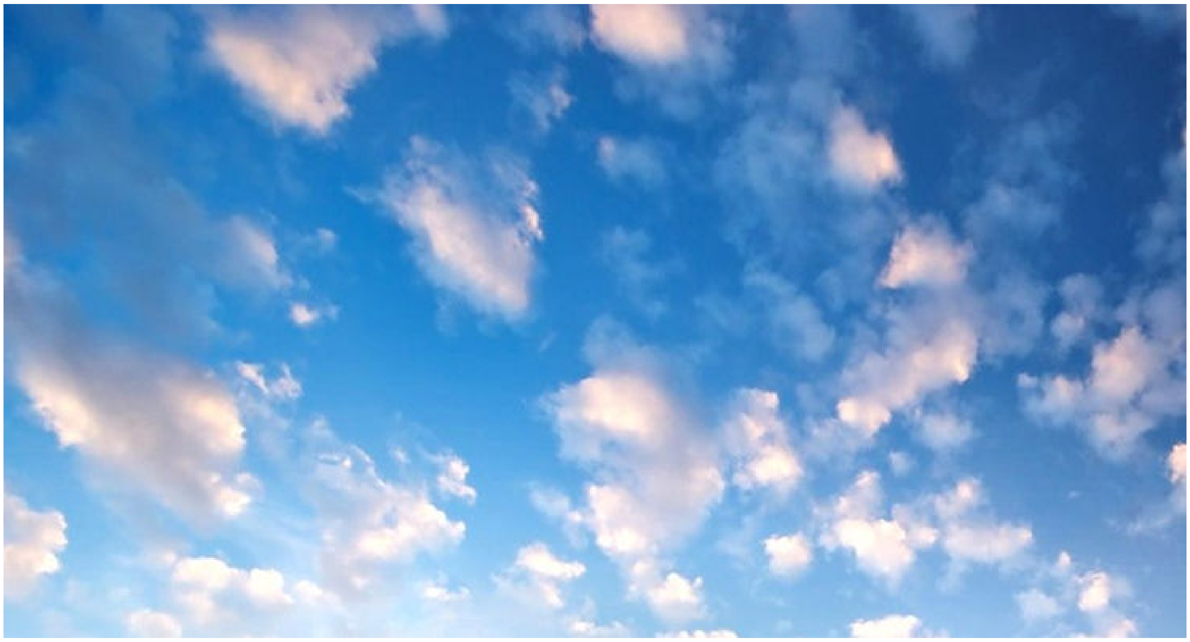

2025 Regional Transportation Plan/Sustainable Communities Strategy

Air Quality and Greenhouse Gas Study

prepared for

Tahoe Regional Planning Agency
Long Range & Transportation Planning
128 Market Street
Stateline, Nevada 89449
Contact: Rebecca Cremeen, Senior Planner

prepared by

Rincon Consultants, Inc.
7080 North Whitney Avenue, Suite 101
Fresno, California 93720

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1 Project Description

This report is an analysis of the potential air quality impacts of the Tahoe Regional Planning Agency's (TRPA) proposed 2025 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS). The report has been prepared by Rincon Consultants, Inc. under contract to TRPA for use in support of the environmental documentation being prepared pursuant to the California Environmental Quality Act (CEQA) and TRPA requirements.

As shown in Figure 1, the Plan Area is located in the Lake Tahoe Region and lies across the state line of California and Nevada, between the Sierra Nevada crest and the Carson Range. Approximately two thirds of the region is located in California, with one third within Nevada. The Plan Area contains approximately 325,000 acres, of which approximately 123,000 acres comprise the surface of Lake Tahoe. Lake Tahoe is the dominant feature of the Plan Area and is the primary focus of local environmental regulations to protect its exceptional clarity.

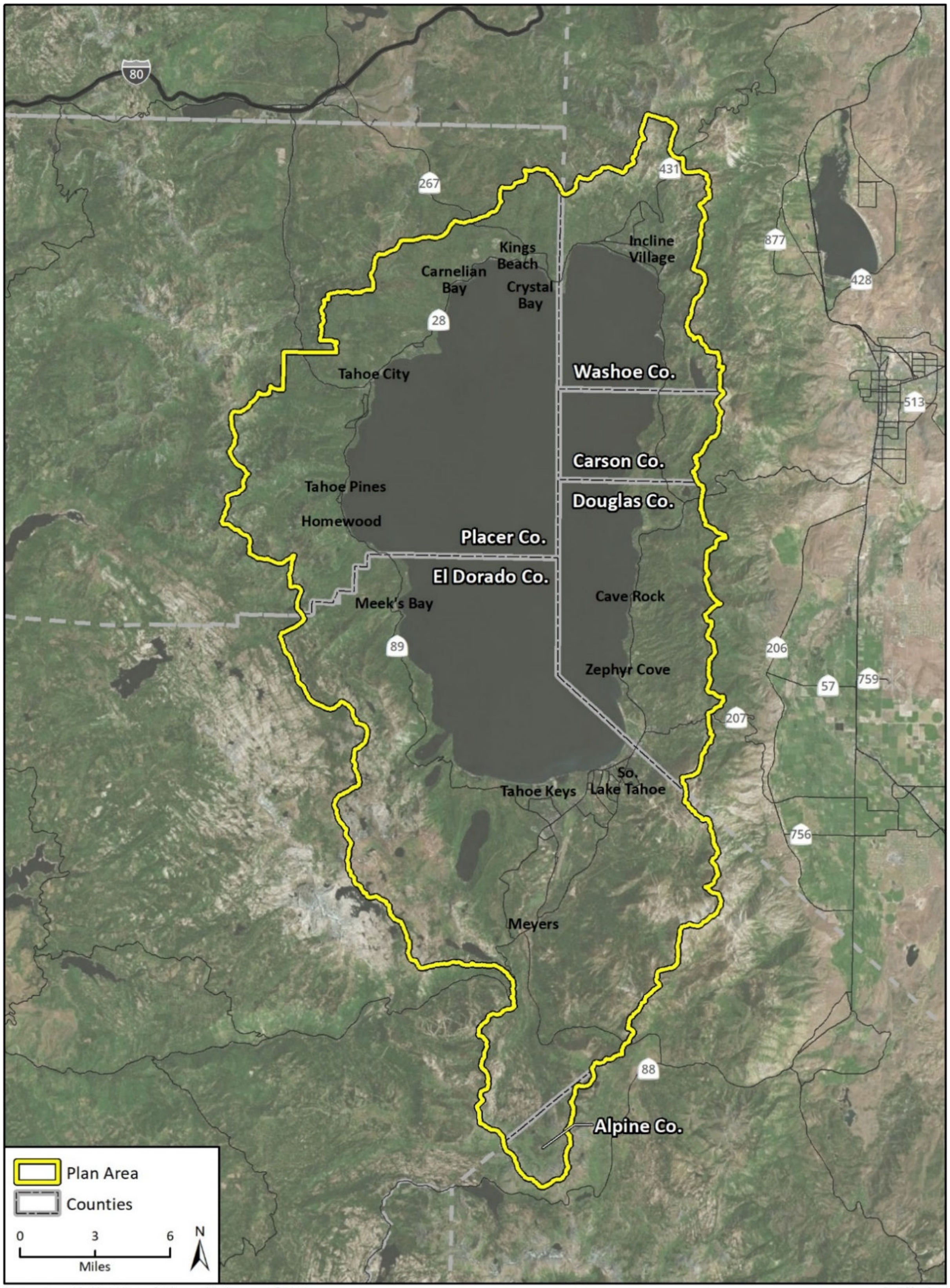
The 2025 RTP is the transportation element of the Lake Tahoe Regional Plan. Every four years, TRPA prepares an RTP/SCS that outlines the overall vision for developing, operating, and maintaining the Lake Tahoe Region's transportation system. This 2025 RTP/SCS builds from the 2020 RTP/SCS to offer innovative strategies that offset transportation impacts, including micro-mobility strategies such as e-bikes and e-scooters, and enhanced inter-regional transit service. The 2025 RTP/SCS's goals, carried over and updated from the 2020 RTP/SCS, are organized around addressing the local community and Tahoe visitor's transportation needs while also meeting state and federal planning and reporting requirements.

Policies have been updated in response to new plans implemented since the 2020 RTP/SCS update as well as federal and state requirements, and for consistency with local planning efforts. Policies support active transportation, connections between recreational access areas, prioritizing an integrated transit system, collaborate with regional and interregional partners, making efficient use of the existing network through technology, monitoring, increasing safety, and supporting the economic growth and vitality of the region. These policies build from the 2020 RTP/SCS while strengthening and restating some policies for clarity.

The goals and policies concepts described above were presented to the public and stakeholders, and input from these groups was incorporated into the development of the 2025 RTP/SCS. The land use scenario envisioned by the 2025 RTP/SCS is similar to that contained in the 2020 RTP/SCS. The regional forecast includes minor changes in development, population demographics, and visitation. This land use scenario, consistent with the 2020 RTP/SCS, concentrates the forecasted growth in population and employment in already urbanized areas.

In addition to policy updates, TRPA proposes revisions to its Code of Ordinances to implement the Regional Transportation Plan. The code revisions will include the addition of specific bicycle parking design standards, inclusion of sidewalks in the exemption from land coverage requirements, and updates to the employer trip reduction ordinance. The changes are included in Attachment X.

Figure 1 Plan Area



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1.1 Air Quality Background

1.1.1 Environmental Setting

Local Climate and Topography

The Plan Area lies in the Lake Tahoe Air Basin (LTAB), which is primarily a depression between the crests of the Sierra Nevada and Carson ranges at a surface elevation of 6,226 feet above sea level. The mountains surrounding Lake Tahoe are approximately 8,000 to 9,000 feet high, with some reaching beyond 10,000 feet (TRPA 2016). The bowl shape of the LTAB has significant air quality implications, and there are two dominant meteorological regimes that affect air quality in the basin (TRPA 2016).

The first meteorological regime, thermal inversions, occurs when a warm layer of air traps a cold layer of air at the surface of the land and lake. Locally generated air pollutants are often trapped in the "bowl" by frequent inversions that limit the amount of air mixing, which allows pollutants to accumulate. Inversions are common throughout the year in the LTAB but occur most frequently during the winter when fog/condensation forms layers over Lake Tahoe.

The second meteorological regime affecting air quality in the LTAB is the atmospheric transportation of pollutants from the Sacramento Valley and San Francisco Bay Area. Lake Tahoe's location directly to the east of the crest of the Sierra Nevada mountain range allows prevailing easterly winds, combined with local mountain upslope winds, to bring air from densely populated regions west of the Sierra to the LTAB. The strength of this pattern depends on the amount of heat, usually strongest in summer beginning in April and ending in late October.

Sources of Air Pollution

Air pollutant emissions in the LTAB are generated primarily by stationary and mobile sources. Stationary sources can be divided into two major subcategories:

- Point sources occur at a specific location and are often identified by an exhaust vent or stack. Examples include boilers or combustion equipment that produce electricity or generate heat.
- Area sources are widely distributed and include such sources as residential and commercial water heaters, painting operations, lawn mowers, agricultural fields, landfills, and some consumer products.

Mobile sources refer to emissions from motor vehicles, including tailpipe and evaporative emissions, and can also be divided into two major subcategories:

- On-road sources may be legally operated vehicles on roadways and highways.
- Off-road sources include aircraft, ships, trains, and self-propelled construction equipment.

Air pollutants can also be generated by the natural environment, such as when high winds suspend and transport fine dust particles.

Air Pollutants of Primary Concern

The U.S. Environmental Protection Agency (USEPA) has identified criteria air pollutants that are a threat to public health and welfare. These pollutants are called "criteria" air pollutants because standards have been established for each of them to meet specific public health and welfare standards. Criteria pollutants that are a concern in the SJVAB are described below.

Ozone

Ozone (O_3) is a highly oxidative unstable gas produced by a photochemical reaction (triggered by sunlight) between nitrogen oxides (NO_X) and reactive organic gases (ROG)/volatile organic compounds (VOC).[1] ROG is composed of non-methane hydrocarbons (with specific exclusions), and NO_X is composed of different chemical combinations of nitrogen and oxygen, mainly nitric oxide and NO_2. NO_X is formed during the combustion of fuels, while ROG is formed during the combustion and evaporation of organic solvents. As a highly reactive molecule, O_3 readily combines with many different atmosphere components. Consequently, high O_3 levels tend to exist only while high ROG and NO_X levels are present to sustain the O_3 formation process. Once the precursors have been depleted, O_3 levels rapidly decline. Because these reactions occur on a regional rather than local scale, O_3 is considered a regional pollutant. In addition, because O_3 requires sunlight to form, it mainly occurs in concentrations considered serious between April and October. Groups most sensitive to O_3 include children, the elderly, people with respiratory disorders, and people who exercise strenuously outdoors (United States Environmental Protection Agency [USEPA] 2024a). Depending on the level of exposure, O_3 can cause coughing and a sore or scratch throat; make it more difficult to breathe deeply and vigorously and cause pain when taking a deep breath; inflame and damage the airways; make the lungs more susceptible to infection; and aggravate lung diseases such as asthma, emphysema, and chronic bronchitis.

Nitrogen Dioxide

Nitrogen dioxide (NO_2) is a by-product of fuel combustion. The primary sources are motor vehicles and industrial boilers, and furnaces. The principal form of NO_x produced by combustion is nitric oxide (NO), but NO reacts rapidly to form NO_2, creating the mixture of NO and NO_2, commonly called NO_x. NO_2 is a reactive, oxidizing gas and an acute irritant capable of damaging cell linings in the respiratory tract. Breathing air with a high concentration of NO_2 can irritate airways in the human respiratory system. Such exposures over short periods can aggravate respiratory diseases leading to respiratory symptoms (such as coughing, wheezing, or difficulty breathing), hospital admissions, and visits to emergency rooms. Longer exposures to elevated concentrations of NO_2 may contribute to the development of asthma and potentially increase susceptibility to respiratory infections. People with asthma, children, and the elderly are generally at greater risk for the health effects of NO_2 (USEPA 2024a). NO_2 absorbs blue light and causes a reddish-brown cast to the atmosphere and reduced visibility. It can also contribute to the formation of O_3/smog and acid rain.

Carbon Monoxide

Carbon monoxide (CO) is a localized pollutant found in high concentrations only near its source. The primary source of CO, a colorless, odorless, poisonous gas, is incomplete combustion of petroleum fuels. Therefore, elevated concentrations are typically only found near areas of high traffic volumes. Other sources of CO include the incomplete combustion of petroleum fuels at power plants and fuel combustion from wood stoves and fireplaces during the winter. When CO levels are elevated outdoors, they can be of particular concern for people with some types of heart disease. These people already have a reduced ability to get oxygenated blood to their hearts in situations where they need more oxygen than usual. As a result, they are especially vulnerable to the effects of CO when exercising or

[1] The California Air Resources Board defines VOC and ROG similarly as, “any compound of carbon excluding carbon monoxide, carbon dioxide, carbonic acid, metallic carbides or carbonates, and ammonium carbonate,” with the exception that VOC are compounds that participate in atmospheric photochemical reactions. For the purposes of this analysis, ROG and VOC are considered comparable in terms of mass emissions, and the term ROG is used in this document.

under increased stress. In these situations, short-term exposure to elevated CO may result in reduced oxygen to the heart accompanied by chest pain, also known as angina (USEPA 2024a).

Particulate Matter

Particulates less than 10 microns in diameter (PM_{10}) and less than 2.5 microns in diameter ($PM_{2.5}$) are comprised of finely divided solids and liquids such as dust, soot, aerosols, fumes, and mists. Both PM_{10} and PM_2 are emitted into the atmosphere as by-products of fuel combustion and wind erosion of soil and unpaved roads. The atmosphere, through chemical reactions, can form particulate matter. The characteristics, sources, and potential health effects of PM_{10} and $PM_{2.5}$ can be very different. PM_{10} is generally associated with dust mobilized by wind and vehicles. In contrast, $PM_{2.5}$ is generally associated with combustion processes and formation in the atmosphere as a secondary pollutant through chemical reactions. PM_{10} can cause increased respiratory disease, lung damage, cancer, premature death, reduced visibility, surface soiling. For $PM_{2.5}$, short-term exposures (up to 24-hours duration) have been associated with premature mortality, increased hospital admissions for heart or lung causes, acute and chronic bronchitis, asthma attacks, emergency room visits, respiratory symptoms, and restricted activity days. These adverse health effects have been reported primarily in infants, children, and older adults with preexisting heart or lung diseases (California Air Resources Board [CARB] 2022a).

Sulfur Dioxide

Sulfur dioxide (SO_2) is included in a group of highly reactive gases known as “oxides of sulfur.” The largest sources of SO_2 emissions are from fossil fuel combustion at power plants (73 percent) and other industrial facilities (20 percent). Smaller sources of SO_2 emissions include industrial processes such as extracting metal from ore and burning fuels with a high sulfur content by locomotives, large ships, and off-road equipment. Short-term exposures to SO_2 can harm the human respiratory system and make breathing difficult. People with asthma, particularly children, are sensitive to these effects of SO_2 (USEPA 2024a).

Lead

Lead (Pb) is a metal found naturally in the environment, as well as in manufacturing products. The major sources of Pb emissions historically have been mobile and industrial. However, due to the USEPA’s regulatory efforts to remove lead from gasoline, atmospheric Pb concentrations have declined substantially over the past several decades. The most dramatic reductions in Pb emissions occurred before 1990 due to the removal of Pb from gasoline sold for most highway vehicles. Pb emissions were further reduced substantially between 1990 and 2008, with reductions occurring in the metals industries at least partly due to national emissions standards for hazardous air pollutants (USEPA 2013). As a result of phasing out leaded gasoline, metal processing is currently the primary source of Pb emissions. The highest Pb level in the air is generally found near Pb smelters. Other stationary sources include waste incinerators, utilities, and Pb-acid battery manufacturers. Pb can adversely affect the nervous system, kidney function, immune system, reproductive and developmental systems, and cardiovascular system depending on exposure. Pb exposure also affects the oxygen-carrying capacity of the blood. The Pb effects most likely encountered in current populations are neurological in children. Infants and young children are susceptible to Pb exposures, contributing to behavioral problems, learning deficits, and lowered intelligence quotient (USEPA 2024a).

Toxic Air Contaminants

In addition to the criteria pollutants discussed above, Toxic Air Contaminants (TAC) are airborne substances diverse group of air pollutants that may cause or contribute to an increase in deaths or serious illness, or that may pose a present or potential hazard to human health. TACs include both organic and inorganic chemical substances that may be emitted from a variety of common sources, including gasoline stations, motor vehicles, dry cleaners, industrial operations, painting operations, and research and teaching facilities. One of the main sources of TACs in California is diesel engine exhaust that contains solid material known as diesel particulate matter (DPM). More than 90 percent of DPM is less than one micron in diameter (about 1/70th the diameter of a human hair) and thus is a subset of $PM_{2.5}$. Because of their extremely small size, these particles can be inhaled and eventually trapped in the bronchial and alveolar regions of the lungs (CARB 2022b). TACs are different than criteria pollutants because ambient air quality standards have not been established for TACs. TACs occurring at extremely low levels may still cause health effects and it is typically difficult to identify levels of exposure that do not produce adverse health effects. TAC impacts are described by carcinogenic risk and by chronic (i.e., long duration) and acute (i.e., severe but of short duration) adverse effects on human health. People exposed to TACs at sufficient concentrations and durations may have an increased chance of getting cancer or experiencing other serious health effects. These health effects can include damage to the immune system, as well as neurological, reproductive (e.g., reduced fertility), developmental, respiratory, and other health problems (USEPA 2024b).

1.1.2 Regulatory Setting

Federal and California Clean Air Act

The federal CAA governs air quality in the United States, which is administered by the U.S. EPA at the federal level. Air quality in California is also governed by regulations under the California CAA, which is administered by the CARB at the State level. At the regional and local levels, local air districts such as Air Quality Management Districts (AQMD) and Air Pollution Control Districts (APCD) typically administer the federal and California CAA. Table 1 summarizes the current (2020) NAAQS and CAAQS. The LTAB is currently in attainment of all NAAQS and CAAQS with the exception of the State PM_{10} standard.

Table 1 Current Federal and State Ambient Air Quality Standards

Pollutant	Averaging Time	Federal Primary Standards[1]	California Standards
Ozone	1-Hour	–	0.09 ppm
	8-Hour	0.070 ppm	0.070 ppm
CO	8-Hour	9.0 ppm	9.0 ppm
	1-Hour	35.0 ppm	20.0 ppm
NO_2	Annual	0.053 ppm	0.030 ppm
	1-Hour	0.100 ppm	0.18 ppm
SO_2	Annual	.030 ppm	–
	24-Hour	0.14 ppm	0.04 ppm
	1-Hour	0.075 ppm	0.25 ppm
PM_{10}	Annual	–	20 µg/m^3
	24-Hour	150 µg/m^3	50 µg/m^3
PM_{25}	Annual	9 µg/m^3	12 µg/m^3
	24-Hour	35 µg/m^3	–
Pb	30-Day Average	–	1.5 µg/m^3
	3-Month Average	0.15 µg/m^3	–
Visibility Reducing Particles	8-Hour	–	Extinction of 0.23 per kilometer[2]
Sulfates	24-Hour	–	25 µg/m^3
Hydrogen Sulfide	1-Hour	–	0.03 ppm (42 µg/m^3)
Vinyl Chloride	24-Hour	–	0.01 ppm (26 µg/m^3)

ppm = parts per million; µg/m^3 = micrograms per cubic meter

[1] Nevada does not have state specific air quality standards and applies the federal primary standards.

[2] In 1989, the CARB converted both the general statewide 10-mile visibility standard and the Lake Tahoe 30-mile visibility standard to instrumental equivalents, which are “extinction of 0.23 per kilometer” and “extinction of 0.07 per kilometer” for the statewide and Lake Tahoe Air Basin standards, respectively.

Source: CARB 2016; USEPA 2024c; Desert Research Institute. Tahoe Regional Planning Agency Ambient Air Monitoring Program Annual Report 2018. 2019. https://monitoring.laketahoeinfo.org/MonitoringProgram/Detail/67.

Federal

The U.S. EPA is responsible for enforcing the federal CAA, which defines nonattainment areas as geographic regions designated as not meeting one or more of the national ambient air quality standards (NAAQS). The federal CAA requires that a State Implementation Plan (SIP) be prepared for each nonattainment area and a maintenance plan be prepared for each former nonattainment area that subsequently demonstrated compliance with the standards. A SIP is a state’s air quality control plans and rules, approved by the U.S. EPA. Section 176(c) of the federal CAA provides that federal agencies cannot engage, support, or provide financial assistance for licensing, permitting, or approving any project unless the project conforms to the applicable SIP. The state and the U.S. EPA’s goals are to eliminate or reduce the severity and number of violations of the NAAQS and to achieve expeditious attainment of these standards. The plan area is in attainment for all NAAQS and no SIPs are required.

The U.S. EPA also regulates emission sources that are under the exclusive authority of the federal government, such as aircraft, ships and certain types of locomotives. The agency has jurisdiction over emission sources outside state waters (e.g. beyond the outer continental shelf) and establishes various emission standards, including those for vehicles.

Transportation Conformity Analysis

Pursuant to 176(c) of the federal CAA (42 USC §7506(c)), Metropolitan Planning Organizations (MPO) and the United States Department of Transportation (U.S. DOT) must make a determination that the RTP and the Regional Transportation Improvement Program (RTIP) conform to the SIP for air quality. Section 176(c) of the CAA, as amended (42 United States Code [U.S.C.] 7401 et seq.) prohibits agencies of the Federal Government from engaging in, supporting, providing financial assistance to, or issuing permits for activities, which do not conform to an applicable SIP. The transportation conformity regulations provided in Code of Federal Regulations (CFR) Title 40, Chapter I, Part 51, Subpart T, Section 51.392-51.400, 51.404, 51.410-51.450, 51.460, and 51.462 were adopted by Placer County APCD in Rule 509 and El Dorado County AQMD in Rule 503; however, PCACPD Rule 509 exempts the Lake Tahoe Air Basin portion of Placer County from compliance with this rule. Currently, the Plan Area is in conformance for all criteria pollutants under federal air quality standards.

State

California

CALIFORNIA AIR RESOURCES BOARD

In California, CARB is responsible for meeting the State requirements of the federal CAA, administering the California CAA and establishing the California ambient air quality standards (CAAQS). The California CAA, as amended in 1992, requires all air districts in the State to endeavor to achieve and maintain the CAAQS. The CAAQS are generally more stringent than the corresponding federal standards and incorporate additional standards for sulfates, hydrogen sulfide, vinyl chloride and visibility reducing particles. CARB regulates mobile air pollution sources, such as motor vehicles. The agency is responsible for setting emission standards for vehicles sold in California and for other emission sources, such as consumer products and certain off-road equipment. CARB established passenger vehicle fuel specifications, which became effective in March 1996.

SENATE BILL 656 (CHAPTER 738, STATUES OF 2003)

In 2003, the California Legislature enacted Senate Bill (SB) 656 (Chapter 738, Statutes of 2003), codified as Health and Safety Code Section 39614, to reduce public exposure to PM_{10} and $PM_{2.5.}$ SB 656 required that, by January 1, 2005, CARB, in consultation with local air pollution control and air quality management districts (air districts), must develop and adopt a list of the most readily available, feasible, and cost-effective control measures that could be employed by CARB and the air districts to reduce PM_{10} and $PM_{2.5}$ (collectively referred to as PM). The legislation established a process for achieving near-term reductions in PM throughout California ahead of federally required deadlines for $PM_{2.5}$ and provided new direction on PM reductions in those areas not subject to federal requirements for PM. Measures adopted as part of SB 656 complement and support those required for federal $PM_{2.5}$ attainment plans, as well as for State ozone plans. This ensures continuing focus on PM reduction and progress toward attaining California's more health protective standards. This list of air district control measures was adopted by CARB on November 18, 2004.

TOXIC AIR CONTAMINANT IDENTIFICATION AND CONTROL ACT OF 1983

The Toxic Air Contaminant Identification and Control Act (Assembly Bill 1807) created California's program to reduce exposure to air toxics. The program involves a two-step process: risk identification and risk management. In the risk identification step, and upon CARB's request, the Office of

Environmental Health Hazard Assessment evaluates the health effects of substances other than pesticides and their pesticidal uses. Substances with the potential to be emitted or that are currently being emitted into the ambient air may be identified as a TAC. In the risk management step, once a substance is identified as a TAC, and with the participation of local air districts, industry, and interested public, CARB prepares a report that outlines the need and degree to regulate the TAC through a control measure.

CARB Air Quality and Land Use Handbook and 2017 Technical Advisory

CARB's *Air Quality and Land Use Handbook: A Community Health Perspective* recommends that local agencies avoid siting new, sensitive land uses within specific distances of potential sources of TACs, such as freeways and high-traffic roads, distribution centers, railroads, and ports (CARB 2005). Specifically, CARB recommends that local agencies avoid siting new, sensitive land uses within 500 feet of a freeway. The primary concern is the effect of diesel exhaust particulate on sensitive uses.

CARB's *Strategies to Reduce Air Pollution Exposure Near High-Volume Roadways* technical advisory (2017) identifies effective strategies that planners and other land use decision-makers can implement locally and in the near-term to reduce exposure to near-roadway pollution from increased infill development while also protecting public health. These strategies complement the State's many efforts to reduce air pollution from all sources, including cars and trucks.

Diesel Risk Reduction Program

In August 1998, CARB identified particulate emissions from diesel-fueled engines (diesel PM) as TACs, based on data linking diesel PM emissions to increased risks of lung cancer and respiratory disease. Following the identification process, CARB was required to determine if there was a need for further control, which led to creation of the Diesel Advisory Committee to assist in the development of a risk management guidance document and risk reduction plan. In September 2000, CARB adopted the Diesel Risk Reduction Plan, which recommends control measures to reduce the risks associated with diesel PM and achieve a goal of 75 percent diesel PM reduction by 2010 and 85 percent by 2020. Specific statewide regulations designed to further reduce diesel PM emissions from diesel-fueled engines and vehicles are continuing to be evaluated and developed. The goal of these regulations is to make diesel engines as clean as possible by establishing state-of-the-art technology requirements or emission standards to reduce diesel PM emissions.

Airborne Toxic Control Measures

Under the California Health and Safety Code, Division 26 (Air Resources), CARB is authorized to adopt regulations to protect public health and the environment through the reduction of TACs and other air pollutants with adverse health effects. CARB has promulgated several mobile and stationary source airborne toxic control measures (ATCMs) pursuant to this authority. For instance, effective as of July 2003, CARB approved an ATCM that limits school bus idling and idling at or near schools to only when necessary for safety or operational concerns (13 California Code of Regulations [CCR] Chapter 10, Section 2480). This ATCM is intended to reduce diesel PM and other TACs and air pollutants from heavy-duty motor vehicle exhaust. It applies to school buses, transit buses, school activity buses, youth buses, general public paratransit vehicles, and other commercial motor vehicles. This ATCM focuses on reducing public exposure to diesel PM and other TACs, particularly for children riding in and playing near school buses and other commercial motor vehicles who are disproportionately exposed to pollutants from these sources. In addition, effective February 2005, CARB approved an ATCM to limit the idling of diesel-fueled commercial motor vehicles with gross vehicular weight ratings of greater than

10,000 pounds, regardless of the state or country in which the vehicle is registered (13 CCR Chapter 10, Section 2485).

DRAYAGE TRUCK REGULATION

CARB established the Drayage Truck Regulation as part of its ongoing efforts to reduce PM and NO_X emissions from diesel-fueled engines and improve air quality associated with goods movement. The purpose of this regulation is to reduce emissions and public exposure to diesel PM, NO_X, and other air contaminants by setting emission standards for in-use, heavy-duty diesel-fueled vehicles.

Starting January 1, 2023, drayage trucks will be subject to the provisions of 13 CCR Section 2025, the Regulation to Reduce Emissions of Diesel Particulate Matter, Oxides of Nitrogen and Other Criteria Pollutants from In-Use Heavy Duty Diesel-Fueled Vehicles, which requires that all not otherwise exempt in-use on-road diesel vehicles, including drayage trucks, have a 2010 model year emissions equivalent engine by January 1, 2023 (13 CCR Section 2027).

PROPOSITION 1B: GOODS MOVEMENT EMISSION REDUCTION PROGRAM

The $1 billion Proposition 1B Goods Movement Emission Reduction Program is a partnership between CARB and local agencies, air districts, and seaports to quickly reduce air pollution emissions and health risk from freight movement along California's trade corridors. Local agencies apply to CARB for funding. Then those agencies offer financial incentives to owners of equipment used in freight movement to upgrade to cleaner technologies. Projects funded under this program must achieve early or extra emission reductions not otherwise required by law or regulation.

OFFICE OF ENVIRONMENTAL HEALTH HAZARD ASSESSMENT

The Office of Environmental Health Hazard Assessment (OEHHA) is the State's lead agency for the assessment of health risks posed by environmental contaminants. OEHHA, which is an office within the California Environmental Protection Agency (CalEPA), aims to protect human health and the environment through scientific evaluation of risks posed by hazardous substances. In addition, OEHHA develops health-protective exposure levels for contaminants in air, water and soil as guidance for regulatory agencies and the public. These include public health goals for contaminants in drinking water and both cancer potency factors and non-cancer reference exposure levels for the Air Toxics Hot Spots Program.

The Air Toxics "Hot Spots" Information and Assessment Act (Assembly Bill 2588) was enacted in 1987 to require stationary sources to report the types and quantities of substances identified as having a localized health risk. This act aims to ascertain health risks, notify nearby residents of significant risks and to reduce significant risks to acceptable levels. Furthermore, CARB's *Air Quality and Land Use Handbook: A Community Health Perspective* recommends that local agencies avoid siting new, sensitive land uses within specific distances of potential sources of TACs, such as freeways and high-traffic roads, distribution centers, railroads and ports (CARB 2005). Specifically, the CARB recommends that local agencies avoid siting new, sensitive land uses within 500 feet of a freeway. The primary concern is the effect of diesel exhaust particulate, a TAC, on sensitive uses.

