
PM10			Scrapers	1	0.125			0
PM2.5			00.000	•	020		Acres	0.00
	Acres	25	50		100		200	500
NOx	1	57	58		68		90	142
	1	57	58		68		90	142
		57	58		68		90	142
CO	1	585	789		1180		2296	7558
	1	585	789		1180		2296	7558
		585	789		1180		2296	7558
PM10	1	4	13		29		61	158
	1	4	13		29		61	158
		4	13		29		61	158
PM2.5	5 1	3	5		10		26	93
	1	3	5		10		26	93
		3	5		10		26	93
South Coastal LA Cou	nty							
0.00	Acres							
	25	50	100		200		500	
NOx	57	58	68		90		142	
CO	585	789	1180		2296		7558	
PM10	4	13	29		61		158	
PM2.5	3	5	10		26		93	
Acre Below		Acre Above		1				
SRA No.	Acres	SRA No.	Acres					
4	1	4	1					
Distance Increment E 25								
Distance Increment A				1				
Distance increment A	ADOVE			1				

Updated: 10/21/2009 - Table C-1. 2006 - 2008

# **Appendix**

# Appendix B Traffic Assessment

# Appendix

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# FEHR PEERS

#### **TECHNICAL MEMORANDUM**

**Date:** June 17, 2020

To: William Halligan, Placeworks

From: Paul Herrmann, PE and Delia Votsch, PE

Subject: 201 W. Pacific Coast Highway Traffic Assessment LB20-0013

This technical memorandum presents the traffic assessment for the proposed redevelopment project at 201 Pacific Coast Highway in Long Beach, California. The project site is bordered by Cedar Avenue to the west, Pacific Coast Highway to the south, Pacific Avenue to the east, and existing residences to the north. The proposed project consists of apartments and commercial space. The existing site includes three parcels, two of which are vacant. The third parcel currently includes an approximately 9,100 square foot grocery store and surface parking.

This memorandum presents the trip generation of the existing and proposed site, an assessment of Vehicle Miles Traveled (VMT), and a site access analysis.

# **Trip Generation**

The proposed project consists of 138 apartment units and approximately 25,000 square feet of commercial. The commercial space will include approximately 23,000 square feet of grocery store and approximately 2,000 square feet of café.

The existing site includes three parcels, two of which are vacant. The third parcel currently includes an approximately 9,100 square foot grocery store and surface parking.

Trip generation rates from *Trip Generation*, 10<sup>th</sup> Edition (Institute of Transportation Engineers [ITE], 2017) were used to estimate the number of trips associated with the Project. The Environmental Protection Agency (EPA), in corporation with Institute of Transportation Engineers (ITE), has developed a methodology to more accurately calculate trip generation for mixed use sites. The methodology developed trip internalization estimates. These internalization estimates are based on a series of factors related to built environment variables including demographics, project specifics, and the projects ability to internally capture trips. This methodology was utilized to better assess the mixed used nature of the development of the Project.

The trip generation of the existing site and proposed site are presented in **Table 1**. As noted below, the project is expected to generate a net increase of 2,554 daily trips.

TABLE 1 - 201 W. PCH Trip Generation Estimates

Land Use	Units	ITE Code	Ouantitu.	Daile	AM Peak Hour			PM Peak Hour		
	Units		Quantity	Daily	In	Out	Total	In	Out	Total
			Exis	ting Site						
Grocery Store	KSF	850	9.1	970	21	14	35	43	41	84
			Prop	osed Site						
Apartments	DUs	221	138	750	13	37	50	37	24	61
Grocery Store	KSF	850	23	2,450	53	35	88	108	105	213
Cafe	KSF	930	2	630	3	1	4	15	13	28
Total				3,830	69	73	142	160	142	302
Internal Capture Reductions (Daily 8%, AM 11%, PM 11%)				-306	-8	-8	-16	-18	-15	-33
Existing Project Site Reductions			-970	-21	-14	-35	-43	-41	-84	
Net New Trips				2,554	40	51	91	99	86	185

#### Notes:

# **VMT Assessment**

SB 743, signed by the Governor in 2013, has directed the Office of Planning and Research (OPR) to look at different metrics for identifying transportation impacts under CEQA. The Final OPR Technical Advisory was released in December 2018 and identified vehicle miles of travel (VMT) as the preferred metric moving forward. The Natural Resources Agency completed the rule making process to modify the CEQA guidelines in December of 2018. The CEQA Guidelines identify that, by July of 2020 all lead agencies must use VMT as the new transportation metric for identifying impacts for land use projects.

The City of Long Beach has not yet adopted local guidelines for VMT assessment. However, Draft Traffic Impact Analysis Guidelines were released in June 2020. This assessment assumes that the City will adopt screening criteria consistent with the information in those draft guidelines. However, this assessment should be confirmed once the City's finalized guidelines have been released.