2004 Revisions to the Carbon Monoxide Maintenance Plan

In 2004, the CARB approved a revision to the SIP that consists of an update to CO maintenance plan for ten areas within California that had attained the federal air quality standard for CO since the early 1990s. This included North Lake Tahoe and South Lake Tahoe. The 2004 revisions to the Maintenance Plan (2004 CO Maintenance Plan) were an update to the 1998 Carbon Monoxide Maintenance Plan and show how attainment would be maintained through 2018 and beyond. Part of the maintenance strategy involves allocation of transportation emissions budgets to the maintenance areas as approved by the EPA.

TRPA Carbon Monoxide Conformity

On March 21, 2018, the U.S. EPA issued a letter stating that as of June 1, 2018, transportation conformity requirements no longer apply for the CO NAAQS for Federal Highway Administration/Federal Transit Association projects as defined in 40 CFR 93.101 in California because the standard 20-year maintenance planning period per 40 CFR 93.102(b)(4) has ended and the maintenance plan does not specify a longer maintenance period (U.S. EPA 2018). Therefore, the Plan Area is in attainment with the SIP.

Nevada

At the state level, the Nevada Bureau of Air Pollution Control (BAPC) and Bureau of Air Quality Planning (BAQP) are the agencies responsible for coordination and oversight of state air pollution control programs, including the Chemical Accident Prevention Program and air quality surveillance in Nevada. The agencies achieve and maintain air quality conditions in Douglas and Washoe Counties and Carson City Rural District through a comprehensive program of planning, regulation, enforcement, technical innovation, and promotion of the understanding of air-quality issues. The clean air strategy of the BAPC and BAQP include the preparation of plans and programs for the attainment of ambient air quality standards, adoption and enforcement of rules and regulations, and issuance of permits for stationary sources. The BAPC and BAQP also oversee compliance with Nevada and federal laws; prepare SIPs; conduct inspections; observe and review source test data, excess emission reports, and compliance certification reports; investigate air quality complaints; operate an ambient air quality monitoring network; develop and implement strategies to control air pollution from motor vehicles, convert motor vehicle fleets to use cleaner-burning alternative fuels; and coordinate and facilitate prescribed outdoor burning.

Nevada Carbon Monoxide Limited Maintenance Plan

On April 3, 2012, the State of Nevada submitted to the U.S. EPA a second 10-year limited maintenance plan (LMP) for the Lake Tahoe Nevada Area for the CO NAAQS. An LMP is an option whereby an area's maintenance demonstration is considered to be satisfied for “not classified” areas if the monitoring data show the design value is at or below 7.65 ppm, or 85 percent of the level of the 8-hour CO NAAQS. The 2012 LMP addressed maintenance of the CO NAAQS for a second 10-year period beyond the original 10-year maintenance period, which began in 2003 when the State of Nevada submitted a redesignation request for the Lake Tahoe Nevada Area from nonattainment to attainment for the CO NAAQS. On August 26, 2016, the State amended the 2012 submittal with a supplemental SIP submittal and thereby approved the 2012 plan.

Local

Tahoe Regional Planning Agency

TRPA is a regional planning agency that oversees development in Lake Tahoe. It was created in 1969 by a Bi-State Compact, approved by governors and lawmakers in California and Nevada in 1969 and ratified by the United States Congress. The Bi-State Compact was revised in 1980, giving TRPA authority to adopt standards for environmental quality, Environmental Threshold Carrying Capacities (thresholds) and to develop and enforce a regional plan to achieve the thresholds. The TRPA Governing Board adopted the original thresholds in 1982. TRPA is a separate legal entity governed by a body of seven voting delegates from California and seven voting delegates from Nevada. There is also a non-voting federal representative to the Governing Board. TRPA prepares the regional land use plan for the Lake Tahoe region, serves as the metropolitan planning organization for the Plan Area, and retains authority over both land use and transportation planning decisions for the Lake Tahoe region.

The Bi-State Compact requires that TRPA establish environmental threshold carrying capacity standards for air quality, and prepare a regional plan to meet those thresholds and attain federal, state, and local air quality standards for the portions of the Plan Area in which they apply. The Air Quality Sub-element and Transportation Element of the TRPA Regional Plan establishes Goals and Policies to achieve and maintain TRPA's air quality thresholds and all applicable federal, state, and local standards for air quality.

LAKE TAHOE REGIONAL PLAN

The Bi-State Compact requires TRPA to develop and implement a Regional Plan to establish a balance, or equilibrium, between the natural environment and the human-made environment. The Regional Plan is designed to achieve and maintain the environmental threshold carrying capacities for the region. Specific components of the Plan and how they relate to air quality are described below.

Goals and Policies

The goals and policies of the Lake Tahoe Regional Plan are designed to achieve and maintain adopted environmental thresholds and are implemented through the Code of Ordinances, Environmental Improvement Program, and Transportation Improvement Plan (with the Tahoe Metropolitan Planning Organization). The Plan Goals and Policies, Attachments and Maps present the overall approach to meeting TRPA's environmental thresholds. A key component of the goals and policies identifies fundamental philosophies directing land use and development in the Lake Tahoe Basin. The Land Use Element of the Plan's Goals and Policies document consists of seven sub-elements, including the Air Quality Sub-element.

TRPA has jurisdiction within the LTAB-portion of Placer and El Dorado Counties with regard to air quality. Therefore, the Air Quality Sub-element focuses on achieving the NAAQS and CAAQS, as well as TRPA adopted threshold. The Code and the RTP contain specific measures designed to monitor and achieve the air quality goals and policies of the Plan.

Code of Ordinances

The Code of Ordinances includes the ordinances needed to implement the Goal and Policies of the Plan. Permit applicants generally utilize the Code of Ordinances to plan their projects, and TRPA regularly amends the Code of Ordinances to improve its effectiveness and clarity. Applicable provisions of Chapter 65, *Air Quality and Transportation,* of the TRPA Code of Ordinances are described below:

- Chapter 33—*Grading and Construction*. Chapter 33 includes requirements for grading and construction activity. Grading and earth disturbance ais allowed only between May 1 and October 15 unless an exemption is granted by TRPA when best management practices (BMPs) to retain soil on site and control dust can be implemented.
- Chapter 65.1—*Air Quality Control*. The provisions of Chapter 65.1 apply to direct sources of air pollution in the Plan Area, including certain motor vehicles registered in the Plan Area, combustion heaters installed, open burning and stationary sources of air pollution, and idling combustion engines. Provisions potentially applicable to the 2025 RTP/SCS are provided below.
  - Section 65.1.3, Vehicle Inspection and Maintenance Program, states that to avoid duplication of effort in implementation of an inspection/maintenance program for certain vehicles registered in the CO nonattainment area, TRPA shall work with the affected state agencies to plan for applying state inspection/maintenance programs to the Lake Tahoe Region.
  - Section 65.1.4, Combustion Appliances, defines air quality standards to be met by gas heaters and wood heaters.
  - Section 65.1.8, Idling Restrictions, states that no person shall cause a combustion engine in a parked auto, truck, bus, or boat to idle for more than 30 consecutive minutes in the designated plan areas (with limited exemptions).
  - Section 65.5, Employer Trip Reduction Ordinance, requires employers to implement programs that incentivize alternative modes of transportation and that reduce employee vehicle trips.

TRPA Best Construction Practices Policy for Construction Emissions

TRPA is committed to monitoring and adaptively managing construction emissions, including criteria air pollutants, through existing permit compliance programs. Pre-grade inspections occur for every permitted project prior to any ground-disturbing activities. These inspections verify that all required permit conditions, such as the location of staging areas and the use of approved power sources, are in place prior to construction activities. In addition, compliance inspections occur for projects throughout construction to verify compliance with all permit requirements. If an inspection determines that a project is not in compliance with permit conditions, enforcement actions are taken, which can include stopping activity at the construction site and monetary fines.

In addition to existing permit limits, TRPA has developed a Best Construction Practices Policy for Construction Emissions, pursuant to the requirements of 2012 RPU Environmental Impact Report (EIR)/Environmental Impact Study (EIS) mitigation measures adopted by the TRPA Governing Board. The policy and related conditions were approved at the November 20, 2013, meeting of the TRPA Governing Board. The policy addresses construction-generated emissions of air pollutants and GHGs associated with development under the Lake Tahoe Regional Plan. The following items constitute TRPA's Best Construction Practices Policy for Construction Emissions:

- TRPA Code Section 65.8.1 limits idling for certain diesel engines to no longer than 5 minutes in California and 15 minutes in Nevada.
- TRPA's Standard Conditions of Approval for projects involving grading and residential projects include:
  - Limit idling time for diesel powered vehicles exceeding 10,000 pounds in Gross Vehicle Weight and self-propelled equipment exceeding 25 horsepower (hp) to no more than 15 minutes in Nevada and 5 minutes in California, or as otherwise required by state or local permits;
  - Utilize existing power sources (e.g., power poles) or clean-fuel generators rather than temporary diesel power generators, wherever feasible; and
  - Locate construction staging areas as far as feasible from sensitive air pollution receptors (e.g., schools or hospitals).

The standard conditions of approval also include a requirement for residential and grading projects for inclusion of dust control measures where earth-moving activities would occur.

- Implementation of a Contractor Recognition Program to incentivize exceedance of regulatory requirements related to emissions-reducing construction practices.
- Implementation of a Woodstove Rebate Program for existing residences to help offset emissions generated from construction by reducing PM_{10}, reactive organic gases (ROG), and NO_X emissions from existing non-compliant woodstoves.

The overall effectiveness of these measures and other efforts to attain and maintain air quality standards continue to be monitored through a comprehensive multi-agency air quality program.

According to Chapter 16 of the TRPA Code, if ongoing monitoring determines that the Best Construction Practices and other efforts to achieve adopted air quality standards have not been successful, then TRPA may develop and implement additional compliance measures. Additional compliance measures may include additional required construction best practices, an expanded rebate program to replace non-conforming woodstoves or other emission-producing appliances, or restrictions on other emission sources such as off-highway vehicles or boats.

Placer County Tahoe Basin Area Plan

The Placer County Tahoe Basin Area Plan (Area Plan) was adopted in 2017 and most recently updated in February 2021. The Area Plan is a component of the Lake Tahoe Regional Plan and the Placer County General Plan. The Planning area includes the portions of Placer County located within the Lake Tahoe Regional Planning area, including the north and west shores of Lake Tahoe. The following policies from Placer County APCD's Placer County Tahoe Basin Area Plan apply to air quality in the LTAB.

- Policy AQ-P-1: Continue to participate in the Lake Tahoe Environmental Improvement Program (EIP) and coordinate with other agencies to identify and secure funding for air quality improvement projects.
- Policy AQ-P-2: Continue to implement federal, state and local air quality protection programs through the Placer County Air Pollution Control District.
- Policy AQ-P-3: Include qualifying air quality improvement projects in TMDL Pollutant Load Reduction Plans (PLRPs).

- Policy AQ-P-4: Prioritize projects and services that reduce vehicle miles travelled (VMT) and support alternative modes of transportation.
- Policy AQ-P-5: Accelerate air quality improvement by implementing Regional Plan incentives for redevelopment within town centers and the transfer of development from outlying areas to town centers.
- Policy AQ-P-6: Continue to implement the mPOWER incentive program to reduce greenhouse gas emissions from buildings and other site improvements.
- Policy AQ-P-7: Implement building design standards and design capital improvements to reduce energy consumption and where feasible to incorporate alternative energy production.
- Policy AQ-P-8: All TRPA policies, ordinances and programs related to Air Quality will remain in effect.

Previous Environmental Review

The air quality attainment status in the LTAB has not changed from 2020 to 2024 relative to the CAAQS, NAAQS, and TRPA air quality standards. The 2020 RTP/SCS IS/IEC examined the air quality setting and potential air quality impacts resulting from changes in the 2020 RTP/SCS compared to the 2017 RTP/SCS (TRPA 2020). The analysis included calculating construction-generated and operational air quality impacts from new transportation infrastructure projects as proposed in the 2020 RTP/SCS. As concluded in the environmental analysis for the 2020 RTP/SCS, the LTAB was in a nonattainment area for PM_{10} for the CAAQS. Since that time, the LTAB has been designated a nonattainment area for the PM_{10} CAAQS. The LTAB has remained in attainment for all other pollutants for the NAAQS and CAAQS.

The analysis in this report for the 2025 RTP/SCS is tiered from the air quality impact analysis contained in the 2020 RTP/SCS IS/IEC, supplemented by project-specific analysis. By tiering from the 2020 RTP/SCS IS/IEC, the analysis in this section relies on the 2017 RTP/SCS IS/IEC and 2020 RTP/SCS IS/IEC for a discussion of general background and setting information for this environmental topic area; overall growth-related issues; issues that were evaluated in sufficient detail in the 2020 RTP/SCS IS/IEC for which there is no significant new information or change in circumstances that would require further analysis; and an assessment of cumulative impacts. The analysis of air quality impacts conforms to the methodologies recommended in the Appendix G of the *CEQA Guidelines* and TRPA’s Environmental Threshold Carrying Capacities (threshold standards). These guidelines include thresholds for air quality impacts associated with both construction and operation of proposed projects.

1.2 Greenhouse Gas Background

1.2.1 Environmental Setting

Climate Change and Greenhouse Gases

Climate change is the observed increase in the average temperature of the Earth’s atmosphere and oceans along with other substantial changes in climate (such as wind patterns, precipitation, and storms) over an extended period. The term “climate change” is often used interchangeably with the term “global warming,” but climate change is preferred because it conveys that other changes are happening in addition to rising temperatures. The baseline against which these changes are measured originates in historical records that identify temperature changes that occurred in the past, such as during previous ice ages. The global climate is changing continuously, as evidenced in the geologic record which indicates repeated episodes of substantial warming and cooling. The rate of change has typically been incremental, with warming or cooling trends occurring over the course of thousands of years. The past 10,000 years have been marked by a period of incremental warming, as glaciers have steadily retreated across the globe. However, scientists have observed acceleration in the rate of warming over the past 150 years. The United Nations Intergovernmental Panel on Climate Change (IPCC) expressed a high degree of confidence (95 percent or greater chance) that the global average net effect of human activities has been the dominant cause of warming since the mid-twentieth century (IPCC 2014).

Gases that absorb and re-emit infrared radiation in the atmosphere are called greenhouse gases (GHGs). The gases widely seen as the principal contributors to human-induced climate change include carbon dioxide (CO_2), methane (CH_4), nitrous oxides (N_2O), fluorinated gases such as hydrofluorocarbons (HFCs) and perfluorocarbons (PFCs), and sulfur hexafluoride (SF_6). Water vapor is excluded from the list of GHGs because it is short-lived in the atmosphere, and natural processes, such as oceanic evaporation, largely determine its atmospheric concentrations.

GHGs are emitted by natural processes and human activities. Of these gases, CO_2 and CH_4 are emitted in the greatest quantities from human activities. Emissions of CO_2 are usually by-products of fossil fuel combustion, and CH_4 results from off-gassing associated with agricultural practices and landfills. Human-made GHGs, many of which have greater heat-absorption potential than CO_2, include fluorinated gases and SF_6 (United States Environmental Protection Agency [U.S. EPA] 2022a). Different types of GHGs have varying global warming potentials (GWP). The GWP of a GHG is the potential of a gas or aerosol to trap heat in the atmosphere over a specified timescale (generally, 100 years). Because GHGs absorb different amounts of heat, a common reference gas (CO_2) is used to relate the amount of heat absorbed to the amount of the gas emitted, referred to as “carbon dioxide equivalent” (CO_2e), and is the amount of GHG emitted multiplied by its GWP. Carbon dioxide has a 100-year GWP of one. By contrast, methane has a GWP of 28, meaning its global warming effect is 28 times greater than carbon dioxide on a molecule per molecule basis (IPCC 2014).

The accumulation of GHGs in the atmosphere regulates the earth’s temperature. Without the natural heat-trapping effect of GHGs, the earth’s surface would be about 33° Celsius (°C) cooler (World Meteorological Organization 2023). However, emissions from human activities, particularly the consumption of fossil fuels for electricity production and transportation, are believed to have elevated the concentration of these gases in the atmosphere beyond the level of concentrations that occur naturally.

Greenhouse Gas Emissions Inventory

Global Emissions Inventory

Worldwide anthropogenic emissions of GHGs were approximately 46,000 million metric tons (MMT or gigatonne) CO_2e in 2010 (IPCC 2014). Carbon dioxide emissions from fossil fuel combustion and industrial processes contributed about 65 percent of total emissions in 2010. Of anthropogenic GHGs, carbon dioxide was the most abundant, accounting for 76 percent of total 2010 emissions. Methane emissions accounted for 16 percent of the 2010 total, while nitrous oxide and fluorinated gases accounted for 6 percent and 2 percent respectively (IPCC 2014).

Federal Emissions Inventory

United States GHG emissions were 6,343.2 MMT of CO_2e in 2022 or 5,489.0 MMT CO_2e after accounting for sequestration. Emissions increased by 0.2 percent from 2021 to 2022. The increase from

2021 to 2022 was driven by an increase in CO_2 emissions from fossil fuel combustion across most end-use sectors due in part to increased energy use from the continued rebound of economic activity after the height of the COVID-19 pandemic. In 2022, the energy sector (including transportation) accounted for 76.4 percent of nationwide GHG emissions while agriculture, industrial and waste accounted for approximately 23.6 percent of nationwide GHG emission (U.S. EPA 2024d).

California Emissions Inventory

Based on a review of the California Air Resource Board (CARB) California Greenhouse Gas Inventory for the years between 2000-2021, California produced 381.3 MMT of CO_2e in 2021, which is 12.6 MMT of CO_2e higher than 2020 levels. The 2019 to 2020 decrease and the 2020 to 2021 increase in emissions is likely due in large part to the impacts of the COVID-19 pandemic. Emissions levels in 2020 are anomalous to the long-term trend, and the one-year increase from 2020 to 2021 should be considered in the broader context of the pandemic and subsequent economic recovery that took place over 2021. The major source of GHG emissions in California is the transportation sector, which comprises 38 percent of the state’s total GHG emissions. The industrial sector is the second largest source, comprising 19 percent of the state’s GHG emissions while electric power accounts for approximately 16 percent (CARB 2023).

California emissions are due in part to its large size and large population compared to other states. However, a factor that reduces California’s per capita fuel use and GHG emissions, as compared to other states, is its relatively mild climate. In 2016, the State of California achieved its 2020 GHG emission reduction goals as emissions fell below 431 MMT of CO_2e. The annual 2030 statewide target emissions level is 260 MMT of CO_2e (CARB 2017).

Nevada Emissions Inventory

The Nevada Division of Environmental Protection (NDEP) prepares GHG emissions inventory for the State of Nevada pursuant to Nevada Revised Statutes (NRS) 44B.380 and Senate Bill 254 passed in 2019. The 2024 report includes an updated inventory of actual GHG emissions through 2022 and projection of GHG emissions through 2044 for the largest emitting sectors (transportation and electricity generation) as well as other key emitting sectors (industry, residential and commercial, waste, agriculture, and land use, land use change, and forestry). Based on NDEPS’s Greenhouse Gas Inventory and Projections, 1990 to 2044, Nevada produced 37.46 MMT of CO_2e in 2022 (NDEP 2024). The major source of GHG emissions in Nevada is transportation, contributing to 35 percent of the state’s total GHG emissions. Electricity generation is the second largest source, contributing approximately 29 percent. The emissions reduction targets for the State are 28 percent by 2025, 45 percent by 2030, and net-zero by 2050 (compared to a 2005 GHG emissions baseline).

Local Emissions Inventory

The Lake Tahoe Sustainable Communities Program’s 2021 Greenhouse Gas Inventory Update estimated that total emissions for the Lake Tahoe region were 795,793 MT of CO_2e in 2018. Electricity consumption, natural gas consumption, and transportation contribute approximately 75 percent of GHG emissions in the Region. The energy sector was the largest source of GHG emissions at 59 percent, followed by on-road transportation at 36 percent, and solid waste generation at 5 percent. The Tahoe Region surpassed the initial target of 15 percent GHG emission reduction by 2020. The 2014 Sustainability Action Plan set additional GHG reduction targets of 49 percent by 2035, and net-zero by 2045. Additional reduction actions are needed to meet the region’s 2045 net-zero carbon emissions target. (TRPA 2021).

Potential Effects of Climate Change

Globally, climate change has the potential to affect numerous environmental resources though potential impacts related to future air temperatures and precipitation patterns. Scientific modeling predicts that continued GHG emissions at or above current rates would induce more extreme climate changes during the 21st century than were observed during the 20th century. The year 2022 was the sixth warmest year since global records began in 1880 at 0.86°C (1.55°F) above the 20th century average of 13.9°C (57.0°F). This value is 0.13°C (0.23°F) less than the record set in 2016 and it is only 0.02°C (0.04°F) higher than the last year's (2021) value, which now ranks as the seventh highest (National Oceanic and Atmospheric Administration 2023). Furthermore, several independently analyzed data records of global and regional Land-Surface Air Temperature obtained from station observations jointly indicate that Land Surface Air Temperature and sea surface temperatures have increased. Due to past and current activities, anthropogenic GHG emissions are increasing global mean surface temperature at a rate of 0.2°C per decade. In addition to these findings, there are identifiable signs that global warming is currently taking place, including substantial ice loss in the Arctic over the past two decades (IPCC 2014, 2018).

Potential impacts of climate change in California may include reduced water supply from snowpack, sea level rise, more extreme heat days per year, more large forest fires, and more drought years. California's Fourth Climate Change Assessment includes regional reports that summarize climate impacts and adaptation solutions for nine regions of the State and regionally specific climate change case studies (California Natural Resources Agency [CNRA] 2019). However, while there is growing scientific consensus about the possible effects of climate change at a global and statewide level, current scientific modeling tools are unable to predict what local impacts may occur with a similar degree of accuracy. A summary follows of some of the potential effects that climate change could generate in California.

Air Quality and Wildfires

Scientists project that the annual average maximum daily temperatures in California could rise by 2.4 to 3.2°C in the next 50 years and by 3.1 to 4.9°C in the next century. Higher temperatures are conducive to air pollution formation and rising temperatures could therefore result in worsened air quality in the Tahoe Region. As a result, climate change may increase the concentration of ground-level ozone, but the magnitude of the effect, and therefore its indirect effects, are uncertain. In addition, as temperatures have increased in recent years, the area burned by wildfires throughout the State has increased, and wildfires have occurred at higher elevations in the Sierra Nevada Mountains (CNRA 2019). If higher temperatures continue to be accompanied by an increase in the incidence and extent of large wildfires, air quality could worsen. Severe heat accompanied by drier conditions and poor air quality could increase the number of heat-related deaths, illnesses, and asthma attacks throughout the State. With increasing temperatures, shifting weather patterns, longer dry seasons, and more dry fuel loads, the frequency of large wildfires and area burned is expected to increase (CNRA 2021).

Water Supply

Analysis of paleoclimatic data (such as tree-ring reconstructions of stream flow and precipitation) indicates a history of naturally and widely varying hydrologic conditions in California and the west, including a pattern of recurring and extended droughts. Uncertainty remains with respect to the overall impact of climate change on future precipitation trends and water supplies in California. Year-to-year variability in statewide precipitation levels has increased since 1980, meaning that wet and dry precipitation extremes have become more common (California Department of Water Resources 2018).

For example, the winter of 2022-2023 had severe storms and flooding from increased rainfall and snowmelt, which the California Department of Water Resources identified as “the latest example that California’s climate is becoming more extreme” (California Department of Water Resources 2023). This uncertainty regarding future precipitation trends complicates the analysis of future water demand, especially where the relationship between climate change and its potential effect on water demand is not well understood. The average early spring snowpack in the western United States, including the Sierra Nevada Mountains, decreased by about 10 percent during the last century. During the same period, sea level rose over 0.15 meter along the central and Southern California coasts. The Sierra snowpack provides the majority of California's water supply as snow that accumulates during wet winters is released slowly during the dry months of spring and summer. A warmer climate is predicted to reduce the fraction of precipitation that falls as snow and the amount of snowfall at lower elevations, thereby reducing the total snowpack. Projections indicate that average spring snowpack in the Sierra Nevada and other mountain catchments in central and northern California will decline by approximately 66 percent from its historical average by 2050 (CNRA 2019).

Long-term data through 2017 indicate that Lake Tahoe has experienced its greatest warming in recent years, with the highest rates at the surface of the Lake. In 2017 the peak surface temperature was 4 degrees Celsius warmer than the previous three years. The rate of surface temperature warming between 1968 and 2017 was 0.02 degrees Celsius per year. This has increased resistance to mixing and increased the duration of thermal stratification (the separation of the Lake into distinct layers based on temperature and interaction with inflowing streams) by 24 days from 1968 to 2014 (TRPA 2020).

Recent research has determined that, on average, approximately three and a half feet of water evaporates from the surface of Lake Tahoe each year. This amounts to more than 400,000 acre-feet. Though small compared to the total volume in the Lake, this represents more than half of the total reservoir capacity. Because of the disproportionate influence of evaporation on its water balance, Lake Tahoe is uniquely and highly susceptible to changes in evaporation, which is one of the primary effects expected in a warming future climate. Relatively small changes in future evaporation rates and average inflow volumes can result in substantial changes to the ongoing water surface elevation of the Lake (TRPA 2020).

Hydrology and Sea Level Rise

Climate change could affect the intensity and frequency of storms and flooding (State of California 2018). Furthermore, climate change could induce substantial sea level rise in the coming century. Rising sea level increases the likelihood of and risk from flooding. The rate of increase of global mean sea levels over the 2001-2010 decade, observed by satellites, ocean buoys, and land gauges, was approximately 3.2 millimeters per year, double the twentieth century trend of 1.6 millimeters per year. Global mean sea levels averaged over the last decade were about 0.20 meter higher than those of 1880 (World Meteorological Organization 2013). Sea levels are rising faster now than in the previous two millennia, and the rise will probably accelerate, even with robust GHG emission control measures. The most recent IPCC report predicts a mean sea-level rise of 0.25 to 0.94 meter by 2100 (IPCC 2018). A rise in sea levels could erode 31 to 67 percent of California beaches and cause flooding of approximately 370 miles of coastal highways during 100-year storm events. This would also jeopardize California’s water supply due to saltwater intrusion and induce groundwater flooding and/or exposure of buried infrastructure (State of California 2018). Increased storm intensity and frequency could affect the ability of flood-control facilities, including levees, to handle storm events.

Agriculture

California has an over $51 billion annual agricultural industry that produces over a third of the country's vegetables and three-quarters of the country's fruits and nuts (California Department of Food and Agriculture 2022). The value of agriculture in Nevada was reported at $960 million in 2022 (U.S. Department of Agriculture 2024). Higher CO_2 levels can stimulate plant production and increase plant water-use efficiency, but if temperatures rise and drier conditions prevail, certain regions of agricultural production could experience water shortages of up to 16 percent. This would increase water demand as hotter conditions lead to the loss of soil moisture; crop-yield could be threatened by water-induced stress and extreme heat waves; and plants may be susceptible to new and changing pest and disease outbreaks (State of California 2018). Temperature increases could change the time of year certain crops, such as wine grapes, bloom or ripen, and thereby affect their quality (California Climate Change Center 2006).

Ecosystems and Wildlife

Climate change and the potential resultant changes in weather patterns could have ecological effects on the global and local scales. Soil moisture is likely to decline in many regions due to higher temperatures, and intense rainstorms are likely to become more frequent. Rising temperatures could have four major impacts on plants and animals: timing of ecological events; geographic distribution and range of species; species composition and the incidence of nonnative species within communities; and ecosystem processes, such as carbon cycling and storage (Parmesan 2006; CNRA 2019).

1.2.2 Regulatory Setting

Federal

The U.S. Supreme Court in *Massachusetts et al. v. Environmental Protection Agency et al*. ([2007] 549 U.S. 05-1120) held that the USEPA has the authority to regulate motor-vehicle GHG emissions under the federal Clean Air Act. The USEPA issued a Final Rule for mandatory reporting of GHG emissions in October 2009. This Final Rule applies to fossil fuel suppliers, industrial gas suppliers, direct GHG emitters, and manufacturers of heavy-duty and off-road vehicles and vehicle engines and requires annual reporting of emissions. In 2012, the USEPA issued a Final Rule that establishes the GHG permitting thresholds that determine when CAA permits under the New Source Review Prevention of Significant Deterioration (PSD) and Title V Operating Permit programs are required for new and existing industrial facilities.

In 2014, the U.S. Supreme Court in *Utility Air Regulatory Group v. EPA* (134 S. Ct. 2427 [2014]) held that USEPA may not treat GHGs as an air pollutant for purposes of determining whether a source is a major source required to obtain a PSD or Title V permit. The Court also held that PSD permits that are otherwise required (based on emissions of other pollutants) may continue to require limitations on GHG emissions based on the application of Best Available Control Technology (BACT).

California

CARB is responsible for the coordination and oversight of state and local GHG emissions reduction programs in California. There are numerous regulations aimed at reducing the state's GHG emissions. These initiatives are summarized below.

California Advanced Clean Cars Program

AB 1493 (2002), California's Advanced Clean Cars program (referred to as "Pavley"), requires CARB to develop and adopt regulations to achieve "the maximum feasible and cost-effective reduction of GHG emissions from motor vehicles." On June 30, 2009, USEPA granted the waiver of CAA preemption to California for its GHG emission standards for motor vehicles beginning with the 2009 model year. Pavley I regulates model years from 2009 to 2016 and Pavley II, which is now referred to as "LEV (Low Emission Vehicle) III GHG" regulates model years from 2017 to 2025. The Advanced Clean Cars program coordinates the goals of the Low Emissions Vehicles (LEV), Zero Emissions Vehicles (ZEV), and Clean Fuels Outlet programs, and should provide major reductions in GHG emissions. By 2025, when the rules will be fully implemented, new automobiles will emit 34 percent fewer GHGs and 75 percent fewer smog-forming emissions from their model year 2016 levels (CARB 2011).

California Global Warming Solutions Act of 2006 (Assembly Bill 32 and Senate Bill 32)

The "California Global Warming Solutions Act of 2006," (AB 32), outlines California's major legislative initiative for reducing GHG emissions. AB 32 codifies the statewide goal of reducing GHG emissions to 1990 levels by 2020 and requires CARB to prepare a Scoping Plan that outlines the main state strategies for reducing GHG emissions to meet the 2020 deadline. In addition, AB 32 requires CARB to adopt regulations to require reporting and verification of statewide GHG emissions. Based on this guidance, CARB approved a 1990 statewide GHG level and 2020 target of 431 MMT CO2e, which was achieved in 2016. CARB approved the Scoping Plan on December 11, 2008, which included GHG emission reduction strategies related to energy efficiency, water use, and recycling and solid waste, among others (CARB 2008). Many of the GHG reduction measures included in the Scoping Plan (e.g., Low Carbon Fuel Standard, Advanced Clean Car standards, and Cap-and-Trade) have been adopted since the Scoping Plan's approval.

The CARB approved the 2013 Scoping Plan update in May 2014 (CARB 2014). The update defined the CARB's climate change priorities for the next five years, set the groundwork to reach post-2020 statewide goals, and highlighted California's progress toward meeting the "near-term" 2020 GHG emission reduction goals defined in the original Scoping Plan. It also evaluated how to align the state's longer term GHG reduction strategies with other state policy priorities, including those for water, waste, natural resources, clean energy, transportation, and land use (CARB 2014).

On September 8, 2016, the governor signed Senate Bill (SB) 32 into law, extending the California Global Warming Solutions Act of 2006 by requiring the state to further reduce GHG emissions to 40 percent below 1990 levels by 2030 (the other provisions of AB 32 remain unchanged). On December 14, 2017, the CARB adopted the 2017 Scoping Plan, which provides a framework for achieving the 2030 target. The 2017 Scoping Plan relies on the continuation and expansion of existing policies and regulations, such as the Cap-and-Trade Program, and implementation of recently adopted policies and legislation, such as SB 1383 and SB 100 (discussed later). The 2017 Scoping Plan also puts an increased emphasis on innovation, adoption of existing technology, and strategic investment to support its strategies. As with the 2013 Scoping Plan update, the 2017 Scoping Plan does not provide project-level thresholds for land use development. Instead, it recommends that local governments adopt policies and locally appropriate quantitative thresholds consistent with statewide per capita goals of six MT CO2e by 2030 and two MT CO2e by 2050 (CARB 2017). As stated in the 2017 Scoping Plan, these goals may be appropriate for plan-level analyses (city, county, sub-regional, or regional level), but not for specific individual projects because they include all emissions sectors in the state (CARB 2017). The 2017 Scoping Plan was superseded by CARB's 2022 Climate Change Scoping Plan in November 2022, as discussed in the following subsection.

Assembly Bill 1279 – California Climate Crisis Act

AB 1279, the California Climate Crisis Act, was passed on September 16, 2022, and declares the State would achieve net zero GHG emissions as soon as possible, but no later than 2045, and to achieve and maintain net negative GHG emissions thereafter. In addition, the bill states that the State would reduce GHG emissions by 85 percent below 1990 levels no later than 2045.

In response to the passage of AB 1279 and the identification of the 2045 GHG reduction target, CARB published the Final 2022 Climate Change Scoping Plan in November 2022 (CARB 2022). The 2022 Update builds upon the framework established by the 2008 Climate Change Scoping Plan and previous updates while identifying new, technologically feasible, cost-effective, and equity-focused path to achieve California's climate target. The 2022 Update includes policies to achieve a significant reduction in fossil fuel combustion, further reductions in short-lived climate pollutants, support for sustainable development, increased action on natural and working lands (NWL) to reduce emissions and sequester carbon, and the capture and storage of carbon.

The 2022 Update assesses the progress California is making toward reducing its GHG emissions by at least 40 percent below 1990 levels by 2030, as called for in SB 32 and laid out in the 2017 Scoping Plan, addresses recent legislation and direction from Governor Gavin Newsom, extends and expands upon these earlier plans, and implements a target of reducing anthropogenic emissions to 85 percent below 1990 levels by 2045, as well as taking an additional step of adding carbon neutrality as a science-based guide for California's climate work. As stated in the 2022 Update, "The plan outlines how carbon neutrality can be achieved by taking bold steps to reduce GHGs to meet the anthropogenic emissions target and by expanding actions to capture and store carbon through the state's NWL and using a variety of mechanical approaches" (CARB 2022c). Specifically, the 2022 Update:

- Identifies a path to keep California on track to meet its SB 32 GHG reduction target of at least 40 percent below 1990 emissions by 2030
- Identifies a technologically feasible, cost-effective path to achieve carbon neutrality by 2045 and a reduction in anthropogenic emissions by 85 percent below 1990 levels
- Focuses on strategies for reducing California's dependency on petroleum to provide consumers with clean energy options that address climate change, improve air quality, and support economic growth and clean sector jobs
- Integrates equity and protecting California's most impacted communities as driving principles throughout the document
- Incorporates the contribution of NWL to the State's GHG emissions, as well as their role in achieving carbon neutrality
- Relies on the most up-to-date science, including the need to deploy all viable tools to address the existential threat that climate change presents, including carbon capture and sequestration, as well as direct air capture
- Evaluates the substantial health and economic benefits of taking action
- Identifies key implementation actions to ensure success

In addition to reducing emissions from transportation, energy, and industrial sectors, the 2022 Update includes emissions and carbon sequestration in NWL and explores how NWL contribute to long-term climate goals. Under the Scoping Plan Scenario, California's 2030 emissions are anticipated to be 48 percent below 1990 levels, representing an acceleration of the current SB 32 target. Cap-and-Trade regulation continues to play a large factor in the reduction of near-term emissions for meeting the accelerated 2030 reduction target. Every sector of the economy will need to begin to transition in this decade to meet our GHG emissions reduction goals and achieve carbon neutrality no later than 2045. The 2022 Update approaches decarbonization from two perspectives, managing a phasedown of existing energy sources and technologies, as well as increasing, developing, and deploying alternative clean energy sources and technology.

Senate Bill 97

SB 97, signed in August 2007, acknowledges that climate change is an environmental issue that requires analysis in California Environmental Quality Act (CEQA) documents. In March 2010, the California Natural Resources Agency adopted amendments to the State CEQA Guidelines for the feasible mitigation of GHG emissions or the effects of GHG emissions. The adopted guidelines give lead agencies the discretion to set quantitative or qualitative thresholds for the assessment and mitigation of GHG and climate change impacts.

Senate Bill 375

SB 375, signed in August 2008, enhances the state's ability to reach AB 32 goals by directing CARB to develop regional GHG emission reduction targets to be achieved from passenger vehicles by 2020 and 2035. In addition, SB 375 directs each of the state's 18 major Metropolitan Planning Organizations (MPOs) to prepare a "sustainable communities strategy" (SCS) that contains a growth strategy to meet these emission targets for inclusion in the Regional Transportation Plan (RTP). On March 22, 2018, CARB adopted updated regional targets for reducing GHG emissions from 2005 levels by 2020 and 2035. TRPA was assigned targets of an eight percent reduction in GHGs from transportation sources by 2020 and a five percent reduction in GHGs from transportation sources by 2035.

Senate Bill 1383

Adopted in September 2016, SB 1383 requires CARB to approve and begin implementing a comprehensive strategy to reduce emissions of short-lived climate pollutants. The bill requires the California Department of Resources Recycling and Recovery (CalRecycle), in consultation with CARB, to adopt regulations that achieve:

- 50 percent reduction in the level of the statewide disposal of organic waste from the 2014 level by 2020
- 75-percent reduction in the level of the statewide disposal of organic waste from the 2014 level by 2025

The bill also mandates various state and local agencies to develop further strategies to reduce emissions generated by specific industries such as agriculture. The stated goal is to achieve the following reduction targets by 2030:

- Methane – 40 percent below 2013 levels
- Hydrofluorocarbons – 40 percent below 2013 levels
- Anthropogenic black carbon – 50 percent below 2013 levels

Senate Bill 100

Adopted on September 10, 2018, SB 100 supports the reduction of GHG emissions from the electricity sector by accelerating the state's Renewables Portfolio Standard Program, which was last updated by SB 350 in 2015. SB 100 requires electricity providers to increase procurement from eligible renewable energy resources to 33 percent of total retail sales by 2020, 60 percent by 2030, and 100 percent by 2045.

Executive Order B-55-18

On September 10, 2018, Governor Brown issued Executive Order (EO) B-55-18, which established a new statewide goal of achieving carbon neutrality by 2045 and maintaining net negative emissions thereafter. This goal is in addition to the existing statewide GHG reduction goals established by SB 375, SB 32, SB 1383, and SB 100.

California Building Standards Code

The California Code of Regulations (CCR) Title 24 is referred to as the California Building Code (CBC). It consists of a compilation of several distinct standards and codes related to building construction including plumbing, electrical, interior acoustics, energy efficiency, and handicap accessibility for persons with physical and sensory disabilities. The current iteration is the 2022 Title 24 standards. The CBC's energy-efficiency and green building standards are outlined as follows.

PART 6 – BUILDING ENERGY EFFICIENCY STANDARDS (CALIFORNIA ENERGY CODE)

CCR Title 24, Part 6 is the Building Energy Efficiency Standards or California Energy Code. This code, originally enacted in 1978, establishes energy-efficiency standards for residential and non-residential buildings in order to reduce California's energy demand. New construction and major renovations must demonstrate their compliance with the current Energy Code through submittal and approval of a Title 24 Compliance Report to the local building permit review authority and the California Energy Commission (CEC). The 2022 Title 24 standards are the applicable building energy efficiency standards for the proposed project because they became effective on January 1, 2023.

PART 11 – CALIFORNIA GREEN BUILDING STANDARDS

The California Green Building Standards, referred to as CALGreen, was added to Title 24 as Part 11, first in 2009 as a voluntary code, which then became mandatory effective January 1, 2011 (as part of the 2010 CBC). The 2022 CALGreen includes mandatory minimum environmental performance standards for all ground-up new construction of residential and non-residential structures. It also includes voluntary tiers with stricter environmental performance standards for these same categories of residential and non-residential buildings. Local jurisdictions must enforce the minimum mandatory CALGreen standards and may adopt additional amendments for stricter requirements.

California Integrated Waste Management Act (Assembly Bill 341)

The California Integrated Waste Management Act of 1989, as modified by AB 341 in 2011, requires each jurisdiction's source reduction and recycling element to include an implementation schedule that shows: (1) diversion of 25 percent of all solid waste by January 1, 1995, through source reduction, recycling, and composting activities and (2) diversion of 50 percent of all solid waste on and after January 1, 2000.

Executive Order N-79-20

On September 23, 2020, Governor Newsom issued EO N-79-20, which established the following new statewide goals:

- All new passenger cars and trucks sold in-state to be zero-emission by 2035

- All medium- and heavy-duty vehicles in the state to be zero-emission by 2045 for all operations where feasible and by 2035 for drayage trucks
- All off-road vehicles and equipment to be zero-emission by 2035 where feasible

EO N-79-20 directs CARB, the Governor's Office of Business and Economic Development, the CEC, the California Department of Transportation, and other state agencies to take steps toward drafting regulations and strategies and leveraging agency resources toward achieving these goals.

Clean Energy, Jobs, and Affordability Act of 2022 (Senate Bill 1020)

Adopted on September 16, 2022, SB 1020 creates clean electricity targets for eligible renewable energy resources and zero-carbon resources to supply 90 percent of retail sale electricity by 2035, 95 percent by 2040, 100 percent by 2045, and 100 percent of electricity procured to serve all State agencies by 2035. This bill shall not increase carbon emissions elsewhere in the western grid and shall not allow resource shuffling.

California Environmental Quality Act

Pursuant to the requirements of SB 97, the Resources Agency has adopted amendments to the *CEQA Guidelines* for determining the effects and feasible mitigation of GHG emissions. The adopted *CEQA Guidelines* provide general regulatory guidance on the analysis and mitigation of GHG emissions in CEQA documents, while giving lead agencies the discretion to set quantitative or qualitative thresholds for the assessment and mitigation of GHGs and climate change impacts. To date, a variety of air districts, including the Placer County Air Pollution Control District (APCD), have adopted quantitative significance thresholds for GHGs.

For more information on the Senate and Assembly bills, executive orders, building codes, and reports discussed above, and to view reports and research referenced above, please refer to the following websites: www.climatechange.ca.gov, www.arb.ca.gov/cc/cc.htm, and https://www.dgs.ca.gov/BSC/Codes.

Relevant Case Law

Nevada

On April 10, 2007, Nevada Governor Jim Gibbons signed an executive order that created the Nevada Climate Change Advisory Committee (NCCAC). The executive order directed the NCCAC to develop recommendations for reducing Nevada's GHG emissions. The NCCAC released its final report on May 31, 2008 in which it identified recommendations to reduce GHG emissions in sectors such as agriculture, energy, waste management, commercial and residential building, and transportation.

In 2019, the Nevada state legislature passed SB 254, which requires the State Department of Conservation and Natural Resources to issue an annual report concerning GHG emissions in Nevada. The annual reports also include policies that could inform future policy development initiatives designed to reduce GHG emissions statewide. The inaugural report was released for 2019, with proposed policies including the adoption of California vehicle emissions standards, adopting a goal of achieving 100 percent electricity from renewable sources by 2050, and reducing methane emissions from the waste and wastewater sectors.

On March 21, 2023, Nevada Governor Joe Lombardo signed Executive Order 2023-073. The Executive Order outlines Nevada's energy policy objectives aimed at:

- Achieving 50 percent renewable energy portfolio standard by 2030, as established by SB 358 in 2019
- Developing and maintaining a diverse energy supply portfolio and a balanced approach to affordability and reliability for consumers
- Developing sufficient in-state electric generation resources to ensure the needs of all Nevadans are met and ensuring that Nevada has sufficient electric generation resources to mitigate risks during peak usage periods

In addition, on August 8, Governor Lombardo announced the launch of Nevada's Climate Innovation Plan, a strategic initiative designed to propel Nevada towards a sustainable future.

SB 254 and these executive orders, together with the increased Renewable Portfolio Standard approved by the Legislature in 2019, form the foundation of Nevada's efforts to address climate change through reducing GHG emissions from all parts of the economy, while driving innovative technologies and pursuing an inclusive and equitable transition to a sustainable, low-carbon economy.

The state of Nevada and its jurisdictions follow the air quality policies and regulations set forth by the Federal Highway Administration and the U.S. EPA when evaluating the greenhouse gas emissions generated by the construction of road projects (Federal Highway Administration 2013).

Local Regulations

Tahoe Regional Planning Agency

TRPA is a regional planning agency that oversees development in Lake Tahoe. It was created in 1969 by the Bi-State Compact, approved by governors and lawmakers in California and Nevada in 1969 and ratified by the United States Congress. The Bi-State Compact was revised in 1980, giving TRPA authority to adopt environmental quality standards (called thresholds) and to enforce ordinances designed to achieve the thresholds. The TRPA Governing Board adopted the thresholds in 1982. TRPA is a separate legal entity governed by a body of seven voting delegates from California and seven voting delegates from Nevada. There is also a non-voting federal representative to the Governing Board. TRPA prepares the regional land use plan for the Lake Tahoe region, serves as the metropolitan planning organization for the Plan Area, and retains authority over both land use and transportation planning decisions for the Lake Tahoe region.

In 1982, TRPA adopted nine environmental threshold carrying capacities (thresholds), which set environmental standards for the Lake Tahoe region and indirectly define the capacity of the Plan Area to accommodate additional land development. Thresholds define the environmental quality goals that the Regional Plan is required to achieve for matters including water quality, air quality, soil conservation, vegetation protection, fisheries, wildlife, scenic resources, noise and recreation. TRPA has not specifically identified any Environmental Threshold Carrying Capacities related to GHG emissions or climate change. The Lake Tahoe Regional Plan Goals and Policies document, which is designed to achieve and maintain adopted environmental thresholds, has one policy pertaining to GHG emissions (Policy AQ-1.3) that encourages the reduction of GHG emissions from motor vehicles and motorized machinery in the Plan Area. The TRPA Code of Ordinances includes a provision requiring that a GHG reduction strategy be incorporated into area plans adopted by local jurisdictions (TRPA Code Section 13.5.3.E) to reduce emissions of GHGs from operation and construction.

TRPA 2020 Regional Transportation Plan

TRPA serves as the Metropolitan Planning Organization for El Dorado County and Placer County in California within the LTAB and Washoe and Douglas counties in Nevada. In 2020, TRPA prepared the 2020 RTP/SCS, which is an update to the 2017 RTP/SCS. The plan seeks to improve mobility and safety for the commuting public while at the same time delivering environmental improvements throughout the transportation network in the Plan Area through 2045. Important directions of the plan are to reduce the overall environmental impact of transportation in the Tahoe Region, create walkable, vibrant communities, and provide real alternatives to driving. The RTP establishes a target to reduce GHG emissions. TRPA's current SB 375 target was updated in 2018 to 8 percent reduction of GHGs by 2020 and a 5 percent reduction by 2035, relative to 2005 emissions.

The plan also is an update of the Transportation Element of the TRPA Lake Tahoe Regional Plan. The 2025 RTP update includes an SCS, in accordance with California SB 375 (Sustainable Communities and Climate Protection Act). The SCS demonstrates how integrated transportation, land use, and housing strategies will help the Metropolitan Planning Organization Region meet environmental thresholds and greenhouse gas targets for cars and light trucks on the California side of the Basin by 2035. The RTP and SCS are integrated into TRPA's Regional Plan. The 2025 RTP/SCS is an update to the 2020 RTP/SCS.

TRPA Sustainability Action Plan and Climate Resilience Action Strategy

TRPA adopted a Sustainability Action Plan in December 2013, which provides tools to assist local governments, agencies, businesses, residents, visitors, and community groups with prioritizing and adopting consistent sustainability actions throughout the Region. The Sustainability Action Plan represents an integrated approach to reducing GHG emissions and striving toward zero-impact in all aspects of sustainability. The document includes the revised GHG emissions inventory, reduction targets, and climate change and adaptation strategies; however, it is not a CEQA-qualified GHG reduction plan under which GHG impact analysis can be streamlined for new development projects. Local jurisdiction partners at Placer County and City of South Lake Tahoe have adopted CEQA-qualified GHG reduction plans for their portions of the Tahoe Basin.

The Lake Tahoe Climate Resilience Action Strategy builds on existing Tahoe Basin climate and environmental improvement plans to identify five focus areas that will advance equity, create jobs, and build resilience for the Basin's extraordinary natural resources, 57,000 residents, and an economy that supports 15 million annual visitors. The five climate resilience focus areas are as follows:

- Build Sustainable Recreation and Transportation Systems: Upgrade recreation and transportation facilities to prepare for longer summers, shorter winters, fluctuating lake levels, and changes in visitor patterns. Invest in projects that expand equitable access like bike paths, accessibility improvements, and tribal interpretive sites.
- Reduce Wildfire Risk and Build Forest Resilience: Implement unfunded thinning and forest restoration projects to protect communities from wildfire and improve forest health. Restore burned forests. Continue implementing the Lake Tahoe Forest Action Plan.
- Increase Watershed Resilience and Biodiversity: Restore wetlands, streams, and meadows. Prevent and control aquatic invasive species. Help wildlife, natural infrastructure, and culturally significant places withstand droughts, fire, and warming temperatures, while storing more carbon in meadows and forests.
- Upgrade Infrastructure and Protect Vulnerable Communities: Prepare for wildfire and extreme weather by upgrading water, sewer, broadband, and power infrastructure; building community

resilience centers; planning for emergencies; and expanding electric vehicle charging and solar energy adoption.

- Advance Science, Stewardship, and Accountability: Guide and protect Tahoe climate investments through cutting-edge research, monitoring, and adaptive management.

Greenhouse Gas Inventory

The inventory shows that overall, progress is being made toward GHG emission reduction goals. From 2005 to 2018, the Tahoe Region's emissions have declined significantly by 38.7 percent. Total emissions were reduced from 1,297,446 MT CO_2e to 795,793 MT CO_2e. On average between the years of 2015 and 2018, the energy sector produced more than half the emissions in the basin (59 percent), followed by transportation (37 percent). In combination, these two sectors generate more than 95 percent of total emissions in the basin and therefore have the most potential for reduction.

For the first time, the updated inventory modeled carbon sequestration potential in Tahoe's forests and meadows and compared those to annual emissions. The updated inventory found that the natural landscape sequestered or stored between 300,000 and 1,000,000 MT CO_2e in 2018. This is compared to about 800,000 MT CO_2e in emissions for 2018.

TRPA Best Construction Practices Policy for Construction Emissions

TRPA coordinates implementation of its Best Construction Practices Policy for Construction Emissions through TRPA-approved plans, project-permitting, or projects/programs developed in coordination with local or other governments that require, as a condition of project approval, implementation of feasible measures and best management practices to reduce construction-generated emissions to the extent feasible TRPA adopted its Best Construction Practices Policy in 2013 pursuant to Mitigation Measure 3.4-2 and Mitigation Measure 3.5-1 of the 2012 RPU Environmental Impact Report/Environmental Impact Statement (EIR/EIS), and Mitigation Measure 3.4-2 of the Regional Plan Update (RPU) EIS. Included in these measures are limits on idling time and the use of clean-fuel generators rather than diesel, which help reduce GHG emissions related to the construction of project build alternatives.

Lake Tahoe Sustainable Communities Program

The Lake Tahoe Basin is already experiencing the direct impacts of growing number of extreme environmental events. These include rapid change to the ecological composition of our natural environment, more severe and frequent hazard events, retreating snowpack, and socio-economic shifts (such as fluctuation of trends in visitation). Climate change directly impacts the ability of TRPA and regional partners to achieve and maintain thresholds and will likely cause major disruptions to the region's economic, social, and ecological systems.

In 2013, a GHG inventory and future projections were completed for the Plan Area. The inventory found that generation of electricity, transportation, and fuel combustion for heating and cooking are the top three emissions sources in the Plan Area and constitute approximately 90 percent of all emissions. The completion of this inventory led to the creation of the Lake Tahoe Sustainable Communities Program (Sustainability Program) in 2014, a multi-sector collaborative funded by the Strategic Growth Council, and the national Sustainability Action Plan (Action Plan).

The Action Plan outlines a comprehensive regional approach to reducing GHG emissions and adapting to climate change. Other components of the Sustainability Program include an Economic Development

Strategy and supported implementation of the Regional Plan through creation of the initial version of the Area Plan Framework. In addition to the successful implementation components of the Lake Tahoe Sustainability Program, other notable inputs and changes in relevant climate change policy and information since 2014 include:

- Truckee Basin Study, Bureau of Reclamation (2015) – Report analyzing impacts of climate change on water supply for the Truckee River Basin
- Water for the Seasons (ongoing) – Study by Desert Research Institute to address impacts identified in Truckee Basin Study
- California Fourth Climate Change Assessment (2018) – Included more localized analysis of impacts of climate change on regions of California, including the Sierra Nevada
- Tahoe Basin Vulnerability Assessment (2020) – Completed by the California Tahoe Conservancy, downscaled science from the 4th Assessment to analyze specific climate change impacts to the Tahoe Basin
- Tahoe Climate Adaptation Action Portfolio (2020) – Ongoing California Tahoe Conservancy project to highlight current adaptation actions in the Tahoe Basin
- Tahoe Science Advisory Council Science to Action Plan – Ongoing work to assess summer-winter clarity trends and identify actions to address findings

Placer County Air Pollution Control District

Placer County APCD has adopted CEQA thresholds of significance for evaluating whether the GHG emissions of different types of projects would be a cumulatively considerable contribution to climate change in their *California Environmental Quality Act Thresholds of Significance Justification Report* (Placer County APCD 2016a). Placer County APCD recommends an array of GHG thresholds for determining whether a project's GHG emissions would be cumulatively considerable. Placer County APCD's recommendations are discussed in detail under Section 2.2, *Significance Thresholds*.

South Lake Tahoe General Plan

The Natural and Cultural Resources Element of the South Lake Tahoe General Plan provides city-wide goals and polices aimed at reducing GHG emissions and promoting sustainable development (City of South Lake Tahoe 2011). Relevant goals and policies include incorporating bicycle and pedestrian facilities in city transportation planning and new development projects (Policy NCR-5.1), consideration of traffic-calming measures where needed (Policy NCR-5.5), encouraging interconnected bicycle, pedestrian, and bus transit circulation in development projects (NCR-5.8), supporting appropriately located mixed-use development sites within walking distance of each other (NCR-5.9), and mitigating carbon emissions during project-level CEQA review for individual projects (NCR-5.15). The General Plan also encourages conservation in new and existing development to reduce GHG emissions (Goal NCR-6); this goal is supported by policies that encourage use of "EPA Energy Star" certified appliances for new private development and public facilities (NCR-6.14), and a requirement to prepare a waste diversion plan to address the construction phase for certain projects (NCR6.16).

Previous Environmental Review

The 2020 RTP/SCS IS/IEC examined the GHG setting and potential GHG impacts resulting from changes in the 2020 RTP/SCS compared to the 2017 RTP/SCS (TRPA 2020). This analysis included estimating vehicle miles traveled (VMT) and future mobile-source emissions in the Plan Area using EMFAC2017, which was an updated version of the EMFAC2014 model that was utilized for the 2017 RTP/SCS.

The analysis in this report for the 2025 RTP/SCS is tiered from the GHG impact analysis contained in the 2020 RTP/SCS IS/IEC, supplemented by project-specific analysis. By tiering from the 2020 RTP/SCS IS/IEC, the analysis in this section relies on the 2020 RTP/SCS IS/IEC for a discussion of general background and setting information for this environmental topic area; overall growth-related issues; issues that were evaluated in sufficient detail in the 2020 RTP/SCS IS/IEC for which there is no significant new information or change in circumstances that would require further analysis; and an assessment of cumulative impacts. The analysis of GHG impacts conforms to the methodologies recommended in the Appendix G of the *CEQA Guidelines* and TRPA's Environmental Threshold Carrying Capacities (threshold standards). These guidelines include thresholds for GHG emissions associated with both construction and operation of proposed projects.

2 Impact Analysis

2.1 Air Quality Significance Thresholds

This analysis follows the guidance and methodologies recommended in CEQA Appendix G and TRPA's *Initial Environmental Checklist*. The following CEQA Appendix G criteria were identified for determining whether a project's impacts would have a significant impact on air quality:

1. Conflict with or obstruct implementation of the applicable air quality plan?
2. 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?
3. Expose sensitive receptors to substantial pollutant concentrations?
4. Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?

The following criteria were identified in the TRPA *Initial Environmental Checklist* for determining whether a project's impacts would have a significant impact on air quality:

1. Result in substantial air pollutant emissions? (TRPA 2a)
2. Result in deterioration of ambient (existing) air quality? (TRPA 2b)
3. Result in the creation of objectionable odors? (TRPA 2c)
4. Result in the alteration of air movement, moisture or temperature, or any change in climate, either locally or regionally? (TRPA 2d)
5. Result in increased use of diesel fuel? (TRPA 2e)

2.1.1 TRPA Environmental Threshold Carrying Capacities

In 1982, TRPA adopted nine environmental threshold carrying capacities, which set environmental standards for the LTAB and indirectly define the capacity of the Plan Area to accommodate additional land development. Thresholds define the environmental quality goals that the Regional Plan is required to achieve for matters including water quality, air quality, soil conservation, vegetation protection, fisheries, wildlife, scenic resources, noise and recreation. TRPA has established air quality thresholds that address CO, ozone, regional and sub-regional visibility, and nitrate deposition.

In June 2021, TRPA released its Final 2019 Threshold Evaluation Report, which contains TRPA's air quality thresholds. The 2019 Threshold Evaluation Report was used in the 2020 RTP/SCS IS/IEC to determine the region's attainment of TRPA AAQS. The report generally found that air quality in the region either remained the same or improved for most pollutant standards, similar to the designations made in 2016 except for the highest 24-hour concentration of PM_{10} and highest 24-hour concentration of $PM_{2.5}$, both of which moderately declined since 2016 but had not exceeded TRPA's thresholds.

In February 2025, TRPA released its 2023 Draft Threshold Evaluation Report. The latest report findings indicate that the region is in nonattainment for one TRPA Air Quality threshold: Regional Visibility 90^{th} Percentile (Worst Visibility Days).

TRPA's air quality threshold standards and how they address CAAQS and NAAQS for LTAB regional air quality are shown in Table 2.

Table 2 TRPA Air Quality Threshold Standards

Pollutant	Name of Standard	Standard Type	Adopted TRPA Threshold Standard (TRPA Threshold Standards and Regional Plan))	Applicable State and Federal Standards	TRPA Indicator
Carbon Monoxide (CO)	8-Hour CO	Numerical	Maintain CO concentrations at or below 6 ppm	California and Nevada: Not to exceed 6 ppm averaged over 8 hours. Federal: Not to exceed 9 ppm, averaged over 8 hours, more than once per year	The highest 8- hour average CO concentration measured at Stateline, Nevada monitoring station.
	Winter Traffic Volume	Management (with Numerical Target)	Reduce traffic volumes on the U.S. Highway 50 Corridor by 7 percent during the winter from the 1981 base year between 4 p.m. and midnight, provided that those traffic volumes shall be amended as necessary to meet any state standards.	N/A	Average daily winter traffic volume (vehicles/day) on Presidents' Day Weekend at U.S. Highway 50 and Park Avenue, South Lake Tahoe, California. TRPA threshold is 24,000 cars/day.
	1-hour Ozone	Numerical	Maintain ozone concentrations at or below 0.08 ppm averaged over 1 hour	Federal: N/A California: Not to exceed 0.09 ppm Nevada: Not to exceed 0.10 ppm	Highest 1-hour average ozone concentration measured within a year at any monitoring station
Ozone	Oxides of Nitrogen Emissions	Management	Maintain oxides of nitrogen (NOx) emissions at or below the 1981 level.	N/A	Average tons per day of NOx emission to be kept below 5.6 tons per day.
	Regional Visibility	Numerical	Achieve an extinction coefficient of 25 Mm-1 at least 50 percent of the time as calculated from aerosol species concentrations measured at the Bliss State Park monitoring site (visual range of 97 miles); Calculations will be made on three year running periods using the existing monitoring data as the performance standards to be met or exceeded.	California: 8-hour average extinction coefficient of 0.07 per kilometer – visibility of 30 miles or more due to particles when relative humidity is less than 70%. Nevada and Federal: N/A	50th percentile extinction coefficient and distance of visibility. 3-year running average of extinction coefficient.
		Numerical	Achieve an extinction coefficient of 34 Mm^{-1} at least 90 percent of the time as calculated from aerosol species concentrations measured at the Bliss State Park monitoring site (visual range of 71 miles). Calculations will be made on three year running periods using the existing monitoring data as the performance standards to be met or exceeded.	California: 8-hour average extinction coefficient of 0.07 per kilometer – visibility of 30 miles or more due to particles when relative humidity is less than 70%. Nevada and Federal: N/A	90th percentile extinction coefficient and distance of visibility. 3-year running average of extinction coefficient.
Visibility Reducing Particles	Sub-Regional Visibility	Numerical	Achieve an extinction coefficient of 50 Mm^{-1} at least 50 percent of the time as calculated from aerosol species concentrations measured at the South Lake Tahoe monitoring site (visual range of 48 miles).	N/A	50th percentile extinction coefficient and distance of visibility. 3-year running average of extinction coefficient.
		Numerical	Achieve an extinction coefficient of 125 Mm-1 at least 90 percent of the time as calculated from aerosol species concentrations measured at the South Lake Tahoe monitoring site (visual range of 19 miles).	N/A	90th percentile extinction coefficient and distance of visibility. 3-year running average of extinction coefficient.
	Respirable Particulate Matter (PM_{10})	Numerical	Maintain PM_{10} at or below 50 $\mu g/m^3$ measured over a 24-hour period in the portion of the Plan Area within California Maintain PM_{10} at or below 150 $\mu g/m^3$ measured over a 24-hour period in the portion of the Plan Area within Nevada. Particulate Matter10 measurements shall be made using gravimetric or beta attenuation methods or any equivalent procedure which can be shown to provide equivalent results at or near the level of air quality standard.	Federal: 150 $\mu g/m^3$ (24- hr mean, not to be exceeded more than 3 times in 3 years) California: 50 $\mu g/m^3$ Nevada: 150 $\mu g/m^3$	Number of 24-hr periods exceeding the applicable federal or state standards at any monitoring station
	Respirable Particulate Matter (PM_{10}) Fine Particulate Matter ($PM_{2.5}$)	Numerical	Maintain PM_{10} at or below annual arithmetic average of 20 $\mu g/m^3$ in the portion of the Plan Area within California Maintain PM_{10} at or below annual arithmetic average of 50 $\mu g/m^3$ in the portion of the Region within Nevada. Particulate Matter10 measurements shall be made using gravimetric or beta attenuation methods or any equivalent procedure which can be shown to provide equivalent results at or near the level of air quality standard.	California: 20 $\mu g/m^3$ Nevada 50 $\mu g/m^3$ Federal: N/A	3-year mean of the annual average PM_{10} concentrations at any permanent monitoring station ($\mu g/m^3$)

Pollutant	Name of Standard	Standard Type	Adopted TRPA Threshold Standard (TRPA Threshold Standards and Regional Plan))	Applicable State and Federal Standards	TRPA Indicator
Respirable and Fine Particle Matter	Respirable Particulate Matter (PM_{10}) Fine Particulate Matter ($PM_{2.5}$)	Numerical	Maintain $PM_{2.5}$ at or below 35 µg/m³ measured over a 24-hour period using gravimetric or beta attenuation methods or any equivalent procedure which can be shown to provide equivalent results at or near the level of air quality standard.	Federal: 35 µg/m³, 3-year average of the 98th percentile of 24-hour concentration must not exceed concentration standard California and Nevada: N/A	Number of 24-hour periods exceeding the applicable federal or state standards at any monitoring station (µg/m³)
		Numerical	Maintain $PM_{2.5}$ at or below annual arithmetic average of 12 µg/m³ in the portion of the Region within California and maintain $PM_{2.5}$ at or below annual arithmetic average of 15 µg/m³ in the portion of the Region within Nevada. $PM_{2.5}$ measurements shall be made using gravimetric or beta attenuation methods or any equivalent procedure which can be shown to provide equivalent results at or near the level of air quality standard	Federal: 9.0 µg/m³, 3- year average of weighted annual mean concentration must not exceed. California: 12 µg/m³ Annual concentration must not be exceeded.	3-year mean of the annual average $PM_{2.5}$ concentrations at any permanent monitoring station (µg/m³)
	Nitrate Deposition	Management	Reduce the transport of nitrates into the basin and reduce NO_x produced in the Basin consistent with the water quality thresholds.	N/A	Annual dissolved inorganic nitrogen “DIN” (NO3-N + NH4-N) loading at the mid-lake station. Implementation of management standard into the Regional Plan.
	Nitrate Deposition	Management	Reduce the transport of nitrates into the basin and reduce NO_x produced in the Basin consistent with the water quality thresholds.	N/A	Annual dissolved inorganic nitrogen “DIN” (NO3-N + NH4-N) loading at the mid-lake station. Implementation of management standard into the Regional Plan.
Nitrate Deposition	Nitrate Deposition	Management	Reduce the transport of nitrates into the basin and reduce NO_x produced in the Basin consistent with the water quality thresholds.	N/A	Annual dissolved inorganic nitrogen “DIN” (NO3-N + NH4-N) loading at the mid-lake station. Implementation of management standard into the Regional Plan.