Since the proposed Project is a mixed-use project, the draft City guidelines indicate the land uses should be evaluated separately, or predominant land use should be used to evaluate the potential VMT impacts of the Project. For the purposes of this evaluation the land uses were evaluated separately. The draft City guidelines includes a list of screening criteria that screen projects from project-level assessment under the presumption that those projects will result in a less-than-significant impact. The following is from the draft City guidelines regarding residential project screening:

"The OPR Technical Advisory on Evaluating Transportation Impacts in CEQA states that residential and office projects that have similar density, mix of uses, and transit accessibility as surrounding similar uses will likely have similar VMT generation as those uses. Therefore, maps showing VMT-efficient areas can be used to screen residential and office projects from further analysis. Figure 2 presents a map of VMT per capita for all existing Long Beach residential areas. These data were obtained from the 2016 Southern California Association of Governments (SCAG) Regional

<sup>1.</sup> KSF = 1,000 square feet, DUs = Dwelling Units Source: Fehr & Peers, 2020

William Halligan Placeworks June 17, 2020

Transportation Plan/Sustainable Communities Strategy (RTP/SCS) travel demand model... In these green areas, projects with similar characteristics to the surrounding development would be presumed to have a less than significant transportation impact."

The Project is located in a "green" area for VMT per capita, which indicate that the apartments would be eligible for screening in a VMT efficient area as projects in those areas are assumed to generate VMT per capita more than 15% below the regional average.

The following is from the draft City guidelines regarding retail project screening:

"Retail development that is 50,000 square feet (sf) or less is likely to be local-serving and tends to shorten trips within Long Beach. Therefore, any retail project 50,000 sf or less will be presumed to have a less than significant transportation impact related to CEQA Guidelines Section 15064.3, subdivision (b)."

The grocery store and cafe would qualify as local-serving retail under 50,000 square feet.

Projects located within a Transit Priority Area (TPA) may also be screened from a full VMT assessment. A TPA is defined as a half mile area around an existing major transit stop or an existing stop along a high-quality transit corridor per the definitions below<sup>1</sup>. The project site is located within a half mile of a high-quality transit corridor and within a half mile of a major transit stop. There is an existing bus stop on the Project frontage. Torrance Transit Route 3 (12-minute headways) stops at this bus stop and along Pacific Coast Highway, making this a high-quality transit corridor. Furthermore, approximately 1/3 mile from the project site is the Pacific Coast Highway stop for the Metro A Line light rail service.

Given that the retail land use is local-serving retail under 50,000 square feet, the location of the project is within identified VMT-efficient areas for VMT per population, and the project is located in a TPA, this project should be screened from a full VMT assessment under the presumption that it will result in a less-than-significant impact. As noted above, this conclusion should be confirmed once the City of Long Beach has finalized their screening criteria and guidance.

# **Site Plan Review**

# **Site Access Analysis**

Vehicle access to the proposed site will be provided through the existing alley between Pacific Coast Highway and 19<sup>th</sup> Street, a driveway on Cedar Avenue, and a driveway on Pacific Avenue. The site's loading

<sup>&</sup>lt;sup>1</sup> Pub. Resources Code, § 21064.3 - 'Major transit stop' means a site containing an existing rail transit station, a ferry terminal served by either a bus or rail transit service, or the intersection of two or more major bus routes with a frequency of service interval of 15 minutes or less during the morning and afternoon peak commute periods.

Pub. Resources Code, § 21155 - For purposes of this section, a 'high-quality transit corridor' means a corridor with fixed route bus service with service intervals no longer than 15 minutes during peak commute hours.

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areas will be accessible through the alley. The vehicle entrances on Cedar Avenue and through the alley will provide access to parking for the retail portion of the site, while the driveway on Pacific Avenue will provide access to the residential portion of the site. The existing grocery store site includes vehicle access driveways on Pacific Coast Highway and Cedar Avenue, the Pacific Coast Highway driveway will be removed, and the Cedar Avenue driveway will remain with the proposed buildout of the site.

# **Parking Assessment**

Table 3-5 in the Midtown Specific Plan lists that for residential uses 1 parking space is required for units with 0-1 bedrooms, 1.25 spaces for units with 2 bedrooms, 1.5 spaces for units with 3 or more bedrooms, and 1 guest space is required per four units.

The project would construct 9 studio units, 89 one-bedroom units, 32 units with 2 bedrooms, and 8 units with 3 bedrooms. Per the specific plan, the project would be required to provide 150 stalls of parking for residents, and 35 spaces for guests.

Table 3-5 in the Midtown Specific Plan lists that non-residential uses should provide 2 spaces per 1,000 square feet.

The project would construct approximately 23,000 square feet of grocery store and approximately 2,000 square feet of café. Per the specific plan, the project would be required to provide 4 spaces for the café and 46 parking spaces for the grocery store.

The project site will provide a total of 258 parking stalls, including 20 tandem stalls, 52 stalls for retail uses, 35 stalls of guest parking, and 151 stalls for the apartments. The Project would provide adequate site access, and the provided parking is consistent with the requirements of the Midtown Specific Plan.