2.1.2 Placer County APCD Revised Thresholds of Significance

On October 13, 2016, Placer County APCD adopted revised CEQA thresholds of significance for criteria pollutant emissions (Placer County APCD 2016b). The revised thresholds are supported by Placer County APCD's *California Environmental Quality Act Thresholds of Significance Justification Report* released in September 2016 (Placer County APCD 2016b) and were used in the evaluation of impacts related to the 2020 RTP/SCS IS/IEC occurring within the Placer County portion of the LTAB. Based on the Placer County APCD thresholds of significance, a project would result in a significant project-level air quality impact if any of the following would occur:

- A net increase in short-term construction-related emissions of ROG, NO_X, or PM_{10} that exceeds mass emissions of 82 pounds per day in Placer County
- A net increase in long-term operation-related (regional) emissions of ROG or NO_X that exceeds mass emissions of 55 pounds per day or a net increase in long-term operation-related (regional) emissions of PM_{10} that exceeds mass emissions of 82 pounds per day in Placer County
- Exposure of sensitive receptors to TAC emissions that would exceed 10 in 1 million for the carcinogenic risk (i.e., the risk of contracting cancer) or a non-carcinogenic Hazard Index of 1 for the maximally exposed individual

In addition, a project would result in a cumulatively considerable contribution to a cumulative air quality impact if it would result in a net increase in long-term operation-related (regional) emissions of ROG or NO_X that exceed 55 pounds per day or a net increase in long-term operation-related (regional) emissions of PM_{10} that exceeds 82 pounds per day.

2.1.3 El Dorado County AQMD Thresholds of Significance

In February 2002, El Dorado County AQMD adopted CEQA thresholds of significance for criteria pollutant emissions. The revised thresholds are supported by El Dorado County AQMD's *Determining Significance of Air Quality Impact Under the California Environmental Quality Act (CEQA)*, released in February 2002, and were used in the evaluation of impacts related to the 2017 RTP/SCS IS/IEC and the 2020 RTP/SCS IS/IEC occurring within the El Dorado County portion of the LTAB. Based on the El Dorado County AQMD thresholds of significance, a project would result in a significant project-level air quality impact if any of the following occurred:

- The project would result in construction or operational emissions of ROG or NO_x in excess of 82 pounds per day. Special requirements for determining significance may apply in the LTAB as imposed by TRPA in interpreting its 0.08 ppm one-hour significance threshold for ozone. However, per El Dorado AQMD guidance, "there is no reason to adopt a more stringent significance threshold for individual projects in the Tahoe region for CEQA purposes in light of the TRPA threshold…because there is no direct relationship between the TRPA threshold, which is expressed as an ozone concentration in parts per million, and the CEQA ozone precursor significance thresholds designated above, which are expressed as mass emissions. Accordingly, the same criteria are considered appropriate for the LTAB portion of the county as well as the Mountain Counties Air Basin portion" (El Dorado AQMD 2002).
- The project would result in construction or operation emissions of other pollutants (PM_{10}, CO, SO_2, NO_2, sulfates, lead, hydrogen sulfide) that could cause or contribute to violations of any applicable NAAQS or CAAQS (including visibility). In the LTAB, the TRPA visibility standard is applied.

- The project would result in construction or operational emissions of TACs that cause a lifetime cancer risk greater than one in one million (10 in one million if best available control technology for TACs is applied), or ground-level concentrations of non-carcinogenic toxic air contaminants with a Hazard Index greater than 1.

The El Dorado CEQA Guide also outlines the following qualitative criteria that would result in a project being found significant:

- The project triggers any of the air quality significance criteria in Appendix G of the *CEQA Guidelines*.
- The project results in excessive odors, as defined under the California Health & Safety Code definition of an air quality nuisance.
- The project results in land use conflicts with sensitive receptors, such as schools, elderly housing, hospitals or clinics, etc.
- The project, as proposed, is not in compliance with all applicable El Dorado County AQMD rules and regulations.
- The project does not comply with U.S. EPA general and transportation conformity regulations.

In addition, according to El Dorado County AQMD, a project would result in a considerable contribution to a cumulative impact to air quality if one or more of the following conditions is met:

- The project would require a change in the land use designation (general plan amendment or rezone) that increases ROG and NO_x emissions as compared to the prior approved use;
- The project would individually exceed the project-level significance thresholds for ROG or NO_x;
- For potentially significant air quality impacts, the lead agency for the project does not require the project to implement the emission reduction measures contained in and/or derived from the El Dorado County AQMD Air Quality Attainment Plan.
- The project is located in a jurisdiction that does not implement the emission reduction measures contained in and/or derived from the El Dorado County AQMD Air Quality Attainment Plan.
- For PM_{10}, SO_2, and/or NO_2:
  - The project is primarily an industrial project or the majority of the emissions of these pollutants is attributable to stationary sources of air pollution subject to regulation by El Dorado County AQMD and one or more of the following conditions are met:
    - Project-level emissions of these pollutants are significant.
    - The project would not comply with all applicable rules and regulations of El Dorado County AQMD.
    - A modeling analysis indicates that the project's impacts would exceed Class III Prevention of Significant Deterioration (PSD) increments (Class II in Lake Tahoe).
  - The project is primarily a development project or the majority of the emissions of these pollutants is attributable to motor vehicle sources and one or more of the following conditions are met:
    - Project-level emissions of these pollutants are significant.
    - The project would not comply with all applicable rules and regulations of El Dorado County AQMD.
    - Project emissions are not cumulatively significant for ROG, NO_X, and CO.

- The combined TAC concentrations from multiple projects creates a composite lifetime cancer risk greater than one in one million (10 in one million if best available control technology for TACs is applied), or ground-level concentrations of non-carcinogenic toxic air contaminants with a Hazard Index greater than 1. However, in the event that the project-level cancer risk is less than one in one million and the non-cancer Hazard Index is less than 0.5, a project is considered to be a *de minimis* contributor to the cumulative risk, and the project's contribution to the cumulative impact would not be cumulatively considerable.

2.2 Air Quality Methodology

2.2.1 Short-Term Emissions Methodology

Emissions from construction activities represent temporary impacts that are typically short in duration depending on the size, phasing and type of project. Air quality impacts can nevertheless be acute during construction periods, resulting in localized impacts to air quality. Construction-related emissions are speculative at the RTP/SCS level because such emissions are dependent on the characteristics and timing of individual development projects. However, because construction of the 2025 RTP/SCS would generate temporary criteria pollutant emissions, primarily due to the operation of construction equipment and truck trips, a qualitative analysis is provided.

2.2.2 Long-Term Emissions Methodology

For this analysis, the baseline year is updated to 2022 from the 2018 baseline year used in the 2020 RTP/SCS IEC/IS to accommodate new VMT estimates that characterize updated existing conditions and use TRPA's recently updated Travel Demand Model. In addition, the planning horizon for the 2025 RTP/SCS has been updated to 2050, which is five years longer than the previous projection year of 2045 under the 2020 RTP/SCS. RTP/SCSs are updated every four years and must have a minimum of a 20-year planning horizon.

Air pollutant emissions from on-road mobile sources were calculated using emission factors from CARB's EMFAC2021 model and regional vehicle miles traveled (VMT) from TRPA's Travel Demand Model, shown in Table 3. EMFAC2021 is the most recently adopted model version, and is approved by the U.S. EPA for use in calculating air pollutant emissions[2]. Consistent with the methodology used in the 2017 RTP/SCS IEC/IS and 2020 RTP/SCS IEC/IS, TRPA assumes that the vehicle fleet information contained in the EMFAC model for the Lake Tahoe subareas of Placer and El Dorado counties would be representative of vehicles throughout the LTAB because the factors that determine vehicle choice (e.g., lifestyle, mobility, environmental, and local economic factors) do not differ dramatically throughout the region. Therefore, for the purposes of modeling mobile source criteria pollutant emissions, VMT that crosses the California-Nevada state line are distributed proportionally.

[2] For certain regulatory frameworks, including CARB's SB 375, EMFAC2014 is the preferred model version. GHG emissions calculated pursuant to SB 375 requirements utilize EMFAC 2014, not EMFAC2021.

Table 3 2025 RTP/SCS Vehicle Miles Traveled Data

	Annual Daily Average VMT[1]		
	California	Nevada	Total
2022	861,047	543,951	1,404,998
2035	829,451	510,457	1,339,908
2050	857,452	519,342	1,376,795

VMT = vehicle miles traveled

Source: TRPA 2025b

EMFAC emission factors are established by CARB and accommodate mobility assumptions (e.g., vehicle fleets, speed, delay times, average trip lengths, time of day and total travel time) provided by TRPA's Travel Demand Model and socioeconomic growth projections based on data from the UCLA Anderson Forecast, California Department of Finance, California Board of Equalization, California Energy Commission, U.S. Department of Energy Information Administration, and U.S. Bureau of Economic Analysis. Since the time of the 2020 RTP/SCS IEC/IS, CARB released EMFAC2021, replacing EMFAC2017, the model that was used in the 2020 RTP/SCS IS/IEC to estimate mobile source emissions in California. EMFAC2021 reflects CARB's current understanding of statewide and regional vehicle activities, emissions, and recently adopted regulations such as Advanced Clean Trucks (ACT) and Heavy Duty Omnibus regulations. The updated model accounts for updated fleet characterization, vehicle activity profile, and socio-econometric forecasting data; and new vehicle testing data for emission rates. Table 4 provides a comparison of weighted average running exhaust emissions factors for the LTAB region using EMFAC2017, which was utilized to model emissions in the 2020 RTP/SCS IS/IEC and EMFAC2021, which is used in this analysis. As shown therein, weighted average running exhaust emission factors in EMFAC2021 are generally lower than those of EMFAC2017 with the exception of those for $PM_{2.5}$ and SO_X, which are moderately higher. Projected vehicle emissions on the TRPA transportation network for the year 2050 under the 2025 RTP/SCS were compared with emissions estimated for baseline year 2022.

Table 4 Weighted Average Emissions Factors for Vehicle Travel in the LTAB in 2050

On-Road Mobile Source Emissions Model	Emissions Rate (grams/mile)					
	ROG	NO_X	CO	SO_X	PM_{10}	$PM_{2.5}$
EMFAC2017	0.017	0.122	0.502	0.0024	0.0015	0.0014
EMFAC2021	0.006	0.069	0.488	0.0025	0.0014	0.0014
Percent Change	(94%)	(55%)	(3%)	4%	(2%)	2%

ROG = reactive organic gases; NO_X = nitrogen oxides; CO = carbon monoxide; SO_X = sulfur oxides; PM_{10} = particulate matter measuring 10 microns or less in diameter; $PM_{2.5}$ = particulate matter measuring 2.5 microns or less

Note: Weighted average emissions rates are based on RUNEX emissions for each pollutant.

See Appendix A for calculations.

Health Impacts

As discussed in Section 1.1, *Air Quality Background*, short-term and long-term exposure to criteria pollutants and TACs may result in adverse health effects including aggravated asthma, increases in respiratory symptoms like coughing and difficult or painful breathing, chronic bronchitis, decreased lung function, increased cancer risk, heart attack and premature death. The ambient air quality standards are health-based standards. Therefore, in this impact analysis, when the proposed Plan would result in a cumulative considerable net increase of criteria pollutants for which the project region is nonattainment under applicable air quality standards, it would also contribute to these adverse health effects.

2.3 Greenhouse Gas Significance Thresholds

The significance of GHG emissions may be evaluated based on locally adopted quantitative thresholds, or consistency with a regional or state GHG reduction plan (such as a Climate Action Plan). The following CEQA Appendix G criteria were identified for determining whether a project's impacts would have a significant impact associated with GHG emissions:

1. Generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment?
2. Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

The following criteria were identified in the TRPA Initial Environmental Checklist for determining whether a project's impacts would have a significant impact associated with GHG emissions:

Alteration of climate, air movement, moisture, or temperature? (TRPA 2d)

2.3.1 Placer County APCD Revised Thresholds of Significance

On October 13, 2016, Placer County APCD adopted revised CEQA thresholds of significance for evaluating whether the GHG emissions of different types of projects would be a cumulatively considerable contribution to climate change (Placer County APCD 2016). These revised thresholds are supported by Placer County APCD's *California Environmental Quality Act Thresholds of Significance Justification Report* released in September 2016 (Placer County APCD 2016). Placer County APCD's proposed GHG thresholds reflect the CEQA projects reviewed by Placer County APCD over the last 13 years (2003 to 2015) and the CEQA significance thresholds adopted by other air districts in the Sacramento Area (Placer County APCD 2016a). Placer County APCD recommends the following hierarchy of GHG thresholds for determining whether a project's GHG emissions would be cumulatively considerable. No thresholds of significance for evaluating GHG emissions have been adopted by the El Dorado County AQMD or the State of Nevada; therefore, for the 2025 RTP/SCS, the net change in GHG emissions from existing conditions in the Plan Area was evaluated in light of the following Placer County APCD thresholds, consistent with the analysis in the 2020 RTP/SCS IS/IEC:

1. To start, the operational emissions of a land use project should be compared to *de minimis* level of 1,100 MT of CO_2e per year. If the *de minimis* level if not exceeded, the project's GHG emissions would be less than cumulatively considerable. No further analysis is necessary.
2. If project emissions exceed the *de minimis* level but emissions are less than the bright-line threshold of 10,000 MT of CO_2e per year, the operational emissions of a land use project should be compared to the thresholds contained in the efficiency matrix, which provides four efficiency thresholds for use depending on whether the project is rural or urban and residential or non-residential (e.g., 4.5 MT of CO_2e per year per capita and 26.5 MT of CO_2e per year per 1,000 square feet for residential and non-residential land uses in urban areas, respectively) (Placer County APCD 2016a). If the applicable efficiency threshold is not exceeded, the project's GHG emissions would be less than cumulatively considerable.
3. If a land use project's construction emissions or a stationary source project's construction and operational emissions exceed the bright-line threshold of 10,000 MT of CO_2e per year, the

project's GHG emissions would be cumulatively considerable regardless of the project's GHG efficiency.

2.4 Greenhouse Gas Methodology

For this analysis, the baseline year is updated to 2022 from the 2018 baseline year used in the 2020 RTP/SCS IS/IEC. The 2022 baseline includes new VMT estimates that characterize more current conditions and use TRPA's recently updated Travel Demand Model. In addition, the planning horizon for the 2025 RTP/SCS has been updated to 2050, which is five years longer than the previous projection year of 2045 under the 2020 RTP/SCS.

2.4.1 Mobile Source Emissions Modeling

GHG emissions from on-road mobile sources were calculated using emission factors from CARB's EMFAC2021 model and VMT from TRPA's Travel Demand Model, shown in Table 5. Consistent with the methodology used in the 2017 RTP/SCS IS/IEC and 2020 IS/IEC, TRPA assumes that the vehicle fleet information contained in the EMFAC2021 model for the Lake Tahoe subareas of Placer and El Dorado counties would be representative of vehicles throughout the LTAB because the factors that determine vehicle choice (e.g., lifestyle, mobility, environmental, and local economic factors) do not differ dramatically throughout the region. Therefore, for the purposes of modeling GHG emissions, VMT from trips that cross state lines, trips that start in Nevada and end in California were distributed proportionally.

Table 5 2025 RTP/SCS Annual Vehicle Miles Traveled Data

Year	California	Nevada
2005	333,255,698	228,932,039
2022	314,282,155	198,542,261
2035	302,749,652	186,316,696
2050	312,969,944	189,560,122

Source: TRPA 2025b

EMFAC2021 emission factors are established by CARB and incorporate mobility assumptions (e.g., vehicle fleets, speed, delay times, average trip lengths, time of day and total travel time) provided by TRPA's Travel Demand Model and socioeconomic growth projections based on data from the UCLA Anderson Forecast, California Department of Finance, California Board of Equalization, California Energy Commission, U.S. Department of Energy Energy Information Administration, and U.S. Bureau of Economic Analysis. Projected vehicle emissions on the TRPA transportation network for the year 2050 under the 2025 RTP/SCS were compared with emissions estimated for baseline year 2022.

Table 6 provides a comparison of weighted average running exhaust emissions factors for CO2 for the TRPA region using EMFAC2017 (utilized to model emissions in the 2045 RTP/SCS IS/IEC) and EMFAC2021 (utilized in this analysis). As shown in Table 6, the weighted average running exhaust emission factor in EMFAC2021 for CO_2 is 4 percent higher than that of EMFAC2017.

Table 6 Weighted Average Emissions Factors for Vehicle Travel in the TRPA Jurisdiction in 2050

On-Road Mobile Source Emissions Model	CO_2 Emissions Rate (grams/mile)
EMFAC2017	248.35
EMFAC2021	256.84
Percent Change	4%

CO_2 = carbon dioxide

Note: Weighted average emissions rates are based on RUNEX emissions for each pollutant.

See Appendix A for calculations.

2.4.2 SB 375 Analysis

To determine whether the 2025 RTP/SCS would allow TRPA to meet its SB 375 reduction targets, per capita CO_2 emissions were calculated by multiplying the emission factors by the VMT from passenger vehicles and dividing by the region's population. As discussed in Section 1.2.2, *Regulatory Setting*, TRPA was assigned targets of an eight percent reduction in per capita GHGs from passenger vehicle sources by 2020 and a five percent reduction by 2035.

For this analysis, emission factors were generated using the SB 375 template in EMFAC, which deactivates Advanced Clean Cars (Pavley) and Low Carbon Fuel Standards. For the purposes of this analysis, the year 2005 is used as the baseline year per the requirements of SB 375. In accordance with CARB guidance, the same methodology and version of EMFAC as used for SB 375 analysis in the 2020 RTP/SCS (i.e., EMFAC2014) was utilized for SB 375 modeling for the 2025 RTP/SCS to provide a consistent comparison of per capita CO_2 emissions with the SB 375 targets. In addition to estimating per capita passenger vehicle emissions for years 2035 and 2050, emissions were recalculated for baseline year 2005 to account for updates made to the TRPA Travel Demand Model in 2020, which included calibrating and validating the model against traffic counts that represent a typical early/late summer weekday. The purpose of the updates were to create consistency between observed traffic counts, the original model design, the model inputs, and the subsequent model outputs. The result of these adjustments is a model that better represents on-the-ground travel conditions. In comparison, the former travel demand model originally used to calculate the SB 375 baseline for the year 2005 was validated with data that more closely represented a busy summer weekend. Per CARB guidance, the 2025 scenario outputs from the 2020 RTP/SCS were utilized for the 2025 RTP/SCS.

2.5 Air Quality Project Impacts and Mitigation Measures

This section describes generalized air quality impacts associated with the 2025 RTP/SCS. Due to the programmatic nature of the 2025 RTP/SCS, a precise, project-level analysis of the specific impacts associated with individual transportation and land use projects is not possible. In general, however, implementation of proposed transportation improvements and land use scenario envisioned by the 2025 RTP/SCS could result in air quality impacts as described in the following sections.

2.5.1 CEQA

Threshold 1:	Conflict with or obstruct implementation of the applicable air quality plan?

Impact AQ-1 As of June 1, 2018, transportation Conformity requirements no longer apply for the CO NAAQS for Federal-Aid projects in the Lake Tahoe Region. Therefore, no air quality plans are applicable to the 2025 RTP/SCS. No impact would occur. As such, impacts would be less than those identified in the 2017 RTP/SCS IS/IEC and similar to those identified in the 2020 RTP/SCS IS/IEC.

For the California portion of the LTAB, the applicable federal air quality maintenance plan for Lake Tahoe is the Carbon Monoxide Maintenance Plan (CO Maintenance Plan) originally adopted in 1996 and revised in 2004 (CARB 2004). The CO Maintenance Plan tiers off the Regional Transportation Plan – Air Quality Plan, adopted by TRPA in 1992. However, as of June 1, 2018, transportation conformity requirements no longer apply for the CO NAAQS for Federal -Aid projects as defined in 40 CFR 93.101 in California because the standard 20-year maintenance planning period per 40 CFR 93.102(b)(4) has ended and the maintenance plan does not specify a longer maintenance period (U.S. EPA 2018). Therefore, no air quality plans are applicable to the 2025 RTP/SCS, and no impact would occur. As such, impacts would be less than those identified under the 2017 RTP/SCS IS/IEC and similar to those identified under the 2020 RTP/SCS IS/IEC. No new significant impacts or substantially more severe impacts would occur.

Mitigation Measures

None required.

Threshold 2:	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?

Impact AQ-2 Construction activities associated with the transportation projects and land use scenario of the 2025 RTP/SCS would generate fugitive dust and ozone precursor emissions. However, the 2025 RTP/SCS would not result in a cumulatively considerable net increase of any criteria pollutant for which the project region is nonattainment under federal and state ambient air quality standards. Impacts would be less than significant, similar to those identified in the 2017 RTP/SCS IS/IEC and 2020 RTP/SCS IS/IEC. Mitigation Measure 3.4-2 from the 2012 RPU EIR/EIS would continue to apply to the 2025 RTP/SCS.

The LTAB is currently in attainment of all NAAQS and CAAQS with the exception of the PM_{10} CAAQS. The types of short-term construction-generated emission activity would generally be the same under the 2025 RTP/SCS as the 2020 RTP/SCS because the differences between the 2020 RTP and the 2025 RTP consist of adding 35 new projects[3], modifying several projects that remain on the list, and removing projects that have been completed since 2020. The 35 new projects are similar in type to those included in the 2020 RTP/SCS and include construction of bikeways, trails, sidewalks; installation of complete streets improvements and variable speed signs; improvements to parking management and wayfinding; and expanded microtransit and vanpool programs. The 2025 RTP would also include the remaining projects included in the 2020 RTP/SCS, some of which are currently being implemented.

[3] Net new count does not include unconstrained projects in the 2025 RTP/SCS.

One of the two largest infrastructure construction projects in the 2012 RPU, State Route 89/Fanny Bridge Community Revitalization Project, has been approved and construction has been initiated since adoption of the IS/IEC in 2017. As discussed in the 2017 RTP/SCS IS/IEC, although the 2012 RPU EIR/EIS concluded that project-related construction impacts on air quality would be significant and unavoidable (see Impact 3.4-2 of the 2012 RPU EIR/EIS), a project-level analysis of the SR 89/Fanny Bridge concluded that construction-related ROG, NO_X, PM_{10}, $PM_{2.5}$, and CO emissions would be less than significant (see Impact 4.2-2 of the SR 89/Fanny Bridge EIR/EIS/EA [TRPA 2015]). Projects listed in the 2025 RTP/SCS would be constructed at an equivalent or smaller scale than the SR 89/Fanny Bridge Community Revitalization Project, based on current project descriptions and a comparison of anticipated construction costs and project type (see 2025 RTP/SCS). Because construction of the SR 89/Fanny Bridge project was determined to have less-than-significant impacts on air quality, project-level construction under the 2025 RTP/SCS would have a similar impact level. This would include construction for all projects identified in the 2017 and 2020 RTP that continue to remain on the constrained list of projects under the 2025 RTP/SCS and new projects added to the 2025 RTP/SCS. Therefore, the maximum daily criteria pollutants and precursor emissions generated by construction activities would not exceed air quality standards at the project-level with the implementation of TRPA's Best Construction Practices Policy (Mitigation Measure 3.4-2 from the 2012 RPU EIR/EIS) and compliance with all applicable Placer County APCD or El Dorado County AQMD rules; and construction emissions would not result in a cumulatively considerable net increase in criteria pollutants for which the LTAB is in nonattainment. Because transportation projects included in the 2025 RTP/SCS would be similar in nature, scale and location as under the 2017 and 2020 RTP/SCS, and would incorporate site specific design and mitigation, no new significant impacts or substantially more severe impacts would occur beyond what was previously analyzed in the 2017 RTP/SCS IS/IEC and 2020 RTP/SCS IS/IEC.

Mitigation Measures

Mitigation Measure 3.4-2, listed below, from the 2012 RPU EIR/EIS would continue to apply to the 2025 RTP/SCS. The provisions of this mitigation measure have been adopted as part of TRPA's Best Construction Practices Policy, and all construction projects facilitated by the 2025 RTP/SCS would be required to comply with its provisions.

3.4.2 Reduce Temporary Construction Emissions of ROG, NO_X, PM_{10}, and $PM_{2.5}$

Within 12 months of adoption of an updated Regional Plan, TRPA will develop and effectuate the implementation of Best Construction Practices for Construction Emissions that require, as a condition of project approval, implementation of feasible measures and Best Management Practices to reduce construction-generated emissions to the extent feasible. Until that time, TRPA will continue existing practice to require measures developed on a project-specific basis. Such measures shall include those listed below to the extent they are not already addressed in local requirements.

In addition to the mitigation measures identified below, construction of the projects located in California will be required to comply with all applicable Placer County APCD or El Dorado County AQMD rules, as appropriate, including Rule 202 (Placer County APCD and El Dorado County AQMD) regarding visible emissions, Rule 228 (Placer County APCD) and 223 (El Dorado County AQMD) regarding fugitive dust, Rule 218 (Placer County APCD) and 215 (El Dorado County AQMD) regarding the application of architectural coatings, and Rule 217(Placer County APCD) and 224 (El Dorado County AQMD) regarding cutback and emulsified asphalt paving materials. For projects located in Washoe County, projects will comply with Washoe County Health District Rules Governing Air Quality, including 040.005 Visible Emissions, 040.030 Dust Control, 040.090 Cutback

Asphalts, and 040.200 Diesel Engine Idling. Where local rules and regulations pertaining to construction emissions exist, projects developed pursuant to the Regional Plan shall comply with local requirements. For projects located in California, specifically, TRPA will require the following:

- Project proponents shall submit to the Placer County APCD or El Dorado County AQMD, as applicable, and receive approval of, a Construction Emission/Dust Control Plan prior to any groundbreaking or tree removal activities.
- As a condition of approval of California transportation projects, TRPA will require individual project environmental review to confirm and demonstrate that project-generated emissions associated with construction will be within the regulatory limits of Placer County APCD or El Dorado County AQMD, as applicable, following implementation of mitigation measures.

For all projects implementing the RTP/SCS, TRPA will require the following:

- No open burning of removed vegetation shall occur during infrastructure improvements.
- Minimize idling time to 5 minutes for all diesel-power equipment.
- Apply water to control dust as needed to prevent dust impacts off site. Operational water truck(s) shall be on site, as required, to control fugitive dust. Construction vehicles leaving the site shall be cleaned to prevent dust, silt, mud, and dirt from being released or tracked off site.
- Apply approved chemical soil stabilizers, vegetative mats, or other appropriate Best Management Practices to manufacturer's specifications, to all inactive construction areas (previously graded areas which remain inactive for 96 hours). Spread soil binders on unpaved roads and employee/equipment parking areas and wet broom or wash streets if silt is carried over to adjacent public thoroughfares.
- Use existing power sources (e.g., power poles) or clean-fuel generators rather than temporary diesel power generators, wherever feasible.

Threshold 2:	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?

Impact AQ-3 OPERATIONAL EMISSIONS ASSOCIATED WITH VMT AND THE LAND USE SCENARIO UNDER THE 2025 RTP/SCS WOULD GENERALLY DECREASE OVER THE PLANNING PERIOD DUE TO MORE STRINGENT VEHICLE EMISSION STANDARDS. EMISSIONS WOULD NOT EXCEED PLACER COUNTY APCD OR EL DORADO COUNTY AQMD THRESHOLDS. THEREFORE, THIS IMPACT WOULD BE LESS THAN SIGNIFICANT, SIMILAR TO THAT IDENTIFIED IN THE 2017 RTP/SCS IS/IEC AND 2020 RTP/SCS IS/IEC.

The LTAB is currently in attainment of all NAAQS and CAAQS with the exception of the PM_{10} CAAQS. In the 2020 RTP/SCS IS/IEC, operational emissions of criteria air pollutants and precursors were evaluated for the entire region using the EMFAC2017 model. The revised region-wide mobile-source emissions modeling was conducted using EMFAC2021 for baseline year 2022 and buildout year 2050 along with updated VMT data provided by TRPA for 2022 baseline year and 2050 build-out year for the 2025 RTP/SCS. VMT in the Lake Tahoe region would decrease by approximately 28,203 VMT per day by 2050 compared to 2022 conditions under the 2025 RTP/SCS.

Updated emissions modeling results for the 2025 RTP/SCS are summarized in Table 7 for ozone precursors, ROG and NO_X, CO, SO_2, and particulate matter (PM_{10} and $PM_{2.5}$). As shown therein, criteria pollutant emissions modeling for the 2025 RTP/SCS indicates an overall reduction in criteria air pollutants as compared to the 2022 baseline. The estimated reductions in on-road mobile source emissions are primarily due to a reduction in regional daily VMT, in addition to stricter vehicle emissions standards that will phase in over the planning period as reflected in EMFAC2021 emission factors. Thus, the 2025 RTP/SCS would result in a substantial long-term reduction in criteria air pollutant emissions. The emissions modeling results are similar to those in the 2017 RTP/SCS EIR/EIS and 2020 RTP/SCS IEC/IS, which estimated overall reductions in criteria air pollutants (Section 3.4.2 in the 2017 RTP/SCS IEC/IS and Section 3.4.2 in the 2020 RTP/SCS IEC/IS).

Table 7 2025 RTP/SCS Net Change in Daily Basinwide Operational Emissions (2022-2050)

	Daily Emissions (lbs/day)					
Year	ROG	NO_X	CO	SO_X	PM_{10}	$PM_{2.5}$
2022 Baseline	972.1	1,597.6	7,942.3	13.2	103.3	44.2
2050	273.6	356.1	2,372.8	8.0	76.3	26.8
Total Net Change (2022-2050)	(698.4)	(1,241.5)	(5,569.6)	(5.2)	(27.0)	(17.4)
Placer County APCD Thresholds	55	55	n/a	n/a	82	n/a
El Dorado County AQMD Thresholds	82	82	n/a	n/a	n/a	n/a
APCD/AQMD Thresholds Exceeded?	No	No	n/a	n/a	No	n/a

( ) denotes a negative number. Totals may not add up exactly due to rounding.

lbs/day = pounds per day; ROG = reactive organic gases; NO_X = nitrogen oxides; CO = carbon monoxide; SO_X = sulfur oxides; PM_{10} = particulate matter measuring no more than 10 microns in diameter; $PM_{2.5}$ = particulate matter measuring no more than 2.5 microns in diameter; APCD = Air Pollution Control District; AQMD = Air Quality Management District; n/a = not applicable (The air districts have not adopted thresholds for these pollutants.)

[1] Emission modeling completed using EMFAC 2021.

See Appendix B for EMFAC results.

TRPA's significance criteria for ozone and PM_{10} are based on achieving concentration-based standards for these pollutants. In order to evaluate how a project or plan would affect regional attainment of concentration-based ambient air quality standards, local air districts frequently rely on mass emission-based significance criteria. However, TRPA has not adopted mass emission-based standards for projects or plans. For example, as discussed in Section 1.1.2, *Regulatory Setting*, Placer County APCD considers a project that would generate emissions less than 55 pounds per day of ROG or NO_X, or 82 pounds per day of PM_{10} to not result a cumulatively considerable net increase of ozone and PM_{10}. In addition, El Dorado County AQMD also considers a project that would generate emissions less than 82 pounds per day of ROG or NO_X to not result a cumulatively considerable net increase of ozone and PM_{10}. These mass emission thresholds of significance are tied to Placer County APCD and El Dorado County AQMD air quality attainment planning efforts for the NAAQS and CAAQS, which are as stringent as TRPA threshold standards for ozone and PM_{10}. Thus, it is appropriate to use Placer County APCD and El Dorado County AQMD significance criteria to evaluate whether emissions from the 2025 RTP/SCS would exceed TRPA threshold standards. As shown in Table 7, criteria pollutant emissions would not exceed Placer County APCD and El Dorado County AQMD thresholds, which have been established for ROG, NO_X, and PM_{10} emissions. Therefore, operational emissions associated with the 2025 RTP/SCS would not result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under applicable federal or state air quality standards, and impacts would be less than significant, similar to those identified in the 2017 RTP/SCS IEC/IS and 2020 RTP/SCS

IEC/IS. Because projects included in the 2025 RTP/SCS would be similar in nature, scale and location as under the 2017 and 2020 RTP/SCS, and would adhere to local air district standards, no new significant impacts or substantially more severe impacts would occur beyond what was previously analyzed in the 2017 RTP/SCS IEC/IS and 2020 RTP/SCS IEC/IS.

Mitigation Measures

None required.

Threshold 3: Expose sensitive receptors to substantial pollutant concentrations?

Impact AQ-4 IMPLEMENTATION OF THE 2025 RTP/SCS WOULD NOT EXPOSE SENSITIVE RECEPTORS TO SUBSTANTIAL CONCENTRATIONS OF CO OR TACS. IMPACTS WOULD BE LESS THAN SIGNIFICANT, SIMILAR TO THOSE IDENTIFIED IN THE 2017 RTP/SCS IS/IEC AND 2020 RTP/SCS IS/IEC. MITIGATION MEASURE 3.4-5 FROM THE 2012 RPU EIR/EIS WOULD CONTINUE TO APPLY TO THE 2020 RTP/SCS.

Exposure of sensitive receptors to elevated localized concentrations of CO or TAC emissions could result in adverse health impacts. Impacts related to each of these pollutants are discussed in the following subsections.

CO Impacts

With respect to localized CO impacts, the Transportation Project-Level Carbon Monoxide Protocol (Garza et al. 1997) states that signalized intersections that operate at an unacceptable level of service (LOS) represent a potential for a CO violation, also known as a “hot spot.” Thus, an analysis of CO concentrations is typically recommended for receptors located near signalized intersections that are projected to operate at LOS E or F.

Consistent with the approach of the 2017 RTP/SCS IS/IEC and the 2020 RTP/SCS IS/IEC, screening criteria are used to evaluate the potential for localized CO impacts in the event that signalized intersections are projected to operate at LOS E or F. In lieu of available data for signalized intersections, the following discussion utilizes LOS data for roadway segments.

Because TRPA, Placer County APCD, and El Dorado County AQMD have not adopted specific thresholds for evaluating the potential for local CO hotspots, this analysis utilizes the Bay Area Air Quality Management District (BAAQMD) screening criteria. Adjusting for the more stringent 8-hour CO standards for the Lake Tahoe area (6 ppm vs. 9.0 ppm [i.e., a 33 percent decrease]), it is appropriate to use the adjusted-BAAQMD screening method for screening of CO impacts for intersections in the LTAB. The applicable screening criteria are as follows (BAAQMD 2022):

- The project would not result in an affected intersection experiencing more than 29,333 vehicles per hour (vph) (reduced by 33 percent from 44,000 vph for the Bay Area);
- The project would not result in an affected intersection experiencing more than 16,000 vph where vertical and/or horizontal mixing is substantially limited (e.g., tunnel, parking garage, bridge underpass, natural or urban street canyon, below-grade roadway) (reduced by 33 percent from 24,000 vph for the Bay Area)

Under the 2025 RTP/SCS and according to the traffic analysis prepared by DKS Associates (2025), 18 of the 24 analyzed roadway segments would operate at LOS D or better by 2050. In addition, although a number of roadway segments would operate at LOS E or F by 2050, the highest ADT for analyzed roadway segments would be 32,200 daily trips. Assuming a peak hour comprises 10 percent of daily trips, the highest vph in the plan area would be approximately 3,220. Therefore, none of studied roadway segments would experience peak hour volumes greater than 29,333 vph. Therefore, the 2025 RTP/SCS would not expose sensitive receptors to substantial CO emissions, and impacts would be less than significant, similar to those identified in the 2017 RTP/SCS IEC/IS and the 2020 RTP/SCS IS/IEC. As a result, because projects included in the 2025 RTP/SCS would be similar in nature, scale and location as under the 2017 and 2020 RTP/SCS, and would meet screening criteria standards for CO, no new significant impacts or substantially more severe impacts would occur beyond what was previously analyzed in the 2017 RTP/SCS IEC/IS and the 2020 RTP/SCS IS/IEC.

TAC Impacts

The 2025 RTP/SCS would implement VMT-reducing projects and programs that are designed to reduce associated air pollutant emissions by promoting more efficient travel patterns, facilitating the use of active transportation, and enhancing transit service. The construction and operation of projects would comply with federal and state regulations, the TRPA Code of Ordinances, and other applicable rules, including the TRPA's Best Construction Practices Policy (Mitigation Measure 3.4-2 from the 2012 RPU EIR/EIS). Projects included in the 2025 RTP/SCS would be similar in nature, scale and location as under the 2017 and 2020 RTP/SCS and would result in TAC impacts similar to those under the 2017 RTP/SCS and the 2020 RTP/SCS. In addition, implementation of Mitigation Measure 3.4-5 from the 2012 RPU EIR/EIS would continue to be required for the 2025 RTP/SCS. Therefore, similar to the conclusions of the 2017 RTP/SCS IS/IEC and 2020 RTP/SCS IS/IEC, short-term construction-related and long-term operational exposures of sensitive receptors in the LTAB to TAC emissions associated with buildout of the 2025 RTP/SCS would be less than significant. Because projects included in the 2025 RTP/SCS would be similar in nature, scale and location as under the 2017 and 2020 RTP/SCS, and would incorporate site specific design and mitigation, no new significant impacts or substantially more severe impacts would occur beyond what was previously analyzed in the 2017 RTP/SCS IS/IEC and 2020 RTP/SCS IS/IEC.

Mitigation Measures

Mitigation Measure 3.4-5 from the 2012 RPU EIR/EIS would continue to apply to the 2025 RTP/SCS. The provisions of this mitigation measure have been adopted as part of TRPA's Best Construction Practices Policy, and all construction projects facilitated by the 2025 RTP/SCS would be required to comply with its provisions.

3.4-5 Minimize Exposure of Sensitive Receptors to TAC Emissions during Construction

To reduce exposure of sensitive receptors to construction-related TAC emissions, TRPA will implement Mitigation Measure 3.4-2 for all alternatives, "Reduce Temporary Construction Emissions of ROG, NO_X, PM_{10}, and $PM_{2.5}$." This measure includes emissions control strategies for construction equipment that would also reduce diesel PM emissions, including limiting idling time to five minutes maximum and submitting an inventory of construction equipment to Placer County APCD or El Dorado County AQMD to demonstrate that emissions from the construction fleet would be better than statewide averages.

In addition, for all alternatives, TRPA will require contractors to implement the following measures for all projects constructed pursuant to the RTP/SCS:

- Equip heavy-duty construction equipment (greater than 50 brake-horsepower) with diesel particulate traps.

- Locate construction staging areas as far away as possible on the project site from off-site receptors.

As a condition of approval, individual project environmental review shall demonstrate that current district-recommended BMPs are implemented to ensure sensitive receptors are not exposed to substantial TAC concentrations.

Mitigation Measure 3.4-2 includes the opportunity to implement measures developed as part of the Best Construction Practices Policy for Construction Emissions. For projects that are permitted prior to the completion of the Best Construction Practices, TRPA will require the specific strategies listed in Mitigation Measure 3.4-2 for project approval to the extent they are not already addressed in applicable local requirements.[4]

Threshold 4:	Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?

Impact AQ-5 Implementation of the 2025 RTP/SCS would not generate objectionable odors affecting a substantial number of people or site sensitive receptors in proximity to an odor source. Therefore, impacts would be less than significant, similar to those identified in the 2017 RTP/SCS IS/IEC and 2020 RTP/SCS IS/IEC.

Projects included in the 2025 RTP/SCS would be similar in nature, scale, and location as under the 2017 and 2020 RTP/SCS and would not include any major sources of odors because the project types are not those types of facilities known to produce odors such as landfills or wastewater treatment facilities. In addition, no substantial, existing odor sources are located in the LTAB. Odors associated with diesel exhaust from the use of on-site construction equipment would be intermittent and temporary and would dissipate rapidly from the source with an increase in distance. Finally, implementation of the 2025 RTP/SCS does not include the siting of new sensitive receptors. Therefore, impacts would be less than significant, similar to those identified in the 2017 RTP/SCS IEC/IS and 2020 RTP/SCS IEC/IS. No new significant impacts or substantially more severe impacts would occur beyond what was previously analyzed in the 2017 RTP/SCS IS/IEC and 2020 RTP/SCS IS/IEC.

Mitigation Measures

None required.

TRPA

Checklist Question 2a:	Result in substantial air pollutant emissions?
Checklist Question 2b:	Result in the deterioration of ambient (existing) air quality?

Impact AQ-6 Implementation of the 2025 RTP/SCS would generate air pollutant emissions; however, as discussed in CEQA Impacts AQ-1 through AQ-3, these air pollutant emissions

[4] This language is included in the original text of Mitigation Measure 3.4-5 of the 2012 RPU EIR/EIS. However, at this time, TRPA has adopted its Best Construction Practices Policy, which incorporates the requirements of this mitigation measure.

WOULD NOT BE SUBSTANTIAL OR RESULT IN THE DETERIORATION OF AMBIENT AIR QUALITY. THEREFORE, IMPACTS WOULD BE LESS THAN SIGNIFICANT, SIMILAR TO THOSE IDENTIFIED IN THE 2020 RTP/SCS IS/IEC.

The 2025 RTP/SCS would implement VMT-reducing projects and programs that are designed to reduce associated air pollutant emissions by promoting more efficient travel patterns, expanding active transportation infrastructure and adopting policies and goals to expand use, improving safety and enhancing transit service. The construction and operation of projects would comply with federal and state regulations, the TRPA Code of Ordinances, and other applicable rules including the TRPA's Best Construction Practices Policy (Mitigation Measure 3.4-2 from the 2012 RPU EIR/EIS). As discussed under Impacts AQ-2 and AQ-3, construction and operational emissions associated with the 2020 RTP/SCS would not exceed Placer County APCD or El Dorado County AQMD thresholds. Because projects included in the 2025 RTP/SCS would be similar in nature, scale and location as under the 2017 and 2020 RTP/SCS, and would incorporate site specific design and mitigation, no new significant impacts or substantially more severe impacts would occur beyond what was previously analyzed in the 2017 RTP/SCS IS/IEC and 2020 RTP/SCS IS/IEC.

Mitigation Measures

None required.

Checklist Question 2c: Result in the creation of objectionable odors?

Impact AQ-7 AS DISCUSSED IN CEQA IMPACT AQ-5, IMPLEMENTATION OF THE 2025 RTP/SCS WOULD NOT GENERATE OBJECTIONABLE ODORS AFFECTING A SUBSTANTIAL NUMBER OF PEOPLE OR SITE SENSITIVE RECEPTORS IN PROXIMITY TO AN ODOR SOURCE. THEREFORE, IMPACTS WOULD BE LESS THAN SIGNIFICANT, SIMILAR TO THOSE IDENTIFIED IN THE 2020 RTP/SCS IS/IEC.

As discussed under CEQA Impact AQ-5, projects included in the 2025 RTP/SCS would not include any major sources of odors and would not include the siting of new sensitive receptors near existing odor sources. Therefore, impacts would be less than significant, similar to those identified in the 2020 RTP/SCS IEC/IS. No new significant impacts or substantially more severe impacts would occur beyond what was previously analyzed in the 2020 RTP/SCS IS/IEC.

Mitigation Measures

None required.

Checklist Question 2d: Result in the alteration of air movement, moisture or temperature, or any change in climate, either locally or regionally?

Impact AQ-8 IMPLEMENTATION OF THE 2025 RTP/SCS WOULD NOT RESULT IN THE ALTERATION OF AIR MOVEMENT, MOISTURE OR TEMPERATURE, OR ANY CHANGE IN CLIMATE, EITHER LOCALLY OR REGIONALLY. THEREFORE, IMPACTS WOULD BE LESS THAN SIGNIFICANT, SIMILAR TO THOSE IDENTIFIED IN THE 2020 RTP/SCS IS/IEC.

The 2020 RTP/SCS IS/IEC determined that the 2020 RTP/SCS program of projects were not of sufficient size to alter the climate of the local project area or the Lake Tahoe Region. The 2025 RTP/SCS proposes projects of similar scope and size to those included in the 2020 RTP/SCS. Thus, implementation of projects included in the 2025 RTP/SCS would not result in the alteration of air movement, moisture, or temperature. Impacts would be less than significant, similar to those identified in the 2020 RTP/SCS IEC/IS. Potential changes to the climate as a result of greenhouse gas emissions are evaluated in Section

2.6, *Greenhouse Gas Project Impacts and Mitigation Measures.* Because projects included in the 2025 RTP/SCS would be similar in nature, scale and location as under the 2017 and 2020 RTP/SCS, and would incorporate site specific design and mitigation, no new significant impacts or substantially more severe impacts would occur beyond what was previously analyzed in the 2017 RTP/SCS IS/IEC and 2020 RTP/SCS IS/IEC.

Mitigation Measures

None required.

Checklist Question 2e: Result in the increased use of diesel fuel?

Impact AQ-9 IMPLEMENTATION OF THE 2025 RTP/SCS WOULD RESULT IN ACTIVITIES THAT WOULD INCREASE THE USE OF DIESEL FUEL. HOWEVER, AS DISCUSSED UNDER CEQA IMPACTS AQ-2 THROUGH AQ-4, INCREASED DIESEL FUEL CONSUMPTION WOULD NOT RESULT IN SIGNIFICANT AIR QUALITY IMPACTS. THEREFORE, IMPACTS WOULD BE LESS THAN SIGNIFICANT, SIMILAR TO THOSE IDENTIFIED IN THE 2020 RTP/SCS IS/IEC.

The 2020 RTP/SCS IS/IEC concluded that the anticipated increase in diesel fuel consumption would not be sufficient to result in significant air quality impacts. The 2025 RTP/SCS proposes projects of similar scope and size to those included in the 2020 RTP/SCS. As discussed under CEQA Impacts AQ-2 through AQ-4, these activities would not result in significant air quality impacts, similar to the conclusions of the 2020 RTP/SCS IEC/IS. Because projects included in the 2025 RTP/SCS would be similar in nature, scale and location as under the 2020 RTP/SCS, and would incorporate site specific design and mitigation, no new significant impacts or substantially more severe impacts would occur beyond what was previously analyzed in the 2020 RTP/SCS IS/IEC.

Mitigation Measures

None required.

Cumulative Analysis

As discussed in Section 2.1, the cumulative impact analysis area includes the LTAB as well as seven adjoining counties: Placer, El Dorado, Nevada, and Alpine Counties in California and Douglas, Carson City, and Washoe Counties in Nevada. The LTAB falls within the jurisdiction of El Dorado County AQMD and Placer County APCD, while the adjoining counties fall within the jurisdiction of the El Dorado County AQMD, Placer County APCD, Northern Sierra Air Quality Management District, Great Basin Unified Air Pollution Control District, Washoe County Air Quality Management Division, or Nevada Division of Environmental Protection. Each of these six air management agencies has prepared an air quality plan to improve conditions and meet federal and state air quality standards. While each air management agency is primarily responsible for regulating its own emissions, the transport of emissions in one area can affect another area's ability to achieve attainment of pollutant standards. The non-LTAB portions of Placer and El Dorado Counties as well as the western part of Nevada County are designated nonattainment for the federal ozone standard, and the non-LTAB portions of Placer and El Dorado Counties as well as Nevada County are designated nonattainment for the state ozone and PM_{10} standards. These counties are designated attainment for all other NAAQS and CAAQS. Alpine County is in attainment of all NAAQS and CAAQS with the exception of the state PM_{10} standard. Washoe, Carson City, and Douglas Counites are in attainment of all NAAQS (CARB 2025; U.S. EPA 2025).

Based on Placer County APCD thresholds, the 2025 RTP/SCS would result in a cumulatively considerable contribution to a cumulative air quality impact if it would result in a net increase in long-term operation-related (regional) emissions of ROG or NO_X that exceed 55 pounds per day or a net increase in long-term operation-related (regional) emissions of PM_{10} that exceeds 82 pounds per day. As shown in Table 7 under CEQA Impact AQ-3, operational emissions of ROG, NO_X, and PM_{10} associated with the 2025 RTP/SCS would decrease from the 2022 baseline year to the 2050 horizon year.

Based on El Dorado County AQMD guidance, a project would result in a considerable contribution to a cumulative impact to air quality if one or more of the following conditions is met:

- The project would require a change in the land use designation (general plan amendment or rezone) that increases ROG and NO_x emissions as compared to the prior approved use.
- The project would individually exceed the project-level significance thresholds for ROG or NO_x.
- For potentially significant air quality impacts, the lead agency for the project does not require the project to implement the emission reduction measures contained in and/or derived from the El Dorado County AQMD Air Quality Attainment Plan.
- The project is located in a jurisdiction that does not implement the emission reduction measures contained in and/or derived from the El Dorado County AQMD Air Quality Attainment Plan.
- For PM_{10}, SO_2, and/or NO_2, the project is primarily a development project or the majority of the emissions of these pollutants is attributable to motor vehicle sources and one or more of the following conditions are met:
  - Project-level emissions of these pollutants are significant.
  - The project would not comply with all applicable rules and regulations of El Dorado County AQMD.
  - Project emissions are not cumulatively significant for ROG, NO_X, and CO.

Transportation projects and the land use scenario in the 2020 RTP/SCS will not result in changes to land use designations; however, as shown in Table 7 under CEQA Impact AQ-3, operational emissions of criteria air pollutants associated with the 2025 RTP/SCS would decrease from the 2022 baseline year to the 2050 horizon year and therefore would not exceed El Dorado County AQMD thresholds for these pollutants. All projects facilitated by the 2025 RTP/SCS would be required to comply with all applicable rules and regulations of El Dorado County AQMD. Furthermore, the 2025 RTP/SCS incorporates strategies that are similar to the emission reduction measures contained in the El Dorado County AQMD Air Quality Attainment Plan, including the provision, expansion, and improvement of pedestrian facilities, bicycle facilities, transit; parking management; transportation demand management; and the development of a land use scenario that concentrates the forecasted growth in population and employment in already urbanized areas. Therefore, the 2025 RTP/SCS would not result in a cumulatively considerable contribution to cumulative air quality impacts related to criteria air pollutants.

El Dorado County AQMD states that a cumulative impact related to TAC emissions would occur if the combined TAC concentrations from multiple projects creates a composite lifetime cancer risk greater than one in one million (10 in one million if best available control technology for TACs is applied), or ground-level concentrations of non-carcinogenic toxic air contaminants with a Hazard Index greater than 1. As discussed under CEQA Impact AQ-4, the quantity of TAC emissions from project construction under the 2025 RTP/SCS would be reduced to less-than-significant levels because implementation of Mitigation Measure 3.4-5 from the 2012 RPU EIR/EIS) would be required for all project construction under the 2025 RTP/SCS. Furthermore, individual projects facilitated by the 2025 RTP/SCS would be required to comply with Placer County APCD and El Dorado County AQMD rules governing TAC emissions. Therefore, the 2025 RTP/SCS would not result in a cumulatively considerable contribution to the potential cumulative impact related to TAC emissions.

The 2017 RTP/SCS IEC/IS and 2020 RTP/SCS IEC/IS found that the RTP/SCS would not result in cumulatively considerable contributions to cumulative air quality impacts because implementation of Mitigation Measure 3-4.2 would minimize construction-related emissions, mobile source operational emissions would decrease over the planning period, cumulative traffic volumes would not exceed the CO screening criteria, and the RTP/SCS would not result in substantial sources of TAC or odor emissions. Projects included in the 2025 RTP/SCS would be similar in nature, scale and location as under the 2017 and 2020 RTP/SCS. Given the above analysis, cumulative impacts on air quality associated with the 2025 RTP/SCS would be similar to and are within the scope of the analysis in the 2017 RTP/SCS IEC/IS and 2020 RTP/SCS IEC/IS. No new significant impacts or substantially more severe impacts would occur beyond what was previously analyzed in the 2017 RTP/SCS IS/IEC and 2020 RTP/SCS IS/IEC.

2.6 Greenhouse Gas Project Impacts and Mitigation Measures

2.6.1 CEQA

Threshold 1: Generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment?

IMPLEMENTATION OF THE TRANSPORTATION IMPROVEMENT PROJECTS AND LAND USE SCENARIO ENVISIONED BY THE 2025 RTP/SCS WOULD GENERATE TEMPORARY SHORT-TERM GHG EMISSIONS THAT MAY HAVE A SIGNIFICANT EFFECT. HOWEVER, IMPLEMENTATION OF MITIGATION MEASURE 3.5-1 FROM THE 2012 RPU EIR/EIS, WHICH IS INCORPORATED IN TRPA'S BEST CONSTRUCTION PRACTICES POLICY, WOULD REDUCE IMPACTS TO A LESS THAN SIGNIFICANT LEVEL, SIMILAR TO THE CONCLUSIONS OF THE 2012 RPU EIR/EIS, 2017 RTP/SCS IS/IEC, AND 2020 RTP/SCS IS/IEC.

The types of short-term construction-generated emission activity would generally be the same under the 2025 RTP/SCS as the 2020 RTP/SCS. The differences between the 2020 RTP and the 2025 RTP consist of adding 35 new projects[5], modifying several projects that remain on the list, and removing projects that have been completed since 2020. The new projects are similar in type to those included in the 2020 RTP/SCS and include construction of bikeways, trails, sidewalks; installation of complete streets improvements and variable speed signs; improvements to parking management and wayfinding; and incorporation of microtransit and expanded vanpool programs. The 2025 RTP would also include the majority of the remaining yet-to-be-completed projects as under the 2020 RTP/SCS, some of which are currently being implemented.

The 2025 RTP/SCS would result in construction related GHG emissions associated with several transportation infrastructure projects. One of the two largest infrastructure construction projects in the 2012 RPU, State Route 89/Fanny Bridge Community Revitalization Project, has been approved and construction has been initiated, with two of three traffic circles completed. As discussed in the 2017 RTP/SCS IS/IEC, the project-level analysis of the SR 89/Fanny Bridge concluded that construction-related GHG emissions would be less than significant (see Impact 4.6-1 of the SR 89/Fanny Bridge EIR/EIS/EA [TRPA 2015]). Projects listed in the 2025 RTP/SCS would be constructed at an equivalent or smaller scale than the SR 89/Fanny Bridge Community Revitalization Project, based on current project

[5] Net new count does not include unconstrained projects in the 2025 RTP/SCS.

descriptions and a comparison of anticipated construction costs and project type (see 2025 RTP/SCS). As discussed in the 2020 RTP/SCS IS/IEC, although detailed construction information for transportation projects in the RTP is not known at this time, use of heavy-duty equipment, construction worker commute trips, material deliveries, and vendor trips would be involved. These activities would result in GHG emissions that would be finite in duration, but when all the construction projects are considered together over the implementation period of the RTP, construction-related emissions of GHGs could be substantial without environmentally protective policies and/or mitigation measures. However, implementation of Mitigation Measure 3.5-1 from the 2012 EIR/EIS has occurred via the adoption of TRPA's Best Construction Practices Policy, which provides environmental protections. As noted in Section 1.2.2, *Greenhouse Gas Regulatory Setting*, projects would have to demonstrate compliance with TRPA's Best Construction Practices Policy as a condition of approval. The policy would require reductions in construction generated GHGs.

Overall, substantial and adverse impacts from construction-related GHG emissions would remain less than significant with implementation of mitigation measures from the 2012 RPU EIR/EIS and would be similar to what would occur under the 2017 RTP/SCS IS/IEC and 2020 RTP/SCS IS/IEC. No new significant impacts or substantially more severe impacts would occur.

Mitigation Measures

Mitigation Measure 3.5-1 from the 2012 RPU EIR/EIS (listed below) would continue to apply to the 2025 RTP/SCS. The provisions of this mitigation measure have been adopted as part of TRPA's Best Construction Practices Policy, and all construction projects facilitated by the 2025 RTP/SCS would be required to comply with its provisions.

3.5-1 Minimize Construction-Related GHG Emissions

For all the alternatives, GHG emissions from construction will be reduced to the maximum extent feasible. During construction of transportation infrastructure projects, TRPA will require the following mitigation measures to reduce GHG emissions. Other measures that are as effective may be substituted depending on the emissions control technology available at the time of project construction.

- Limit equipment idling time to a maximum of five (5) minutes.
- Recycle or reuse construction waste and demolition material to the maximum extent feasible.
- Use electrified or alternative-fueled construction equipment to the maximum extent feasible. Use local and sustainable building materials to the extent possible.

IMPLEMENTATION OF THE 2025 RTP/SCS WOULD NOT RESULT IN A SUBSTANTIAL INCREASE IN TOTAL GHG EMISSIONS FROM MOBILE SOURCES COMPARED TO 2022 BASELINE CONDITIONS. IMPACTS WOULD BE LESS THAN SIGNIFICANT, SIMILAR TO THOSE IDENTIFIED IN THE 2017 RTP/SCS IS/IEC AND 2020 RTP/SCS IS/IEC.

The 2012 RPU EIR/EIS found that the 2012 RPU (Alternative 3 analyzed in the 2012 RPU EIR/EIS) would result in a substantial long-term increase in GHG emissions and therefore concluded that impacts would be significant and unavoidable. The 2017 RTP/SCS IS/IEC updated the mobile source emissions modeling of the 2012 RPU EIR/EIS with updated VMT estimates and EMFAC2014 emission factors and found that mobile source GHG emissions would be substantially reduced in the long-term, thereby concluding that impacts of the 2017 RTP/SCS would be less than significant.

In the 2020 RTP/SCS IS/IEC, region-wide mobile-source emissions modeling was conducted using EMFAC2017 (including off-model adjustments to account for the SAFE Vehicles Rule). This analysis was conducted using the EMFAC2021 model along with updated VMT data provided by TRPA for 2022 baseline year and 2050 build-out year for the 2025 RTP/SCS. VMT in the Lake Tahoe region would decrease by approximately 28,203 VMT per day by 2050 compared to 2022 conditions under the 2025 RTP/SCS.

Updated GHG emissions modeling results are summarized in Table 8. No thresholds of significance for evaluating GHG emissions have been adopted by the El Dorado County AQMD or the State of Nevada; therefore, the net change in GHG emissions from existing conditions in the Plan Area is compared to the Placer County APCD de minimis level of 1,100 MT of CO2e per year, consistent with the air quality analysis in the 2017 RTP/SCS IS/IEC and 2020 RTP/SCS IS/IEC.

Table 8 2025 RTP/SCS Net Change in Daily Basinwide Operational Emissions (2022-2050)

Year	Emissions (MT of CO_2e/year)
2022 (Baseline)	220,227
2050	133,892
Total Net Change (2022-2050)	**(88,814)**
Placer County APCD *De Minimis* Level	1,100
Threshold Exceeded?	No

( ) denotes a negative number.

MT = metric tons; CO_2e = carbon dioxide equivalents; APCD = Air Pollution Control District

Emission modeling was completed using EMFAC 2021.

See Appendix B for EMFAC results.

As shown in Table 8, GHG emissions modeling for the 2025 RTP/SCS indicates a reduction of approximately 88,814 MT of CO_2e as compared to the 2022 baseline. The estimated reduction in mobile source emissions is primarily due to the reduction in regionwide VMT, fleet mix shifts to cleaner hybrid/electric vehicles and zero emissions vehicles, in addition to stricter fuel efficiency and vehicle emissions standards such as the Advanced Clean Trucks ACT and Heavy Duty Omnibus regulations standards that will phase in over the planning period as reflected in EMFAC2021 emission factors. Because emissions would decrease as compared to 2022 baseline conditions, emissions associated with the 2025 RTP/SCS would not exceed Placer County APCD's recommended *de minimis* level of 1,100 MT of CO_2e per year. Therefore, operational GHG emissions associated with the 2025 RTP/SCS would be less than significant and would not be cumulatively considerable, similar to those identified in the 2017 RTP/SCS IS/IEC and 2020 RTP/SCS IS/IEC. No new significant impacts or substantially more severe impacts would occur beyond what was previously analyzed in the 2017 RTP/SCS IS/IEC and 2020 RTP/SCS IS/IEC.

Mitigation Measures

None required.

Threshold 2: Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

IMPLEMENTATION OF THE 2020 RTP/SCS WOULD BE CONSISTENT WITH SB 375, THE 2017 SCOPING PLAN, AND SB 32. IMPACTS WOULD BE LESS THAN SIGNIFICANT, SIMILAR TO THE CONCLUSIONS OF THE 2012 RPU EIR/EIS AND 2017 RTP/SCS IS/IEC.

Construction-Generated Greenhouse Gas Emissions

As discussed under Impact GHG-1, the types and amount of GHG-generating construction activity under the 2025 RTP/SCS would be mitigated to less-than-significant conditions under the implementation of TRPA's Best Construction Practices Policy and Mitigation Measure 3.5-1 from the 2012 EIR/EIS. The effectiveness of TRPA's Best Construction Practices Policy is demonstrated in the environmental analysis of the SR 89/Fanny Bridge Community Revitalization Project, one of the largest projects under the 2012 RPU, which concluded that construction-related GHG emissions would be less than significant (see Impact 4.6-1 of the 2012 RPU EIR/EIS; TRPA 2015). Thus, construction-related emissions of projects under the 2025 RTP/SCS, which are similar in scope to projects in the 2012 RPU, 2017 RTP/SCS, and 2020 RTP/SCS, would not result in a substantial contribution to global climate change and would not conflict with the 2022 Scoping Plan. Thus, the 2025 RTP/SCS would not result in emissions that conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases.

Operational Greenhouse Gas Emissions

The RTP/SCS's consistency with SB 375 targets and State goals for the California portion of the Lake Tahoe region were evaluated in Section 3.5 of the 2012 RPU EIR/EIS, Section 3.4.3 of the 2017 RTP/SCS IS/IEC, and Section 4.8 of the 2020 RTP/SCS IS/IEC. The 2020 IS/IEC found that the RTP/SCS would meet SB 375 requirements and California GHG reduction goals.

As discussed in Section 1.2.2, *Greenhouse Gas Regulatory Setting*, CARB assigned updated targets to TRPA of an 8 percent reduction in GHG emissions from per capita passenger vehicles by 2020 and a 5 percent reduction in GHG emissions from per capita passenger vehicles by 2035, relative to a 2005 baseline (CARB 2020). The 2017 RTP/SCS IS/IEC determined that the region would reduce per capita GHG emissions from passenger vehicles by 8.8 percent by 2020 and 5.0 percent by 2035. The 2020 RTP/SCS IS/IEC determined that the region would reduce per capita GHG emissions from passenger vehicles by 12.4 percent by 2035.

VMT for the California portion of the Lake Tahoe region under the 2025 RTP/SCS were obtained from the TRPA travel demand model (TRPA 2025b). As discussed in Section 2.4, *Greenhouse Gas Methodology*, per capita GHG emissions associated with passenger vehicles for baseline year 2005 were calculated for the purposes of this analysis using the TRPA Travel Demand Model, which was also used to calculate VMT forecasts for years 2035 and 2050.

Mobile-source emissions associated with VMT from automobiles, light-duty trucks were estimated using the SB 375 Scenario Analysis tool in EMFAC2014 to provide a consistent comparison with the SB 375 targets per CARB's guidance. Results of mobile-source GHG emissions modeling from automobiles and light-duty trucks are summarized below in Table 9. As shown therein, the 2025 RTP/SCS would result in an approximately 10.9 percent reduction in per capita CO_2 emissions from passenger vehicles by 2035, which would achieve the mandated five percent reduction under SB 375. The 2025 RTP/SCS is therefore consistent with SB 375.

Table 9 Per Capita Carbon Dioxide Emission Comparison: Passenger Vehicles

	2005 Baseline (per SB 375)	2035
Annual Average Daily Passenger Vehicle Miles Traveled per Capita[1]	19.8	17.6
Passenger Vehicle GHG Emissions (tons/day)	408.6	358.2
Population[1]	41,338	40,664
Per Capita Passenger Vehicle GHG Emissions (pounds/person/day)	19.8	17.6
Percent Change from in Per Capita GHG Emissions from 2005		-10.9%
SB 375 Target[2]		-5%
SB 375 Target Met?		Yes

[1] Source: TRPA 2025b

[2] SB 375 targets have not been adopted for post-2035 years.

See Appendix B for SB 375 calculations.

The 2025 RTP/SCS would implement a suite of transportation improvement projects and facilitate a land use scenario that is consistent with the transportation sustainability goals of the 2022 Scoping Plan. The land use scenario envisioned by the 2025 RTP/SCS concentrates the forecasted growth in population and employment in already urbanized areas in an effort to reduce VMT. Much of the residential multi and single family forecasted units are assumed to be developed in vacant buildable lots throughout the region in compatible zones similar to the 2020 RTP/SCS. These objectives would be consistent with the 2022 Scoping Plan that states under Chapter 5, *Challenge Accepted,* "*[state funding] strategies aid in developing new technologies, in ramping up access for all, and in shifting to cleaner, modes of transport; for instance, by supporting investments in walkable, bikeable communities and transit, as well as in vehicles."* Appendix D of the Scoping Plan discusses local actions that can occur to support State GHG reduction goals. Included in this discussion is a key priority area of vehicle miles traveled (VMT) reduction that calls for increasing *"public access to clean mobility options by planning for and investing in electric shuttles, bike share, car share, and walking"* and *"amend(ing) zoning or development codes to enable mixed-use, walkable, transit-oriented, and compact infill development,"* which the 2025 RTP/SCS would support. Appendix E of the 2022 Scoping Plan, which discusses sustainable and equitable communities, states that part of the vision of the 2022 Scoping Plan to help meet the State carbon neutrality goal no later than 2050 and advance equity is to provide *"complete networks of safe and accessible bicycle and pedestrian infrastructure to make those modes of transportation the preferred travel mode for short distances."*

Projects included in the 2025 RTP/SCS would implement complete street design policies that prioritize transit, biking, and walking along State Routes 28 and 89, Meyers Corridor, and U.S. Highway 50, as well as at select locations in Tahoe City and the Nevada portion of the region. In addition to the Corridors projects, Active Transportation projects would increase the number, safety, and connectivity, and attractiveness of biking and walking facilities by adding sidewalks, trails, bike lanes, crosswalks, intersection improvements, pedestrian bridges, and signage throughout the Lake Tahoe region. Furthermore, the 2025 RTP/SCS includes transit projects designed to maintain and enhance transit service offered by the two public transit agencies, the Tahoe Transportation District, and the Tahoe Area Regional Transit, micro-transit operated by the South Shore Transportation Management Association, and private operators. In conjunction with the Corridors and Active Transportation projects, the transit projects would provide the availability of low carbon mobility options in the majority of the region.

The 2017 RTP/SCS IS/IEC found that the 2017 RTP/SCS would result in a net decrease in GHG emissions of approximately 100,452 MT of CO_2e per year, and the 2020 RTP/SCS IS/IEC found that the 2020 RTP/SCS would result in a net decrease in GHG emissions of approximately 77,995 MT of CO_2e per year. The 2025 RTP/SCS would result in a net decrease in GHG emissions of approximately 88,814 MT of CO_2e per year as shown in Table 8 under Impact GHG-2. Emissions would be substantially lower than those analyzed in the 2020 RTP/SCS IS/IEC and would result in a net decrease in GHG emissions compared to baseline conditions. Therefore, the 2025 RTP/SCS would be consistent with the goals of the 2022 Scoping Plan as it would decrease GHG emissions compared to existing conditions. Impacts would be less than significant, consistent with those identified in the 2017 RTP/SCS IS/IEC and 2020 RTP/SCS IS/IEC. No new significant impacts or substantially more severe impacts would occur beyond what was previously analyzed in the 2017 RTP/SCS IS/IEC and 2020 RTP/SCS IS/IEC.

Mitigation Measures

None required.

2.6.2 TRPA

Threshold 2d: Result in a significant alteration in climate, air movement, moisture, or temperature?

IMPLEMENTATION OF PROPOSED TRANSPORTATION IMPROVEMENTS AND LAND USE SCENARIO ENVISIONED IN THE 2025 RTP/SCS WOULD NOT RESULT IN AN ALTERATION OF CLIMATE AIR MOVEMENT, MOISTURE, OR TEMPERATURE. IMPACTS WOULD NOT BE SIGNIFICANT, SIMILAR TO THOSE IDENTIFIED IN THE 2020 RTP/SCS IS/IEC.[6]

Similar to the conclusions of the 2020 RTP/SCS IS/IEC, the 2025 RTP program of projects are not of sufficient size to alter the climate of the local project area or the Lake Tahoe Region. Please see the discussion under CEQA Impacts GHG-1 and GHG-2 for an analysis of GHG emissions. Because projects included in the 2025 RTP/SCS would be similar in nature, scale and location as under the 2017 and 2020 RTP/SCS, no new significant impacts or substantially more severe impacts would occur beyond what was previously analyzed in the 2017 RTP/SCS IS/IEC and 2020 RTP/SCS IS/IEC.

Mitigation Measures

None required.

Cumulative Analysis

The geographic scope for related projects considered in the cumulative impact analysis for GHG emissions is global because impacts of climate change are felt on a global scale regardless of the location of GHG emission sources. Therefore, greenhouse gases and climate change are, by definition, cumulative impacts. As discussed in Section 1.2, Greenhouse Gas Background, the adverse environmental impacts of cumulative GHG emissions, including sea level rise, increased average temperatures, more drought years, and more large forest fires, are already occurring. As a result, cumulative impacts related to GHG emissions are significant. Thus, the issue of climate change involves an analysis of whether the contribution of the 2025 RTP/SCS towards the impact is cumulatively considerable. Refer to Impact GHG-1 through Impact GHG-4 for a detailed discussion of the impacts of the 2025 RTP/SCS related to climate change and GHG emissions. As discussed therein, with

[6] The TRPA *Initial Environmental Checklist* was adopted after certification of the 2012 RPU EIR/EIS; therefore, impacts were not evaluated in relation to TRPA thresholds in the 2012 RPU EIR/EIS.

implementation of Mitigation Measure 3.5-1 from the 2012 RPU EIR/EIS, impacts of the 2025 RTP/SCS related to climate change and GHG emissions would be less than significant. Therefore, with mitigation, the contribution of the 2025 RTP/SCS to the cumulative impact of GHG emissions would not be cumulatively considerable.

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Appendix A

Comparison of EMFAC2017 and EMFAC2021 Weighted Average Emissions Factors

TRPA 2025 RTP/SCS Emission Factor Comparison

(EMFAC 2017 and EMFAC 2021)

Weighted Emissions Rates (2021)			
ROG	0.006	PM_{10}	0.0014
CO	0.488	$PM_{2.5}$	0.0014
NO_X	0.069	SO_X	0.0025

Weighted Emissions Rates (20		
ROG	0.016521	PM10
CO	0.501795	PM2.5
NOX	0.122287	SOX

% Change			
ROG	94.172	PM_{10}	1.694
CO	2.786	$PM_{2.5}$	-1.688
NO_X	55.536	SO_X	-3.823

CO_2	
EMFAC 2017	248.347
EMFAC 2021	256.841
% Change	3.363

17)
0.001455
0.001371
0.002434

Weighted Emissions Rates			
ROG	0.017	PM_{10}	0.0015
CO	0.502	$PM_{2.5}$	0.0014
NO_X	0.122	SO_X	0.0024

Source: EMFAC2017 (v1.0.3) Emissions Inventory

Region Type: Air Basin

Region: Lake Tahoe

Calendar Year: 2050

Season: Annual

Vehicle Classification: EMFAC2011 Categories

Units: miles/day for VMT, trips/day for Trips, tons/day for Emissions, 1000 gallons/day for Fuel Consumption

Region	Calendar Y	Vehicle Category	Model Yea	Speed	Fuel	Population	VMT	Trips	**NOx_RUNI**	**Emission Rate (g/mile)**	**Weight**	**Weighted Emissions Rate**	NOx_IDLE)	NOx_STREX	NOx_TOTE	**PM2.5_RU**	**Emission Rate (g/mile)**	**Weight**
LAKE TAHO	2050	All Other Buses	Aggregate	Aggregate	Diesel	0.996318	9.407154	8.369067	2.95E-05	3.13615E-06	6.94311E-06	2.17746E-11	3.14E-06	1.99227E-05	5.26E-05	9.05E-08	9.61525E-09	6.94311E-06
LAKE TAHO	2050	LDA	Aggregate	Aggregate	Gasoline	19197.7	721530.8	88438.52	0.017537	2.43051E-08	0.532537974	1.29434E-08	0	0.01409749	0.031634	0.000435	6.02646E-10	0.532537974
LAKE TAHO	2050	LDA	Aggregate	Aggregate	Diesel	240.1312	9016.854	1105.52	0.000108	1.19536E-08	0.006655041	7.95514E-11	0	0	0.000108	8.43E-06	9.34924E-10	0.006655041
LAKE TAHO	2050	LDA	Aggregate	Aggregate	Electricity	1268.713	50199.71	5877.045	0	0	0.037050741	0	0	0	0	0	0	0.037050741
LAKE TAHO	2050	LDT1	Aggregate	Aggregate	Gasoline	1885.5	69413.68	8517.306	0.001746	2.51584E-08	0.051231933	1.28891E-09	0	0.001444835	0.003191	4.28E-05	6.16394E-10	0.051231933
LAKE TAHO	2050	LDT1	Aggregate	Aggregate	Diesel	0.25525	9.65305	1.166841	3.87E-07	4.01012E-08	7.1246E-06	2.85705E-13	0	0	3.87E-07	5.11E-08	5.29402E-09	7.1246E-06
LAKE TAHO	2050	LDT1	Aggregate	Aggregate	Electricity	73.64711	2882.125	338.9327	0	0	0.002127201	0	0	0	0	0	0	0.002127201
LAKE TAHO	2050	LDT2	Aggregate	Aggregate	Gasoline	6409.09	232563.5	28784.25	0.005471	2.35262E-08	0.171647414	4.03821E-09	0	0.004675838	0.010147	0.000143	6.16131E-10	0.171647414
LAKE TAHO	2050	LDT2	Aggregate	Aggregate	Diesel	65.53146	2416.522	296.5986	9.77E-05	4.04307E-08	0.001783555	7.21104E-11	0	0	9.77E-05	1.29E-05	5.31761E-09	0.001783555
LAKE TAHO	2050	LDT2	Aggregate	Aggregate	Electricity	283.2792	7687.413	1305.473	0	0	0.005673824	0	0	0	0	0	0	0.005673824
LAKE TAHO	2050	LHD1	Aggregate	Aggregate	Gasoline	404.8528	15073.61	6031.704	0.002604	1.7273E-07	0.011125331	1.92167E-09	1.09E-05	0.002570723	0.005185	3.33E-05	2.20641E-09	0.011125331
LAKE TAHO	2050	LHD1	Aggregate	Aggregate	Diesel	312.83	12223.01	3935.008	0.00141	1.15388E-07	0.009021398	1.04096E-09	0.000312	0	0.001723	9.7E-05	7.93757E-09	0.009021398
LAKE TAHO	2050	LHD2	Aggregate	Aggregate	Gasoline	46.35336	1821.407	690.5961	0.000351	1.92492E-07	0.00134432	2.58771E-10	1.19E-06	0.00026588	0.000618	4.07E-06	2.23467E-09	0.00134432
LAKE TAHO	2050	LHD2	Aggregate	Aggregate	Diesel	141.4329	5050.026	1779.048	0.001104	2.18635E-07	0.003727257	8.14909E-10	0.000171	0	0.001275	9.68E-05	1.91674E-08	0.003727257
LAKE TAHO	2050	MCY	Aggregate	Aggregate	Gasoline	892.0586	6363.164	1784.117	0.008818	1.38578E-06	0.004696441	6.50824E-09	0	0.000600281	0.009418	1.69E-05	2.65512E-09	0.004696441
LAKE TAHO	2050	MDV	Aggregate	Aggregate	Gasoline	3904.352	140484.8	17521.14	0.003361	2.39214E-08	0.103687144	2.48034E-09	0	0.002995918	0.006357	8.56E-05	6.09432E-10	0.103687144
LAKE TAHO	2050	MDV	Aggregate	Aggregate	Diesel	142.6892	5148.147	641.7545	6.76E-05	1.31218E-08	0.003799677	4.98584E-11	0	0	6.76E-05	5.46E-06	1.06051E-09	0.003799677
LAKE TAHO	2050	MDV	Aggregate	Aggregate	Electricity	201.1888	5480.438	928.5895	0	0	0.004044929	0	0	0	0	0	0	0.004044929
LAKE TAHO	2050	MH	Aggregate	Aggregate	Gasoline	48.98526	567.1218	4.900486	0.000147	2.59882E-07	0.000418574	1.0878E-10	0	1.64523E-06	0.000149	8.15E-07	1.43687E-09	0.000418574
LAKE TAHO	2050	MH	Aggregate	Aggregate	Diesel	26.7546	262.6581	2.67546	0.000752	2.8626E-06	0.000193859	5.54942E-10	0	0	0.000752	6.59E-06	2.50887E-08	0.000193859
LAKE TAHO	2050	Motor Coach	Aggregate	Aggregate	Diesel	13.1468	1629.733	191.9432	0.003212	1.97091E-06	0.001202852	2.37071E-09	0.000684	0.000472739	0.004369	3.93E-05	2.4142E-08	0.001202852
LAKE TAHO	2050	OBUS	Aggregate	Aggregate	Gasoline	9.182796	499.8884	183.7294	0.000291	5.8229E-07	0.000368951	2.14837E-10	6.61E-07	9.03924E-05	0.000382	7E-07	1.40044E-09	0.000368951
LAKE TAHO	2050	PTO	Aggregate	Aggregate	Diesel	0	247.8166	0	0.001271	5.13062E-06	0.000182905	9.38418E-10	0	0	0.001271	1.27E-06	5.13812E-09	0.000182905
LAKE TAHO	2050	SBUS	Aggregate	Aggregate	Gasoline	6.850169	331.9903	27.40068	7.4E-05	2.22968E-07	0.000245031	5.46341E-11	7E-06	1.64571E-05	9.75E-05	5.46E-07	1.64408E-09	0.000245031
LAKE TAHO	2050	SBUS	Aggregate	Aggregate	Diesel	25.31557	800.246	292.1381	0.001255	1.56863E-06	0.000590635	9.26489E-10	0.000432	0.000689961	0.002378	6.49E-06	8.11342E-09	0.000590635
LAKE TAHO	2050	T6 CAIRP heavy	Aggregate	Aggregate	Diesel	0.001452	0.089419	0.021197	1.77E-07	1.97556E-06	6.59971E-08	1.30381E-13	4.57E-09	3.0517E-08	2.12E-07	1.96E-09	2.1962E-08	6.59971E-08
LAKE TAHO	2050	T6 CAIRP small	Aggregate	Aggregate	Diesel	0.000707	0.013656	0.010316	2.66E-08	1.94722E-06	1.00791E-08	1.96261E-14	2.22E-09	1.48647E-08	4.37E-08	2.97E-10	2.1778E-08	1.00791E-08
LAKE TAHO	2050	T6 instate construction	Aggregate	Aggregate	Diesel	23.89477	1619.053	108.0273	0.004453	2.75034E-06	0.001194969	3.28657E-09	7.52E-05	0.000319533	0.004848	1.85E-05	1.14506E-08	0.001194969
LAKE TAHO	2050	T6 instate construction	Aggregate	Aggregate	Diesel	86.44795	4234.592	390.8278	0.009686	2.2874E-06	0.003125412	7.14907E-09	0.000272	0.00115839	0.011117	3.82E-05	9.01412E-09	0.003125412
LAKE TAHO	2050	T6 instate heavy	Aggregate	Aggregate	Diesel	77.69295	7807.979	896.5659	0.01343	1.72007E-06	0.00576281	9.91242E-09	0.000245	0.00211655	0.015791	6.13E-05	7.85408E-09	0.00576281
LAKE TAHO	2050	T6 instate small	Aggregate	Aggregate	Diesel	237.2992	10506.89	2738.4	0.016989	1.61689E-06	0.007754786	1.25387E-08	0.000747	0.006467381	0.024203	7.62E-05	7.24794E-09	0.007754786
LAKE TAHO	2050	T6 OOS heavy	Aggregate	Aggregate	Diesel	0.000761	0.046334	0.011105	9.11E-08	1.96601E-06	3.41974E-08	6.72324E-14	2.39E-09	1.59923E-08	1.09E-07	1.01E-09	2.19001E-08	3.41974E-08
LAKE TAHO	2050	T6 OOS small	Aggregate	Aggregate	Diesel	0.003168	0.067328	0.046247	1.36E-07	2.02009E-06	4.96923E-08	1.00383E-13	9.97E-09	6.64934E-08	2.12E-07	1.5E-09	2.2241E-08	4.96923E-08
LAKE TAHO	2050	T6 Public	Aggregate	Aggregate	Diesel	163.3729	2537.099	495.5645	0.003502	1.38021E-06	0.001872548	2.58452E-09	0.002708	0.001711303	0.007921	1.11E-05	4.39287E-09	0.001872548
LAKE TAHO	2050	T6 utility	Aggregate	Aggregate	Diesel	5.511995	91.82029	63.38794	9.58E-05	1.04314E-06	6.77695E-05	7.06933E-11	4.77E-05	0.000137842	0.000281	3.28E-07	3.57029E-09	6.77695E-05
LAKE TAHO	2050	T6TS	Aggregate	Aggregate	Gasoline	70.9221	3757.117	1419.009	0.000398	1.05878E-07	0.002773004	2.93599E-10	7E-06	0.000952033	0.001357	5.43E-06	1.44423E-09	0.002773004
LAKE TAHO	2050	T7 CAIRP	Aggregate	Aggregate	Diesel	42.10405	8676.911	614.7192	0.019743	2.27538E-06	0.00640414	1.45718E-08	0.005723	0.00151395	0.02698	0.000257	2.95845E-08	0.00640414
LAKE TAHO	2050	T7 CAIRP construction	Aggregate	Aggregate	Diesel	6.731554	1162.98	30.43309	0.005171	4.44637E-06	0.000858357	3.81657E-09	0.00014	0.000153207	0.005464	2.58E-05	2.21868E-08	0.000858357
LAKE TAHO	2050	T7 NNOOS	Aggregate	Aggregate	Diesel	66.24697	10655.06	967.2057	0.022129	2.07687E-06	0.007864144	1.63328E-08	0.011175	0.002382064	0.035686	0.000277	2.60278E-08	0.007864144
LAKE TAHO	2050	T7 NOOS	Aggregate	Aggregate	Diesel	16.56433	3373.624	241.8392	0.007691	2.27964E-06	0.00248996	5.67622E-09	0.002794	0.000595605	0.01108	0.0001	2.96582E-08	0.00248996
LAKE TAHO	2050	T7 Public	Aggregate	Aggregate	Diesel	103.9774	2106.503	315.3981	0.00481	2.28323E-06	0.00155474	3.54983E-09	0.001681	0.001828858	0.008319	1.62E-05	7.69951E-09	0.00155474
LAKE TAHO	2050	T7 Single	Aggregate	Aggregate	Diesel	15.42005	1248.054	177.9453	0.002939	2.35524E-06	0.000921147	2.16952E-09	0.000439	0.000713586	0.004092	1.71E-05	1.36705E-08	0.000921147
LAKE TAHO	2050	T7 single construction	Aggregate	Aggregate	Diesel	37.84463	2885.139	171.0941	0.010391	3.60166E-06	0.002129425	7.66946E-09	0.000786	0.000860813	0.012038	4.73E-05	1.63984E-08	0.002129425
LAKE TAHO	2050	T7 tractor	Aggregate	Aggregate	Diesel	0.477054	58.94245	6.058591	0.000114	1.93466E-06	4.35035E-05	8.41645E-11	1.17E-05	1.25117E-05	0.000138	1.66E-06	2.81769E-08	4.35035E-05
LAKE TAHO	2050	T7 tractor construction	Aggregate	Aggregate	Diesel	32.31339	2379.985	146.0876	0.011046	4.64132E-06	0.001756588	8.15288E-09	0.000671	0.000735331	0.012453	5.6E-05	2.35207E-08	0.001756588
LAKE TAHO	2050	T7 utility	Aggregate	Aggregate	Diesel	2.015232	40.83979	23.17516	7.8E-05	1.90871E-06	3.01425E-05	5.75332E-11	1.67E-05	8.53688E-05	0.00018	3.01E-07	7.37274E-09	3.01425E-05
LAKE TAHO	2050	T7IS	Aggregate	Aggregate	Gasoline	0.282164	34.32941	5.645539	0.000136	3.96393E-06	2.53374E-05	1.00436E-10	0	1.38456E-05	0.00015	4.04E-08	1.17711E-09	2.53374E-05

Weighted Emissions Rate	PM10_RUN	Emission Rate (g/mile)	Weight	Weighted Emissions Rate	CO2_RUN	Rate (g/mile)	Weight	Emission s Rate	CO2_IDLE	CO2_STRE	CO2_TOTE	CH4_RUN	CH4_IDLE	CH4_STRE	CH4_TOTE	N2O_RUN	N2O_IDLE	N2O_STRE	N2O_TOTE	ROG_RUNEX	Rate (g/mile)
6.67597E-14	9.45E-08	1.005E-08	6.94311E-06	6.97783E-14	0.01204	0.00128	6.94E-06	8.89E-09	0.000709	0	0.012749	6.82E-09	2.52E-09	0	9.34E-09	1.89E-06	1.11E-07	0	2E-06	1.4683E-07	1.56E-08
3.20932E-10	0.000473	6.55432E-10	0.532537974	3.49043E-10	153.6748	0.000213	0.532538	0.000113	0	3.851995	157.5268	0.000544	0	0.002299	0.002843	0.002834	0	0.002206	0.005041	0.00150234	2.08E-09
6.22195E-12	8.81E-06	9.77197E-10	0.006655041	6.50328E-12	1.578474	0.000175	0.006655	1.17E-06	0	0	1.578474	3.13E-06	0	0	3.13E-06	0.000248	0	0	0.000248	6.7307E-05	7.46E-09
0	0	0	0.037050741	0	0	0	0.037051	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3.15791E-11	4.65E-05	6.70385E-10	0.051231933	3.43451E-11	16.97064	0.000244	0.051232	1.25E-05	0	0.430381	17.40102	5.35E-05	0	0.000231	0.000284	0.000279	0	0.000221	0.0005	0.00014849	2.14E-09
3.77178E-14	5.34E-08	5.5334E-09	7.1246E-06	3.94232E-14	0.003174	0.000329	7.12E-06	2.34E-09	0	0	0.003174	1.05E-08	0	0	1.05E-08	4.99E-07	0	0	4.99E-07	2.2573E-07	2.34E-08
0	0	0	0.002127201	0	0	0	0.002127	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1.05757E-10	0.000156	6.70099E-10	0.171647414	1.15021E-10	56.83769	0.000244	0.171647	4.2E-05	0	1.506786	58.34448	0.000236	0	0.001026	0.001262	0.00089	0	0.000733	0.001623	0.0006837	2.94E-09
9.48424E-12	1.34E-05	5.55804E-09	0.001783555	9.91308E-12	0.562151	0.000233	0.001784	4.15E-07	0	0	0.562151	2.64E-06	0	0	2.64E-06	8.84E-05	0	0	8.84E-05	5.6775E-05	2.35E-08
0	0	0	0.005673824	0	0	0	0.005674	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2.45471E-11	3.62E-05	2.39968E-09	0.011125331	2.66972E-11	13.49444	0.000895	0.011125	9.96E-06	0.044223	0.106454	13.64512	3.07E-05	3.88E-05	7.1E-05	0.000141	0.000174	1.07E-06	0.000223	0.000398	9.6072E-05	6.37E-09
7.16079E-11	0.000101	8.29647E-09	0.009021398	7.48457E-11	5.845077	0.000478	0.009021	4.31E-06	0.036386	0	5.881463	7.73E-05	1.76E-06	0	7.9E-05	0.000919	5.72E-06	0	0.000924	0.00166343	1.36E-07
3.00412E-12	4.43E-06	2.43041E-09	0.00134432	3.26725E-12	1.854511	0.001018	0.001344	1.37E-06	0.00574	0.013655	1.873906	3.68E-06	4.35E-06	7.48E-06	1.55E-05	2.29E-05	1.22E-07	2.43E-05	4.74E-05	1.1366E-05	6.24E-09
7.14416E-11	0.000101	2.0034E-08	0.003727257	7.46719E-11	2.767195	0.000548	0.003727	2.04E-06	0.027601	0	2.794796	3.27E-05	7.95E-07	0	3.35E-05	0.000435	4.34E-06	0	0.000439	0.00070476	1.4E-07
1.24696E-11	1.81E-05	2.84822E-09	0.004696441	1.33765E-11	1.543415	0.000243	0.004696	1.14E-06	0	0.130853	1.674268	0.002642	0	0.000629	0.00327	0.000494	0	3.29E-05	0.000527	0.01802932	2.83E-06
6.31903E-11	9.31E-05	6.62813E-10	0.103687144	6.87252E-11	41.58882	0.000296	0.103687	3.07E-05	0	1.105248	42.69407	0.000142	0	0.000621	0.000763	0.000541	0	0.000459	0.001001	0.00041129	2.93E-09
4.02958E-12	5.71E-06	1.10846E-09	0.003799677	4.21178E-12	1.542046	0.0003	0.0038	1.14E-06	0	0	1.542046	1.9E-06	0	0	1.9E-06	0.000242	0	0	0.000242	4.0895E-05	7.94E-09
0	0	0	0.004044929	0	0	0	0.004045	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6.01436E-13	8.86E-07	1.56273E-09	0.000418574	6.54117E-13	0.874494	0.001542	0.000419	6.45E-07	0	0.000107	0.874601	1.58E-06	0	1.66E-07	1.75E-06	1.18E-05	0	1.85E-07	1.2E-05	4.3827E-06	7.73E-09
4.86367E-12	6.89E-06	2.62231E-08	0.000193859	5.08359E-12	0.242406	0.000923	0.000194	1.79E-07	0	0	0.242406	1.07E-06	0	0	1.07E-06	3.81E-05	0	0	3.81E-05	2.296E-05	8.74E-08
2.90393E-11	4.11E-05	2.52336E-08	0.001202852	3.03523E-11	2.097087	0.001287	0.001203	1.55E-06	0.120616	0	2.217704	1.51E-06	2.69E-06	0	4.2E-06	0.00033	1.9E-05	0	0.000349	3.2601E-05	2E-08
5.16695E-13	7.61E-07	1.52311E-09	0.000368951	5.61953E-13	0.776319	0.001553	0.000369	5.73E-07	0.003148	0.004198	0.783665	1.13E-06	2.14E-06	5.27E-06	8.54E-06	1.41E-05	7.11E-08	6.52E-06	2.06E-05	3.9475E-06	7.9E-09
9.39789E-13	1.33E-06	5.37044E-09	0.000182905	9.82282E-13	0.399671	0.001613	0.000183	2.95E-07	0	0	0.399671	3.23E-07	0	0	3.23E-07	6.28E-05	0	0	6.28E-05	6.9533E-06	2.81E-08
4.0285E-13	5.94E-07	1.78808E-09	0.000245031	4.38136E-13	0.251319	0.000757	0.000245	1.85E-07	0.01578	0.001354	0.268453	8.16E-07	1.88E-05	2.14E-06	2.17E-05	5.54E-06	7.66E-07	1.52E-06	7.82E-06	3.4948E-06	1.05E-08
4.79207E-12	6.79E-06	8.48027E-09	0.000590635	5.00874E-12	0.703569	0.000879	0.000591	5.19E-07	0.07426	0	0.777829	3.66E-07	3.47E-07	0	7.13E-07	0.000111	1.17E-05	0	0.000122	7.8893E-06	9.86E-09
1.44943E-15	2.05E-09	2.2955E-08	6.59971E-08	1.51496E-15	9.38E-05	0.001049	6.6E-08	6.92E-11	9.91E-07	0	9.48E-05	5.08E-11	3.67E-12	0	5.45E-11	1.47E-08	1.56E-10	0	1.49E-08	1.0947E-09	1.22E-08
2.19502E-16	3.11E-10	2.27627E-08	1.00791E-08	2.29427E-16	1.48E-05	0.001085	1.01E-08	1.09E-11	4.83E-07	0	1.53E-05	7.73E-12	1.78E-12	0	9.51E-12	2.33E-09	7.59E-11	0	2.4E-09	1.6635E-10	1.22E-08
1.36831E-11	1.94E-05	1.19683E-08	0.001194969	1.43018E-11	1.726935	0.001067	0.001195	1.27E-06	0.013227	0	1.740162	1.37E-06	6.04E-08	0	1.43E-06	0.000271	2.08E-06	0	0.000274	2.942E-05	1.82E-08
2.81729E-11	3.99E-05	9.4217E-09	0.003125412	2.94467E-11	4.351129	0.001028	0.003125	3.21E-06	0.04617	0	4.397299	3.2E-06	2.18E-07	0	3.41E-06	0.000684	7.26E-06	0	0.000691	6.8821E-05	1.63E-08
4.52616E-11	6.41E-05	8.20921E-09	0.00576281	4.73081E-11	6.279381	0.000804	0.005763	4.63E-06	0.042125	0	6.321506	3.73E-06	1.96E-07	0	3.93E-06	0.000987	6.62E-06	0	0.000994	8.0371E-05	1.03E-08
5.62062E-11	7.96E-05	7.57566E-09	0.007754786	5.87476E-11	9.214217	0.000877	0.007755	6.8E-06	0.126502	0	9.340719	4.85E-06	5.99E-07	0	5.45E-06	0.001448	1.99E-05	0	0.001468	0.00010439	9.94E-09
7.48927E-16	1.06E-09	2.28904E-08	3.41974E-08	7.8279E-16	4.85E-05	0.001047	3.42E-08	3.58E-11	5.19E-07	0	4.91E-05	2.63E-11	1.92E-12	0	2.82E-11	7.63E-09	8.15E-11	0	7.71E-09	5.6627E-10	1.22E-08
1.10521E-15	1.57E-09	2.32467E-08	4.96923E-08	1.15518E-15	7.37E-05	0.001094	4.97E-08	5.44E-11	2.17E-06	0	7.58E-05	3.86E-11	8E-12	0	4.66E-11	1.16E-08	3.42E-10	0	1.19E-08	8.3041E-10	1.23E-08
8.22585E-12	1.16E-05	4.59149E-09	0.001872548	8.59779E-12	2.370739	0.000934	0.001873	1.75E-06	0.459287	0	2.830027	1.24E-06	2.16E-06	0	3.39E-06	0.000373	7.22E-05	0	0.000445	2.661E-05	1.05E-08
2.41957E-13	3.43E-07	3.73173E-09	6.77695E-05	2.52897E-13	0.079607	0.000867	6.78E-05	5.88E-08	0.008037	0	0.087644	3.42E-08	3.83E-08	0	7.24E-08	1.25E-05	1.26E-06	0	1.38E-05	7.3527E-07	8.01E-09
4.00485E-12	5.9E-06	1.57073E-09	0.002773004	4.35564E-12	5.776162	0.001537	0.002773	4.26E-06	0.033703	0.046398	5.856263	9.26E-06	2.18E-05	5.36E-05	8.46E-05	3.77E-05	6.31E-07	7.14E-05	0.00011	3.3479E-05	8.91E-09
1.89464E-10	0.000268	3.09222E-08	0.00640414	1.9803E-10	9.007092	0.001038	0.006404	6.65E-06	0.904536	0	9.911628	8.88E-06	2.25E-05	0	3.14E-05	0.001416	0.000142	0	0.001558	0.00019109	2.2E-08
1.90442E-11	2.7E-05	2.319E-08	0.000858357	1.99053E-11	1.638604	0.001409	0.000858	1.21E-06	0.022082	0	1.660686	2.11E-06	5.5E-07	0	2.66E-06	0.000258	3.47E-06	0	0.000261	4.544E-05	3.91E-08
2.04686E-10	0.00029	2.72046E-08	0.007864144	2.13941E-10	11.14502	0.001046	0.007864	8.23E-06	1.790292	0	12.93531	1.02E-05	4.39E-05	0	5.42E-05	0.001752	0.000281	0	0.002033	0.0002206	2.07E-08
7.38477E-11	0.000105	3.09992E-08	0.00248996	7.71867E-11	3.503128	0.001038	0.00249	2.59E-06	0.44186	0	3.944988	3.46E-06	1.1E-05	0	1.44E-05	0.000551	6.95E-05	0	0.00062	7.4388E-05	2.2E-08
1.19707E-11	1.7E-05	8.04765E-09	0.00155474	1.2512E-11	2.742915	0.001302	0.001555	2.02E-06	0.265669	0	3.008584	2.38E-06	6.41E-06	0	8.78E-06	0.000431	4.18E-05	0	0.000473	5.1161E-05	2.43E-08
1.25925E-11	1.78E-05	1.42886E-08	0.000921147	1.31619E-11	1.493082	0.001196	0.000921	1.1E-06	0.069961	0	1.563043	1.15E-06	1.73E-06	0	2.87E-06	0.000235	1.1E-05	0	0.000246	2.4698E-05	1.98E-08
3.49193E-11	4.95E-05	1.71399E-08	0.002129425	3.64982E-11	4.152445	0.001439	0.002129	3.06E-06	0.126201	0	4.278647	4.56E-06	3.09E-06	0	7.64E-06	0.000653	1.98E-05	0	0.000673	9.8069E-05	3.4E-08
1.22579E-12	1.74E-06	2.9451E-08	4.35035E-05	1.28122E-12	0.058563	0.000994	4.35E-05	4.32E-08	0.001856	0	0.060419	5.48E-08	4.59E-08	0	1.01E-07	9.21E-06	2.92E-07	0	9.5E-06	1.179E-06	2E-08
4.13161E-11	5.85E-05	2.45842E-08	0.001756588	4.31842E-11	3.38371	0.001422	0.001757	2.5E-06	0.106505	0	3.490215	4.45E-06	2.64E-06	0	7.09E-06	0.000532	1.67E-05	0	0.000549	9.5819E-05	4.03E-08
2.22233E-13	3.15E-07	7.7061E-09	3.01425E-05	2.32281E-13	0.051546	0.001262	3.01E-05	3.8E-08	0.002748	0	0.054294	3.3E-08	6.56E-08	0	9.86E-08	8.1E-06	4.32E-07	0	8.53E-06	7.1049E-07	1.74E-08
2.9825E-14	4.39E-08	1.28022E-09	2.53374E-05	3.24374E-14	0.057372	0.001671	2.53E-05	4.23E-08	0	0.000212	0.057583	2.7E-06	0	0	2.7E-06	5.26E-06	0	5.67E-07	5.83E-06	1.2043E-05	3.51E-07

Weight	Emission s Rate	CO_RUNE	Rate (g/mile)	Weight	Emission s Rate	SOx_RUNE	Rate (g/mile)	Weight	Emission s Rate
6.94E-06	1.08E-13	1.89E-06	2.01E-07	6.94E-06	1.4E-12	1.14E-07	1.21E-08	6.94E-06	8.4E-14
0.532538	1.11E-09	0.34124	4.73E-07	0.532538	2.52E-07	0.001521	2.11E-09	0.532538	1.12E-09
0.006655	4.97E-11	0.002241	2.49E-07	0.006655	1.65E-09	1.49E-05	1.65E-09	0.006655	1.1E-11
0.037051	0	0	0	0.037051	0	0	0	0.037051	0
0.051232	1.1E-10	0.032925	4.74E-07	0.051232	2.43E-08	0.000168	2.42E-09	0.051232	1.24E-10
7.12E-06	1.67E-13	2.43E-06	2.52E-07	7.12E-06	1.79E-12	3E-08	3.11E-09	7.12E-06	2.21E-14
0.002127	0	0	0	0.002127	0	0	0	0.002127	0
0.171647	5.05E-10	0.126657	5.45E-07	0.171647	9.35E-08	0.000562	2.42E-09	0.171647	4.15E-10
0.001784	4.19E-11	0.000612	2.53E-07	0.001784	4.52E-10	5.31E-06	2.2E-09	0.001784	3.92E-12
0.005674	0	0	0	0.005674	0	0	0	0.005674	0
0.011125	7.09E-11	0.00243	1.61E-07	0.011125	1.79E-09	0.000134	8.86E-09	0.011125	9.86E-11
0.009021	1.23E-09	0.007838	6.41E-07	0.009021	5.79E-09	5.53E-05	4.52E-09	0.009021	4.08E-11
0.001344	8.39E-12	0.000288	1.58E-07	0.001344	2.13E-10	1.84E-05	1.01E-08	0.001344	1.35E-11
0.003727	5.2E-10	0.003424	6.78E-07	0.003727	2.53E-09	2.62E-05	5.18E-09	0.003727	1.93E-11
0.004696	1.33E-08	0.138422	2.18E-05	0.004696	1.02E-07	1.53E-05	2.4E-09	0.004696	1.13E-11
0.103687	3.04E-10	0.076425	5.44E-07	0.103687	5.64E-08	0.000412	2.93E-09	0.103687	3.04E-10
0.0038	3.02E-11	0.001341	2.6E-07	0.0038	9.89E-10	1.46E-05	2.83E-09	0.0038	1.08E-11
0.004045	0	0	0	0.004045	0	0	0	0.004045	0
0.000419	3.23E-12	9.05E-05	1.6E-07	0.000419	6.68E-11	8.65E-06	1.53E-08	0.000419	6.39E-12
0.000194	1.69E-11	6.66E-05	2.54E-07	0.000194	4.91E-11	2.29E-06	8.72E-09	0.000194	1.69E-12
0.001203	2.41E-11	0.000303	1.86E-07	0.001203	2.24E-10	1.98E-05	1.22E-08	0.001203	1.46E-11
0.000369	2.91E-12	8.97E-05	1.79E-07	0.000369	6.62E-11	7.68E-06	1.54E-08	0.000369	5.67E-12
0.000183	5.13E-12	0.000111	4.5E-07	0.000183	8.22E-11	3.78E-06	1.52E-08	0.000183	2.79E-12
0.000245	2.58E-12	7.05E-05	2.12E-07	0.000245	5.2E-11	2.49E-06	7.49E-09	0.000245	1.84E-12
0.000591	5.82E-12	8.65E-05	1.08E-07	0.000591	6.39E-11	6.65E-06	8.31E-09	0.000591	4.91E-12
6.6E-08	8.08E-16	9.07E-09	1.01E-07	6.6E-08	6.7E-15	8.86E-10	9.91E-09	6.6E-08	6.54E-16
1.01E-08	1.23E-16	1.38E-09	1.01E-07	1.01E-08	1.02E-15	1.4E-10	1.03E-08	1.01E-08	1.03E-16
0.001195	2.17E-11	0.000367	2.27E-07	0.001195	2.71E-10	1.63E-05	1.01E-08	0.001195	1.2E-11
0.003125	5.08E-11	0.000861	2.03E-07	0.003125	6.35E-10	4.11E-05	9.71E-09	0.003125	3.03E-11
0.005763	5.93E-11	0.000914	1.17E-07	0.005763	6.75E-10	5.93E-05	7.6E-09	0.005763	4.38E-11
0.007755	7.7E-11	0.001188	1.13E-07	0.007755	8.77E-10	8.71E-05	8.29E-09	0.007755	6.42E-11
3.42E-08	4.18E-16	4.69E-09	1.01E-07	3.42E-08	3.46E-15	4.59E-10	9.9E-09	3.42E-08	3.38E-16
4.97E-08	6.13E-16	6.88E-09	1.02E-07	4.97E-08	5.08E-15	6.96E-10	1.03E-08	4.97E-08	5.14E-16
0.001873	1.96E-11	0.000312	1.23E-07	0.001873	2.31E-10	2.24E-05	8.83E-09	0.001873	1.65E-11
6.78E-05	5.43E-13	8.61E-06	9.37E-08	6.78E-05	6.35E-12	7.52E-07	8.19E-09	6.78E-05	5.55E-13
0.002773	2.47E-11	0.000715	1.9E-07	0.002773	5.28E-10	5.72E-05	1.52E-08	0.002773	4.22E-11
0.006404	1.41E-10	0.001776	2.05E-07	0.006404	1.31E-09	8.51E-05	9.81E-09	0.006404	6.28E-11
0.000858	3.35E-11	0.000633	5.44E-07	0.000858	4.67E-10	1.55E-05	1.33E-08	0.000858	1.14E-11
0.007864	1.63E-10	0.00205	1.92E-07	0.007864	1.51E-09	0.000105	9.88E-09	0.007864	7.77E-11
0.00249	5.49E-11	0.000691	2.05E-07	0.00249	5.1E-10	3.31E-05	9.81E-09	0.00249	2.44E-11
0.001555	3.78E-11	0.000591	2.81E-07	0.001555	4.36E-10	2.59E-05	1.23E-08	0.001555	1.91E-11
0.000921	1.82E-11	0.000302	2.42E-07	0.000921	2.23E-10	1.41E-05	1.13E-08	0.000921	1.04E-11
0.002129	7.24E-11	0.001365	4.73E-07	0.002129	1.01E-09	3.92E-05	1.36E-08	0.002129	2.9E-11
4.35E-05	8.7E-13	1.02E-05	1.73E-07	4.35E-05	7.53E-12	5.53E-07	9.39E-09	4.35E-05	4.08E-13
0.001757	7.07E-11	0.001335	5.61E-07	0.001757	9.85E-10	3.2E-05	1.34E-08	0.001757	2.36E-11
3.01E-05	5.24E-13	9.26E-06	2.27E-07	3.01E-05	6.83E-12	4.87E-07	1.19E-08	3.01E-05	3.59E-13
2.53E-05	8.89E-12	0.001126	3.28E-05	2.53E-05	8.31E-10	5.68E-07	1.65E-08	2.53E-05	4.19E-13

Source: EMFAC2021 (v1.0.2) Emissions Inventory
Region Type: Air Basin
Region: Lake Tahoe
Calendar Year: 2050
Season: Annual
Vehicle Classification: EMFAC2011 Categories
Units: miles/day for CVMT and EVMT, trips/day for Trips, kWh/day for Energy Consumption, tons/day for Emissions, 1000 gallons/day for Fuel Consumption

Region	Calendar Y	Vehicle Ca	Model Yea	Speed	Fuel	Population	Total VMT	CVMT	EVMT	Trips	Energy Cor	**NOx_RUNI**	**Emission Rate (g/mile)**	**Weight**	**Weighted Emissions Rate**	**PM2.5_RUNE)**	**Rate (g/mile)**	**Weight**	**Emissions Rate**	**PM10_RUI**	**Rate (g/mile)**	**Weight**	**Emission s Rate**	**CO2_RUNI**	**Rate (g/mile)**	**Weight**	**Emission s Rate**	CO2_IDLEX
Lake Tahoe	2050	All Other B	Aggregate	Aggregate	Diesel	35.95918	1570.648	1570.648	0	320.0367	0	0.001474	9.3866E-07	0.00126473	1.18715E-09	9.3237E-06	5.94E-09	0.001265	7.5077E-12	9.75E-06	6.2E-09	0.001265	7.85E-12	1.764971	0.001124	0.001265	1.42E-06	0.020965983
Lake Tahoe	2050	All Other B	Aggregate	Aggregate	Natural Ga	0.641324	26.15651	26.15651	0	5.707787	0	2.17E-06	8.31172E-08	2.1062E-05	1.75061E-12	4.6504E-08	1.78E-09	2.11E-05	3.7447E-14	5.06E-08	1.93E-09	2.11E-05	4.07E-14	0.026391	0.001009	2.11E-05	2.13E-08	0.000830414
Lake Tahoe	2050	LDA	Aggregate	Aggregate	Gasoline	12948.54	513702.5	513702.5	0	59464.45	0	0.012893	2.50981E-08	0.41364766	1.03818E-08	0.00023094	4.5E-10	0.413648	1.8596E-10	0.000251	4.89E-10	0.413648	2.02E-10	117.794	0.000229	0.413648	9.49E-05	0
Lake Tahoe	2050	LDA	Aggregate	Aggregate	Diesel	8.400091	307.9809	307.9809	0	36.94615	0	4.68E-06	1.52045E-08	0.000247995	3.77064E-12	3.7017E-07	1.2E-09	0.000248	2.9807E-13	3.87E-07	1.26E-09	0.000248	3.12E-13	0.056366	0.000183	0.000248	4.54E-08	0
Lake Tahoe	2050	LDA	Aggregate	Aggregate	Electricity	1806.882	75401.98	0	75401.98	8342.969	29111.39	0	0	0.060715783	0	0	0	0.060716	0	0	0	0.060716	0	0	0	0.060716	0	0
Lake Tahoe	2050	LDA	Aggregate	Aggregate	Plug-in Hyb	613.5867	24552.11	10008.9	14543.21	2537.181	4392.483	8.62E-05	3.5106E-09	0.019770046	6.94048E-11	4.5163E-06	1.84E-10	0.01977	3.6367E-12	4.91E-06	2E-10	0.01977	3.96E-12	3.142592	0.000128	0.01977	2.53E-06	0
Lake Tahoe	2050	LDT1	Aggregate	Aggregate	Gasoline	854.6141	31298.94	31298.94	0	3747.966	0	0.000822	2.62537E-08	0.025202786	6.61666E-10	1.5298E-05	4.89E-10	0.025203	1.2318E-11	1.66E-05	5.32E-10	0.025203	1.34E-11	8.318563	0.000266	0.025203	6.7E-06	0
Lake Tahoe	2050	LDT1	Aggregate	Aggregate	Diesel	0.009091	0.368506	0.368506	0	0.041605	0	1.14E-08	3.10346E-08	2.96732E-07	9.20896E-15	1.694E-09	4.6E-09	2.97E-07	1.364E-15	1.77E-09	4.8E-09	2.97E-07	1.43E-15	0.000125	0.000338	2.97E-07	1E-10	0
Lake Tahoe	2050	LDT1	Aggregate	Aggregate	Electricity	24.27303	1034.368	0	1034.368	112.4773	399.3513	0	0	0.000832902	0	0	0	0.000833	0	0	0	0.000833	0	0	0	0.000833	0	0
Lake Tahoe	2050	LDT1	Aggregate	Aggregate	Plug-in Hyb	18.53611	773.0211	314.5104	458.5107	76.64681	138.4839	2.71E-06	3.50017E-09	0.000622458	2.17871E-12	1.3922E-07	1.8E-10	0.000622	1.121E-13	1.51E-07	1.96E-10	0.000622	1.22E-13	0.09877	0.000128	0.000622	7.95E-08	0
Lake Tahoe	2050	LDT2	Aggregate	Aggregate	Gasoline	7717.101	293638.8	293638.8	0	34434.68	0	0.008262	2.8135E-08	0.236446173	6.65242E-09	0.00013842	4.71E-10	0.236446	1.1146E-10	0.000151	5.13E-10	0.236446	1.21E-10	81.28708	0.000277	0.236446	6.55E-05	0
Lake Tahoe	2050	LDT2	Aggregate	Aggregate	Diesel	30.47079	1137.247	1137.247	0	134.882	0	3.54E-05	3.11684E-08	0.000915743	2.85423E-11	5.2807E-06	4.64E-09	0.000916	4.2521E-12	5.52E-06	4.85E-09	0.000916	4.44E-12	0.287417	0.000253	0.000916	2.31E-07	0
Lake Tahoe	2050	LDT2	Aggregate	Aggregate	Electricity	290.9478	8500.494	0	8500.494	1345.694	3281.892	0	0	0.006844835	0	0	0	0.006845	0	0	0	0.006845	0	0	0	0.006845	0	0
Lake Tahoe	2050	LDT2	Aggregate	Aggregate	Plug-in Hyb	199.7153	8070.009	3288.847	4781.163	825.8228	1444.054	2.83E-05	3.50771E-09	0.006498197	2.27938E-11	1.4831E-06	1.84E-10	0.006498	1.1943E-12	1.61E-06	2E-10	0.006498	1.3E-12	1.03274	0.000128	0.006498	8.32E-07	0
Lake Tahoe	2050	LHD1	Aggregate	Aggregate	Gasoline	332.1009	11664.19	11664.19	0	4947.808	0	0.000294	2.52352E-08	0.009392332	2.37018E-10	1.4476E-05	1.24E-09	0.009392	1.1657E-11	1.57E-05	1.35E-09	0.009392	1.27E-11	9.668042	0.000829	0.009392	7.78E-06	0.039714378
Lake Tahoe	2050	LHD1	Aggregate	Aggregate	Diesel	175.4944	6267.222	6267.222	0	2207.499	0	0.00194	3.09504E-07	0.005046543	1.56193E-09	0.000128	2.04E-08	0.005047	1.0307E-10	0.000134	2.13E-08	0.005047	1.08E-10	4.166929	0.000665	0.005047	3.36E-06	0.02273667
Lake Tahoe	2050	LHD1	Aggregate	Aggregate	Electricity	350.011	15822.68	0	15822.68	4943.985	10326.28	0	0	0.012740867	0	0	0	0.012741	0	0	0	0.012741	0	0	0	0.012741	0	0
Lake Tahoe	2050	LHD2	Aggregate	Aggregate	Gasoline	27.14664	1033.359	1033.359	0	404.4444	0	2.39E-05	2.316E-08	0.00083209	1.92712E-11	1.3119E-06	1.27E-09	0.000832	1.0564E-12	1.43E-06	1.38E-09	0.000832	1.15E-12	0.954193	0.000923	0.000832	7.68E-07	0.003688422
Lake Tahoe	2050	LHD2	Aggregate	Aggregate	Diesel	104.1103	3319.257	3319.257	0	1309.576	0	0.001738	5.23742E-07	0.002672758	1.39984E-09	9.4961E-05	2.86E-08	0.002673	7.6465E-11	9.93E-05	2.99E-08	0.002673	7.99E-11	2.62259	0.00079	0.002673	2.11E-06	0.02252331
Lake Tahoe	2050	LHD2	Aggregate	Aggregate	Electricity	75.9267	3424.894	0	3424.894	1004.521	2192.058	0	0	0.00275782	0	0	0	0.002758	0	0	0	0.002758	0	0	0	0.002758	0	0
Lake Tahoe	2050	MCY	Aggregate	Aggregate	Gasoline	731.3346	3848.078	3848.078	0	1462.669	0	0.002146	5.57755E-07	0.00309858	1.72825E-09	7.6474E-06	1.99E-09	0.003099	6.1579E-12	8.2E-06	2.13E-09	0.003099	6.61E-12	0.746448	0.000194	0.003099	6.01E-07	0
Lake Tahoe	2050	MDV	Aggregate	Aggregate	Gasoline	4233.763	159891	159891	0	18895.29	0	0.004527	2.8315E-08	0.12874872	3.64551E-09	7.3836E-05	4.62E-10	0.128749	5.9455E-11	8.03E-05	5.02E-10	0.128749	6.47E-11	53.62129	0.000335	0.128749	4.32E-05	0
Lake Tahoe	2050	MDV	Aggregate	Aggregate	Diesel	57.35674	1855.027	1855.027	0	241.5021	0	2.31E-05	1.24316E-08	0.001493719	1.85693E-11	2.5044E-06	1.35E-09	0.001494	2.0166E-12	2.62E-06	1.41E-09	0.001494	2.11E-12	0.617085	0.000333	0.001494	4.97E-07	0
Lake Tahoe	2050	MDV	Aggregate	Aggregate	Electricity	258.3154	7507.22	0	7507.22	1192.23	2898.406	0	0	0.006045024	0	0	0	0.006045	0	0	0	0.006045	0	0	0	0.006045	0	0
Lake Tahoe	2050	MDV	Aggregate	Aggregate	Plug-in Hyb	122.203	4859.968	1980.025	2879.944	505.3095	869.8289	1.7E-05	3.50626E-09	0.003913383	1.37213E-11	8.9204E-07	1.84E-10	0.003913	7.183E-13	9.7E-07	2E-10	0.003913	7.81E-13	0.621776	0.000128	0.003913	5.01E-07	0
Lake Tahoe	2050	MH	Aggregate	Aggregate	Gasoline	32.78507	384.4743	384.4743	0	3.279818	0	9.92E-05	2.58075E-07	0.00030959	7.98973E-11	5.7826E-07	1.5E-09	0.00031	4.6563E-13	6.29E-07	1.64E-09	0.00031	5.06E-13	0.825337	0.002147	0.00031	6.65E-07	0
Lake Tahoe	2050	MH	Aggregate	Aggregate	Diesel	28.99445	264.0361	264.0361	0	2.899445	0	0.000762	2.88753E-06	0.000212609	6.13916E-10	7.6325E-06	2.89E-08	0.000213	6.1459E-12	7.98E-06	3.02E-08	0.000213	6.42E-12	0.317124	0.001201	0.000213	2.55E-07	0
Lake Tahoe	2050	Motor Coa	Aggregate	Aggregate	Diesel	10.14296	1277.72	1277.72	0	233.0851	0	0.001296	1.01421E-06	0.001028856	1.04347E-09	3.1684E-05	2.48E-08	0.001029	2.5513E-11	3.31E-05	2.59E-08	0.001029	2.67E-11	2.145185	0.001679	0.001029	1.73E-06	0.092531578
Lake Tahoe	2050	OBUS	Aggregate	Aggregate	Gasoline	4.361748	154.1246	154.1246	0	87.26986	0	4.55E-05	2.95038E-07	0.000124105	3.66159E-11	1.8831E-07	1.22E-09	0.000124	1.5163E-13	2.05E-07	1.33E-09	0.000124	1.65E-13	0.263344	0.001709	0.000124	2.12E-07	0.001688583
Lake Tahoe	2050	OBUS	Aggregate	Aggregate	Electricity	2.484455	186.9463	0	186.9463	49.70897	207.3766	0	0	0.000150534	0	0	0	0.000151	0	0	0	0.000151	0	0	0	0.000151	0	0
Lake Tahoe	2050	PTO	Aggregate	Aggregate	Diesel	0	126.0331	126.0331	0	0	0	0.000774	6.13958E-06	0.000101485	6.23078E-10	1.0393E-06	8.25E-09	0.000101	8.369E-13	1.09E-06	8.62E-09	0.000101	8.75E-13	0.303432	0.002408	0.000101	2.44E-07	0
Lake Tahoe	2050	PTO	Aggregate	Aggregate	Electricity	0	3.885844	0	3.885844	0	8.049599	0	0	3.12899E-06	0	0	0	3.13E-06	0	0	0	3.13E-06	0	0	0	3.13E-06	0	0
Lake Tahoe	2050	SBUS	Aggregate	Aggregate	Gasoline	1.674594	87.03605	87.03605	0	6.698377	0	8.1E-06	9.31083E-08	7.00839E-05	6.52539E-12	1.1299E-07	1.3E-09	7.01E-05	9.0983E-14	1.23E-07	1.41E-09	7.01E-05	9.9E-14	0.066858	0.000768	7.01E-05	5.38E-08	0.004163495
Lake Tahoe	2050	SBUS	Aggregate	Aggregate	Diesel	16.36472	331.2966	331.2966	0	236.9611	0	0.000104	3.14555E-07	0.000266769	8.39135E-11	1.082E-06	3.27E-09	0.000267	8.7125E-13	1.13E-06	3.41E-09	0.000267	9.11E-13	0.373246	0.001127	0.000267	3.01E-07	0.032634379
Lake Tahoe	2050	SBUS	Aggregate	Aggregate	Electricity	15.79149	422.0135	0	422.0135	210.717	444.5725	0	0	0.000339817	0	0	0	0.00034	0	0	0	0.00034	0	0	0	0.00034	0	0
Lake Tahoe	2050	T6 instate I	Aggregate	Aggregate	Diesel	15.25173	659.1416	659.1416	0	183.6461	0	0.00028	4.24726E-07	0.000530759	2.25427E-10	2.3154E-06	3.51E-09	0.000531	1.8644E-12	2.42E-06	3.67E-09	0.000531	1.95E-12	0.739626	0.001122	0.000531	5.96E-07	0.031784771
Lake Tahoe	2050	T6 instate I	Aggregate	Aggregate	Electricity	11.44836	583.3612	0	583.3612	137.1907	619.1414	0	0	0.000469739	0	0	0	0.00047	0	0	0	0.00047	0	0	0	0.00047	0	0
Lake Tahoe	2050	T6 instate s	Aggregate	Aggregate	Diesel	88.88806	3290.179	3290.179	0	1059.254	0	0.000965	2.93194E-07	0.002649344	7.76771E-10	1.0025E-05	3.05E-09	0.002649	8.0726E-12	1.05E-05	3.18E-09	0.002649	8.44E-12	3.652785	0.00111	0.002649	2.94E-06	0.180762124
Lake Tahoe	2050	T6 instate s	Aggregate	Aggregate	Electricity	113.751	4509.094	0	4509.094	1356.101	4784.133	0	0	0.003630848	0	0	0	0.003631	0	0	0	0.003631	0	0	0	0.003631	0	0
Lake Tahoe	2050	T6 Public	Aggregate	Aggregate	Diesel	50.62193	1993.001	1993.001	0	259.6905	0	0.000812	4.07214E-07	0.00160482	6.53506E-10	6.3024E-06	3.16E-09	0.001605	5.0749E-12	6.59E-06	3.31E-09	0.001605	5.3E-12	2.344884	0.001177	0.001605	1.89E-06	0.151226589
Lake Tahoe	2050	T6 Public	Aggregate	Aggregate	Electricity	42.88596	1841.887	0	1841.887	220.005	2175.085	0	0	0.001483139	0	0	0	0.001483	0	0	0	0.001483	0	0	0	0.001483	0	0
Lake Tahoe	2050	T6 Utility	Aggregate	Aggregate	Diesel	2.002667	83.19568	83.19568	0	25.63414	0	1.74E-05	2.09176E-07	6.69915E-05	1.4013E-11	2.0145E-07	2.42E-09	6.7E-05	1.6221E-13	2.11E-07	2.53E-09	6.7E-05	1.7E-13	0.093007	0.001118	6.7E-05	7.49E-08	0.003094263
Lake Tahoe	2050	T6 Utility	Aggregate	Aggregate	Electricity	3.052559	129.3242	0	129.3242	39.07276	144.8513	0	0	0.000104135	0	0	0	0.000104	0	0	0	0.000104	0	0	0	0.000104	0	0
Lake Tahoe	2050	T6TS	Aggregate	Aggregate	Gasoline	30.25363	1372.046	1372.046	0	605.3147	0	0.000122	8.89728E-08	0.00110481	9.8298E-11	2.0822E-06	1.52E-09	0.001105	1.6767E-12	2.26E-06	1.65E-09	0.001105	1.82E-12	2.328607	0.001697	0.001105	1.88E-06	0.01546376
Lake Tahoe	2050	T6TS	Aggregate	Aggregate	Electricity	23.47655	1578.296	0	1578.296	469.7187	1842.545	0	0	0.001270888	0	0	0	0.001271	0	0	0	0.001271	0	0	0	0.001271	0	0
Lake Tahoe	2050	T7 CAIRP	Aggregate	Aggregate	Diesel	53.08248	10978.18	10978.18	0	1219.835	0	0.014634	1.33298E-06	0.008839938	1.17834E-08	0.00034356	3.13E-08	0.00884	2.7664E-10	0.000359	3.27E-08	0.00884	2.89E-10	15.45435	0.001408	0.00884	1.24E-05	1.17377958
Lake Tahoe	2050	T7 CAIRP	Aggregate	Aggregate	Electricity	14.79219	3168.328	0	3168.328	339.9245	5785.133	0	0	0.002551226	0	0	0	0.002551	0	0	0	0.002551	0	0	0	0.002551	0	0
Lake Tahoe	2050	T7 NNOOS	Aggregate	Aggregate	Diesel	58.71428	16725.53	16725.53	0	1349.254	0	0.024637	1.47304E-06	0.013467868	1.98387E-08	0.00051731	3.09E-08	0.013468	4.1655E-10	0.000541	3.23E-08	0.013468	4.35E-10	22.54138	0.001348	0.013468	1.82E-05	1.544912098
Lake Tahoe	2050	T7 NOOS	Aggregate	Aggregate	Diesel	25.32362	6076.089	6076.089	0	581.9368	0	0.00921	1.51579E-06	0.004892637	7.41621E-09	0.000199	3.28E-08	0.004893	1.6024E-10	0.000208	3.42E-08	0.004893	1.67E-10	8.186921	0.001347	0.004893	6.59E-06	0.66615911
Lake Tahoe	2050	T7 Public	Aggregate	Aggregate	Diesel	58.12932	2354.487	2354.487	0	298.2034	0	0.00353	1.49919E-06	0.001895898	2.84231E-09	1.9157E-05	8.14E-09	0.001896	1.5426E-11	2E-05	8.5E-09	0.001896	1.61E-11	4.109636	0.001745	0.001896	3.31E-06	0.159771533
Lake Tahoe	2050	T7 Public	Aggregate	Aggregate	Electricity	43.79245	1994.05	0	1994.05	224.6553	3913.488	0	0	0.001605665	0	0	0	0.001606	0	0	0	0.001606	0	0	0	0.001606	0	0
Lake Tahoe	2050	T7 Public	Aggregate	Aggregate	Natural Ga	0.195178	7.988059	7.988059	0	1.001264	0	1.87E-06	2.33479E-07	6.43221E-06	1.50178E-12	2.7426E-08	3.43E-09	6.43E-06	2.2084E-14	2.98E-08	3.73E-09	6.43E-06	2.4E-14	0.012777	0.0016	6.43E-06	1.03E-08	0.001253839
Lake Tahoe	2050	T7 Single	Aggregate	Aggregate	Diesel	2.610239	609.5578	609.5578	0	24.58845	0	0.001968	3.22917E-06	0.000490833	1.58498E-09	1.8623E-05	3.06E-08	0.000491	1.4995E-11	1.95E-05	3.19E-08	0.000491	1.57E-11	1.083598	0.001778	0.000491	8.73E-07	0.014018325
Lake Tahoe	2050	T7 Single	Aggregate	Aggregate	Electricity	0.344039	19.56989	0	19.56989	3.240844	35.67892	0	0	1.57582E-05	0	0	0	1.58E-05	0	0	0	1.58E-05	0	0	0	1.58E-05	0	0
Lake Tahoe	2050	T7 Single	Aggregate	Aggregate	Natural Ga	0.109244	25.17027	25.17027	0	1.029075	0	1.75E-05	6.94008E-07	2.02678E-05	1.4066E-11	3.1106E-08	1.24E-09	2.03E-05	2.5047E-14	3.38E-08	1.34E-09	2.03E-05	2.72E-14	0.039172	0.001556	2.03E-05	3.15E-08	0.001127127
Lake Tahoe	2050	T7 SWCV	Aggregate	Aggregate	Diesel	1.747943	113.2493	113.2493	0	8.040538	0	3.45E-05	3.04375E-07	9.11915E-05	2.77565E-11	2.1274E-06	1.88E-08	9.12E-05	1.713E-12	2.22E-06	1.96E-08	9.12E-05	1.79E-12	0.381826	0.003372	9.12E-05	3.07E-07	0.005158533
Lake Tahoe	2050	T7 SWCV	Aggregate	Aggregate	Electricity	1.572166	101.4603	0	101.4603	7.231962	188.7721	0	0	8.16987E-05	0	0	0	8.17E-05	0	0	0	8.17E-05	0	0	0	8.17E-05	0	0
Lake Tahoe	2050	T7 Tractor	Aggregate	Aggregate	Diesel	10.19185	659.8369	659.8369	0	148.0876	0	0.000851	1.28958E-06	0.000531319	6.85178E-10	1.4996E-05	2.27E-08	0.000531	1.2075E-11	1.57E-05	2.38E-08	0.000531	1.26E-11	0.91902	0.001393	0.000531	7.4E-07	0.074430473
Lake Tahoe	2050	T7 Tractor	Aggregate	Aggregate	Electricity	1.997358	140.0719	0	140.0719	29.02161	255.0302	0	0	0.00011279	0	0	0	0.000113	0	0	0	0.000113	0	0	0	0.000113	0	0
Lake Tahoe	2050	T7 Tractor	Aggregate	Aggregate	Natural Ga	0.013356	0.933974	0.933974	0	0.194063	0	1.68E-07	1.79966E-07	7.52062E-07	1.35346E-13	2.0457E-09	2.19E-09	7.52E-07	1.6473E-15	2.22E-09	2.38E-09	7.52E-07	1.79E-15	0.001103	0.001181	7.52E-07	8.88E-10	0.00023423
Lake Tahoe	2050	T7 Utility	Aggregate	Aggregate	Diesel	1.465495	60.36135	60.36135	0	18.75834	0	7.07E-05	1.17152E-06	4.86046E-05	5.69413E-11	4.647E-07	7.7E-09	4.86E-05	3.7419E-13	4.86E-07	8.05E-09	4.86E-05	3.91E-13	0.101863	0.001688	4.86E-05	8.2E-08	0.002135088
Lake Tahoe	2050	T7 Utility	Aggregate	Aggregate	Electricity	1.205716	55.20333	0	55.20333	15.43316	103.9367	0	0	4.44513E-05	0	0	0	4.45E-05	0	0	0	4.45E-05	0	0	0	4.45E-05	0	0
Lake Tahoe	2050	T7IS	Aggregate	Aggregate	Gasoline	0.039477	4.527298	4.527298	0	0.789852	0	1.4E-05	3.10181E-06	3.64551E-06	1.13077E-11	7.1395E-09	1.58E-09	3.65E-06	5.7489E-15	7.76E-09	1.72E-09	3.65E-06	6.25E-15	0.008987	0.001985	3.65E-06	7.24E-09	0
Lake Tahoe	2050	T7IS	Aggregate	Aggregate	Electricity	0.033889	5.050021	0	5.050021	0.678049	10.14774	0	0	4.06642E-06	0	0	0	4.07E-06	0	0	0	4.07E-06	0	0	0	4.07E-06	0	0

CO2_STRE	CO2_TOTE	CH4_RUNI	CH4_IDLE	CH4_STRE	CH4_TOTE	N2O_RUNI	N2O_IDLE	N2O_STRE	N2O_TOTE	**ROG_RUNEX**	**Rate (g/mile)**	**Weight**	**Emissions Rate**	**CO_RUNE**	**Rate (g/mile)**	**Weight**	**Emissions Rate**	**SOx_RUNE**	**Rate (g/mile)**	**Weight**	**Emissions Rate**
0	1.785937	1.54E-06	9.25E-08	0	1.64E-06	0.000278	3.3E-06	0	0.000281	3.32463E-05	2.12E-08	0.001265	2.68E-11	0.000192	1.22E-07	0.001265	1.54E-10	1.67E-05	1.06E-08	0.001265	1.35E-11
0	0.027221	2.46E-05	2.44E-06	0	2.7E-05	5.38E-06	1.69E-07	0	5.55E-06	3.51509E-07	1.34E-08	2.11E-05	2.83E-13	9.88E-05	3.78E-06	2.11E-05	7.95E-11	0	0	2.11E-05	0
3.555601	121.3496	0.000494	0	0.002622	0.003116	0.00202	0	0.001908	0.003928	0.001459426	2.84E-09	0.413648	1.18E-09	0.287582	5.6E-07	0.413648	2.32E-07	0.001165	2.27E-09	0.413648	9.38E-10
0	0.056366	7.02E-08	0	0	7.02E-08	8.88E-06	0	0	8.88E-06	1.51087E-06	4.91E-09	0.000248	1.22E-12	4.62E-05	1.5E-07	0.000248	3.72E-11	5.34E-07	1.73E-09	0.000248	4.3E-13
0	0	0	0	0	0	0	0	0	0	0	0	0.060716	0	0	0	0.060716	0	0	0	0.060716	0
0.157544	3.300136	9.3E-06	0	0.000146	0.000155	1.4E-05	0	5.8E-05	7.2E-05	3.16077E-05	1.29E-09	0.01977	2.55E-11	0.004931	2.01E-07	0.01977	3.97E-09	3.11E-05	1.27E-09	0.01977	2.5E-11
0.264717	8.58328	3.16E-05	0	0.000183	0.000214	0.000126	0	0.000126	0.000252	9.46919E-05	3.03E-09	0.025203	7.62E-11	0.018286	5.84E-07	0.025203	1.47E-08	8.22E-05	2.63E-09	0.025203	6.62E-11
0	0.000125	2.26E-10	0	0	2.26E-10	1.96E-08	0	0	1.96E-08	4.85736E-09	1.32E-08	2.97E-07	3.91E-15	5.25E-08	1.42E-07	2.97E-07	4.23E-14	1.18E-09	3.21E-09	2.97E-07	9.51E-16
0	0	0	0	0	0	0	0	0	0	0	0	0.000833	0	0	0	0.000833	0	0	0	0.000833	0
0.005448	0.104218	2.94E-07	0	4.43E-06	4.72E-06	4.44E-07	0	1.77E-06	2.21E-06	9.93608E-07	1.29E-09	0.000622	8E-13	0.000155	2.01E-07	0.000622	1.25E-10	9.76E-07	1.26E-09	0.000622	7.86E-13
2.570697	83.85778	0.000374	0	0.002042	0.002416	0.001227	0	0.001315	0.002542	0.00115344	3.93E-09	0.236446	9.29E-10	0.191189	6.51E-07	0.236446	1.54E-07	0.000804	2.74E-09	0.236446	6.47E-10
0	0.287417	6.99E-07	0	0	6.99E-07	4.53E-05	0	0	4.53E-05	1.50489E-05	1.32E-08	0.000916	1.21E-11	0.000164	1.44E-07	0.000916	1.32E-10	2.72E-06	2.39E-09	0.000916	2.19E-12
0	0	0	0	0	0	0	0	0	0	0	0	0.006845	0	0	0	0.006845	0	0	0	0.006845	0
0.061735	1.094476	3.06E-06	0	4.75E-05	5.06E-05	4.62E-06	0	1.89E-05	2.35E-05	1.03882E-05	1.29E-09	0.006498	8.36E-12	0.001621	2.01E-07	0.006498	1.3E-09	1.02E-05	1.27E-09	0.006498	8.22E-12
0.134159	9.841915	1.49E-05	3.13E-05	0.000121	0.000167	2.41E-05	8.77E-07	0.000241	0.000266	5.03276E-05	4.31E-09	0.009392	4.05E-11	0.007345	6.3E-07	0.009392	5.91E-09	9.56E-05	8.19E-09	0.009392	7.7E-11
0	4.189666	2.86E-05	9.86E-07	0	2.96E-05	0.000657	3.58E-06	0	0.00066	0.000616451	9.84E-08	0.005047	4.96E-10	0.001573	2.51E-07	0.005047	1.27E-09	3.95E-05	6.3E-09	0.005047	3.18E-11
0	0	0	0	0	0	0	0	0	0	0	0	0.012741	0	0	0	0.012741	0	0	0	0.012741	0
0.010744	0.968625	1.16E-06	2.17E-06	8.23E-06	1.16E-05	2.51E-06	6.38E-08	1.67E-05	1.93E-05	3.734E-06	3.61E-09	0.000832	3.01E-12	0.000659	6.37E-07	0.000832	5.3E-10	9.43E-06	9.13E-09	0.000832	7.6E-12
0	2.645113	2E-05	5.85E-07	0	2.06E-05	0.000413	3.55E-06	0	0.000417	0.000431519	1.3E-07	0.002673	3.47E-10	0.001138	3.43E-07	0.002673	9.16E-10	2.49E-05	7.49E-09	0.002673	2E-11
0	0	0	0	0	0	0	0	0	0	0	0	0.002758	0	0	0	0.002758	0	0	0	0.002758	0
0.069362	0.81581	0.0005	0	0.000262	0.000762	0.000158	0	7.48E-06	0.000166	0.002961848	7.7E-07	0.003099	2.38E-09	0.043196	1.12E-05	0.003099	3.48E-08	7.38E-06	1.92E-09	0.003099	5.94E-12
1.704661	55.32595	0.000204	0	0.001123	0.001327	0.000669	0	0.000733	0.001402	0.000631259	3.95E-09	0.128749	5.08E-10	0.104853	6.56E-07	0.128749	8.44E-08	0.00053	3.32E-09	0.128749	4.27E-10
0	0.617085	4.56E-07	0	0	4.56E-07	9.72E-05	0	0	9.72E-05	9.82703E-06	5.3E-09	0.001494	7.91E-12	0.000298	1.6E-07	0.001494	2.4E-10	5.85E-06	3.15E-09	0.001494	4.71E-12
0	0	0	0	0	0	0	0	0	0	0	0	0.006045	0	0	0	0.006045	0	0	0	0.006045	0
0.045812	0.667587	1.84E-06	0	2.89E-05	3.08E-05	2.79E-06	0	1.15E-05	1.42E-05	6.25441E-06	1.29E-09	0.003913	5.04E-12	0.000976	2.01E-07	0.003913	7.86E-10	6.15E-06	1.26E-09	0.003913	4.95E-12
0.000109	0.825445	1.16E-06	0	1.33E-07	1.3E-06	8E-06	0	1.69E-07	8.16E-06	3.25886E-06	8.48E-09	0.00031	2.62E-12	5.91E-05	1.54E-07	0.00031	4.76E-11	8.16E-06	2.12E-08	0.00031	6.57E-12
0	0.317124	1.24E-06	0	0	1.24E-06	5E-05	0	0	5E-05	2.67639E-05	1.01E-07	0.000213	2.16E-11	7.81E-05	2.96E-07	0.000213	6.29E-11	3E-06	1.14E-08	0.000213	2.42E-12
0	2.237716	6.89E-07	2.07E-06	0	2.76E-06	0.000338	1.46E-05	0	0.000353	1.48432E-05	1.16E-08	0.001029	1.2E-11	5.03E-05	3.93E-08	0.001029	4.05E-11	2.03E-05	1.59E-08	0.001029	1.64E-11
0.002664	0.267696	2.81E-07	9.27E-07	2.98E-06	4.19E-06	2.65E-06	2.26E-08	2.48E-06	5.15E-06	1.02859E-06	6.67E-09	0.000124	8.28E-13	2.7E-05	1.75E-07	0.000124	2.17E-11	2.6E-06	1.69E-08	0.000124	2.1E-12
0	0	0	0	0	0	0	0	0	0	0	0	0.000151	0	0	0	0.000151	0	0	0	0.000151	0
0	0.303432	3.16E-07	0	0	3.16E-07	4.78E-05	0	0	4.78E-05	6.79457E-06	5.39E-08	0.000101	5.47E-12	7.01E-05	5.57E-07	0.000101	5.65E-11	2.87E-06	2.28E-08	0.000101	2.31E-12
0	0	0	0	0	0	0	0	0	0	0	0	3.13E-06	0	0	0	3.13E-06	0	0	0	3.13E-06	0
0.000423	0.071444	1.67E-07	4.62E-06	6.81E-07	5.47E-06	7.81E-07	1.16E-07	3.38E-07	1.23E-06	7.12223E-07	8.18E-09	7.01E-05	5.74E-13	1.64E-05	1.88E-07	7.01E-05	1.32E-11	6.61E-07	7.59E-09	7.01E-05	5.32E-13
0	0.40588	1.05E-07	1.4E-07	0	2.44E-07	5.88E-05	5.14E-06	0	6.39E-05	2.25382E-06	6.8E-09	0.000267	1.81E-12	1.9E-05	5.74E-08	0.000267	1.53E-11	3.53E-06	1.07E-08	0.000267	2.85E-12
0	0	0	0	0	0	0	0	0	0	0	0	0.00034	0	0	0	0.00034	0	0	0	0.00034	0
0	0.77141	2.23E-07	1.38E-07	0	3.61E-07	0.000117	5.01E-06	0	0.000122	4.80753E-06	7.29E-09	0.000531	3.87E-12	3.69E-05	5.6E-08	0.000531	2.97E-11	7E-06	1.06E-08	0.000531	5.64E-12
0	0	0	0	0	0	0	0	0	0	0	0	0.00047	0	0	0	0.00047	0	0	0	0.00047	0
0	3.833547	9.08E-07	8.07E-07	0	1.71E-06	0.000575	2.85E-05	0	0.000604	1.95434E-05	5.94E-09	0.002649	1.57E-11	0.000153	4.66E-08	0.002649	1.23E-10	3.46E-05	1.05E-08	0.002649	2.79E-11
0	0	0	0	0	0	0	0	0	0	0	0	0.003631	0	0	0	0.003631	0	0	0	0.003631	0
0	2.49611	9.63E-07	6.7E-07	0	1.63E-06	0.000369	2.38E-05	0	0.000393	2.07293E-05	1.04E-08	0.001605	1.67E-11	0.000111	5.59E-08	0.001605	8.96E-11	2.22E-05	1.11E-08	0.001605	1.79E-11
0	0	0	0	0	0	0	0	0	0	0	0	0.001483	0	0	0	0.001483	0	0	0	0.001483	0
0	0.096101	2.15E-08	1.39E-08	0	3.54E-08	1.47E-05	4.88E-07	0	1.51E-05	4.62593E-07	5.56E-09	6.7E-05	3.72E-13	3.23E-06	3.88E-08	6.7E-05	2.6E-12	8.81E-07	1.06E-08	6.7E-05	7.09E-13
0	0	0	0	0	0	0	0	0	0	0	0	0.000104	0	0	0	0.000104	0	0	0	0.000104	0
0.025428	2.369498	4.2E-06	8.82E-06	2.78E-05	4.08E-05	1.19E-05	1.75E-07	2.49E-05	3.7E-05	1.58585E-05	1.16E-08	0.001105	1.28E-11	0.000244	1.78E-07	0.001105	1.97E-10	2.3E-05	1.68E-08	0.001105	1.85E-11
0	0	0	0	0	0	0	0	0	0	0	0	0.001271	0	0	0	0.001271	0	0	0	0.001271	0
0	16.62813	6.42E-06	2.84E-05	0	3.48E-05	0.002435	0.000185	0	0.00262	0.000138281	1.26E-08	0.00884	1.11E-10	0.000468	4.26E-08	0.00884	3.77E-10	0.000146	1.33E-08	0.00884	1.18E-10
0	0	0	0	0	0	0	0	0	0	0	0	0.002551	0	0	0	0.002551	0	0	0	0.002551	0
0	24.08629	9.52E-06	3.89E-05	0	4.84E-05	0.003551	0.000243	0	0.003795	0.00020486	1.22E-08	0.013468	1.65E-10	0.000693	4.14E-08	0.013468	5.58E-10	0.000213	1.28E-08	0.013468	1.72E-10
0	8.853081	3.57E-06	1.68E-05	0	2.04E-05	0.00129	0.000105	0	0.001395	7.67996E-05	1.26E-08	0.004893	6.18E-11	0.00026	4.27E-08	0.004893	2.09E-10	7.75E-05	1.28E-08	0.004893	6.24E-11
0	4.269408	2.24E-06	3.58E-06	0	5.81E-06	0.000647	2.52E-05	0	0.000673	4.81681E-05	2.05E-08	0.001896	3.88E-11	0.000323	1.37E-07	0.001896	2.6E-10	3.89E-05	1.65E-08	0.001896	3.13E-11
0	0	0	0	0	0	0	0	0	0	0	0	0.001606	0	0	0	0.001606	0	0	0	0.001606	0
0	0.014031	1.49E-05	3.64E-06	0	1.85E-05	2.6E-06	2.56E-07	0	2.86E-06	2.1284E-07	2.66E-08	6.43E-06	1.71E-13	6.85E-05	8.57E-06	6.43E-06	5.51E-11	0	0	6.43E-06	0
0	1.097617	9.11E-07	2.49E-07	0	1.16E-06	0.000171	2.21E-06	0	0.000173	1.96166E-05	3.22E-08	0.000491	1.58E-11	0.00012	1.97E-07	0.000491	9.65E-11	1.03E-05	1.68E-08	0.000491	8.26E-12
0	0	0	0	0	0	0	0	0	0	0	0	1.58E-05	0	0	0	1.58E-05	0	0	0	1.58E-05	0
0	0.040299	2.92E-05	4.38E-06	0	3.36E-05	7.99E-06	2.3E-07	0	8.22E-06	4.1728E-07	1.66E-08	2.03E-05	3.36E-13	0.000289	1.15E-05	2.03E-05	2.33E-10	0	0	2.03E-05	0
0	0.386985	1.37E-07	1.2E-07	0	2.57E-07	6.02E-05	8.13E-07	0	6.1E-05	2.95571E-06	2.61E-08	9.12E-05	2.38E-12	6.42E-06	5.67E-08	9.12E-05	5.17E-12	3.62E-06	3.19E-08	9.12E-05	2.91E-12
0	0	0	0	0	0	0	0	0	0	0	0	8.17E-05	0	0	0	8.17E-05	0	0	0	8.17E-05	0
0	0.99345	3.42E-07	1.8E-06	0	2.15E-06	0.000145	1.17E-05	0	0.000157	7.36765E-06	1.12E-08	0.000531	5.93E-12	3.43E-05	5.2E-08	0.000531	2.76E-11	8.7E-06	1.32E-08	0.000531	7.01E-12
0	0	0	0	0	0	0	0	0	0	0	0	0.000113	0	0	0	0.000113	0	0	0	0.000113	0
0	0.001338	1.05E-06	7.14E-07	0	1.76E-06	2.25E-07	4.77E-08	0	2.73E-07	1.50186E-08	1.61E-08	7.52E-07	1.21E-14	3.8E-06	4.07E-06	7.52E-07	3.06E-12	0	0	7.52E-07	0
0	0.103998	3.42E-08	4.77E-08	0	8.18E-08	1.6E-05	3.36E-07	0	1.64E-05	7.35614E-07	1.22E-08	4.86E-05	5.92E-13	6.68E-06	1.11E-07	4.86E-05	5.38E-12	9.65E-07	1.6E-08	4.86E-05	7.77E-13
0	0	0	0	0	0	0	0	0	0	0	0	4.45E-05	0	0	0	4.45E-05	0	0	0	4.45E-05	0
3.73E-05	0.009024	4.82E-07	0	7.29E-10	4.82E-07	5.78E-07	0	6.85E-08	6.46E-07	2.24191E-06	4.95E-07	3.65E-06	1.81E-12	0.000151	3.33E-05	3.65E-06	1.22E-10	8.88E-08	1.96E-08	3.65E-06	7.15E-14
0	0	0	0	0	0	0	0	0	0	0	0	4.07E-06	0	0	0	4.07E-06	0	0	0	4.07E-06	0

Appendix B

Basinwide Mobile Source Criteria Pollutant Emissions Calculations

TRPA 2025 RTP/SCS Air Quality Emission Calculations

Scenario	VMT*	ROG (lbs/day)	NO_X (lbs/day)	PM_{10} (lbs/day)[1]	$PM_{2.5}$ (lbs/day)[1]	Fugitive PM_{10} (lbs/day)[2]	Fugitive $PM_{2.5}$ (lbs/day)[2]	CO (lbs/day)	SOx (lbs/day)
2022 TRPA Baseline									
On-Road Motor Vehicles	1,404,998.00	972.050	1,597.630	103.290	44.151	85.233	27.082	7,942.342	13.175
2050 Project									
On-Road Motor Vehicles	1,376,795.00	273.636	356.136	76.293	26.790	71.530	22.287	2,372.782	7.950
Difference (2050 Project - Baseline)	**-28,203.00**	**-698.415**	**-1,241.495**	**-26.997**	**-17.360**	**-13.704**	**-4.796**	**-5,569.560**	**-5.225**
Difference (lbs/day)		**-698.4**	**-1,241.5**	**-27.0**	**-17.4**	**-13.7**	**-4.8**	**-5,569.6**	**-5.2**
%	**-2%**	**-72%**	**-78%**	**-26.1%**	**-39.3%**	**-16%**	**-18%**	**-70%**	**-40%**

Notes

*** VMT from TRPA.**

Annual emissions - Total

1) Includes tire and break wear in the total PM

2) Includes only tire and break wear

TRPA 2025 RTP/SCS Vehicle Miles Traveled Data

2022 Table

	VMT (Daily)	Population	VMT Per Capita	VMT (Annual)
Nevada	543951.4	14943	36.40175424	198,542,261
California	861047	38572	22.32311037	314,282,155
Total	1404998	53515	26.25429182	512,824,270

TRPA Data Notes

For the 2022 base year, the TRIA post-processing tool was not applied to the outputs. That is, these are "raw" outputs from the calibrated model.

2035 Table

	VMT	Population	VMT Per Capita	VMT (Annual)
Nevada	510456.7	15098	33.80955751	186,316,696
California	829451.1	40664	20.39767495	302,749,652
Total	1339908	55762	24.02904762	489,066,420

For the 2035 forecast year, to account for trip reduction strategies that are not included in the Tahoe Travel Demand Model, model outputs were run through the TRIA tool to obtain trip reduction factors, which were then applied to the model runs. Applying the trip reduction factors produced the following VMT and VMT per capita for the 2035 forecast year. California side VMT per capita is within the CARB target for 2035.

2050 Table

	VMT	Population	VMT Per Capita	VMT (Annual)
Nevada	519342.8	15346	33.84222339	189,560,122
California	857451.9	42508	20.1715407	312,969,944
Total	1376795	57854	23.79774281	502,530,175

For the 2050 forecast year, as with the 2035 forecast year, model outputs were run through the TRIA tool to obtain trip reduction factors that were then applied to the model runs. The main differences between the 2035 and 2050 forecasts are additional active transportation infrastructure, added town center tourist accommodation units, and added town center residential units in the 2050 horizon year, all of which reduce vehicle miles traveled per capita on the California side of our jurisdiction.

Air Basin	GAI	Sub-Area	Cal_Year	Default Total VMT	New Total VMT
Lake Tahoe	5	El Dorado (LT)	2022	541,422.6	761,631
Lake Tahoe	5	El Dorado (LT)	2050	603,358.7	668,904
Lake Tahoe	6	Placer (LT)	2022	457,352.4	643,368
Lake Tahoe	6	Placer (LT)	2050	638,525.6	707,891

2005 VMT Summary (from 2045 RTP)

state	population	model daily vmt	Annual Daily Average VMT	Annual VMT	vmt per capita	year
CA	41,338	949,997	912,947	333,225,698	22.98	2005 (2018 factored)

Mpo	GAI	Sub-Area	Cal_Year	Default Total VMT	New Total VMT
TMPO	5	El Dorado (LT)	2005	538,261.8	472,021
TMPO	5	El Dorado (LT)	2035	593,326.8	431,907
TMPO	6	Placer (LT)	2005	502,803.9	440,926
TMPO	6	Placer (LT)	2035	546,121.7	397,544

Consistent with 2045 RTP methodology, Nevada VMT was distributed proportionally across El Dorado and Placer Counties. Proportions based on EMFAC default VMT by sub area for each calendar year.

VMT Distribution by County (Total)	El Dorado %	Placer %
2022	0.54	0.46
2022 NV Allocation	294868.79	249082.61
2022 CA Allocation	466762.09	394284.91
2050	0.49	0.51
2050 NV Allocation	252318.18	267024.62
2050 CA Allocation	416585.54	440866.36

VMT Distribution by County (Passenger Vehicles; CA Only)	El Dorado	Placer
2005 Proportions	0.52	0.48
2022 CA Allocation	472020.63	440926.37
2035 Proportions	0.52	0.48
2035 CA Allocation	431906.81	397544.29

Area	GAI	Sub-Area	Cal. Year	Season	Title	Veh_Tech	EMFAC2011 Category	Population	Total_VMT	cVMT	eVMT	Trips	TOG_RUNEX	TOG_IDLEX	TOG_STREX	TOG_TOTEX	TOG_DIURN	TOG_HTSK	TOG_RUNLS	TOG_TOTAL	ROG_RUNEX	ROG_IDLEX	ROG_STREX	ROG_TOTEX	ROG_DIURN	ROG_HTSK	ROG_RUNLS	ROG_TOTAL	CO_RUNEX	CO_IDLEX
TMPO		All Sub-Areas	2022	Annual	b-Areas-2022-A	All Vehicles	All Vehicles	40,937.6	1,404,998.4	1,380,860.7	24,137.7	214,494.9	0.1022	0.0037	0.1795	0.2854	0.1020	0.0335	0.1063	0.5272	0.0772	0.0030	0.1640	0.2442	0.1020	0.0335	0.1063	0.4860	2.50	0.0357
TMPO		All Sub-Areas	2022	Annual	b-Areas-2022-A	All Other Buses-Dsl	All Other Buses - Dsl	36.0	1,839.3	1,839.3	0	320.2	0.0005	0.0000		0.0005				0.0005	0.0004	0.0000		0.0004				0.0004	0.0011	0.0001
TMPO		All Sub-Areas	2022	Annual	b-Areas-2022-A	All Other Buses-NG	All Other Buses - Oth	0.8944	39.7	39.7	0	7.96	0.0000	0.0000		0.0000				0.0000	0.0000	0.0000		0.0000				0.0000	0.0001	0.0000
TMPO		All Sub-Areas	2022	Annual	b-Areas-2022-A	LDA-Dsl	LDA - Dsl	55.7	1,704.2	1,704.2	0	235.1	0.0001			0.0001				0.0001	0.0001			0.0001				0.0001	0.0008	
TMPO		All Sub-Areas	2022	Annual	b-Areas-2022-A	LDA-Elec	LDA - Oth	372.5	17,072.2	0	17,072.2	1,879.4				0				0				0				0		
TMPO		All Sub-Areas	2022	Annual	b-Areas-2022-A	LDA-Gas	LDA - Gas	10,698.0	383,400.4	383,400.4	0	48,230.0	0.0152		0.0402	0.0554	0.0252	0.0064	0.0232	0.1102	0.0104		0.0367	0.0472	0.0252	0.0064	0.0232	0.1020	0.6057	
TMPO		All Sub-Areas	2022	Annual	b-Areas-2022-A	LDA-Phe	LDA - Gas	198.5	9,306.3	4,768.4	4,537.8	820.6	0.0000		0.0002	0.0002	0.0001	0.0000	0.0000	0.0004	0.0000		0.0002	0.0002	0.0001	0.0000	0.0000	0.0004	0.0024	
TMPO		All Sub-Areas	2022	Annual	b-Areas-2022-A	LDT1-Dsl	LDT1 - Dsl	0.1395	2.11	2.11	0	0.4158	0.0000			0.0000				0.0000	0.0000			0.0000				0.0000	0.0000	
TMPO		All Sub-Areas	2022	Annual	b-Areas-2022-A	LDT1-Elec	LDT1 - Oth	0.6485	27.3	0	27.3	3.17				0				0				0				0		
TMPO		All Sub-Areas	2022	Annual	b-Areas-2022-A	LDT1-Gas	LDT1 - Gas	3,226.2	96,196.7	96,196.7	0	13,571.9	0.0078		0.0206	0.0284	0.0140	0.0036	0.0140	0.0600	0.0053		0.0188	0.0241	0.0140	0.0036	0.0140	0.0558	0.2684	
TMPO		All Sub-Areas	2022	Annual	b-Areas-2022-A	LDT1-Phe	LDT1 - Gas	0.5590	28.0	13.6	14.5	2.32	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
TMPO		All Sub-Areas	2022	Annual	b-Areas-2022-A	LDT2-Dsl	LDT2 - Dsl	61.5	2,513.7	2,513.7	0	290.6	0.0000			0.0000				0.0000	0.0000			0.0000				0.0000	0.0004	
TMPO		All Sub-Areas	2022	Annual	b-Areas-2022-A	LDT2-Elec	LDT2 - Oth	16.7	617.8	0	617.8	85.4				0				0				0				0		
TMPO		All Sub-Areas	2022	Annual	b-Areas-2022-A	LDT2-Gas	LDT2 - Gas	12,471.4	459,369.4	459,369.4	0	56,701.8	0.0139		0.0519	0.0658	0.0253	0.0064	0.0225	0.1200	0.0095		0.0474	0.0569	0.0253	0.0064	0.0225	0.1111	0.6523	
TMPO		All Sub-Areas	2022	Annual	b-Areas-2022-A	LDT2-Phe	LDT2 - Gas	33.4	1,628.9	819.9	809.0	138.3	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0004	
TMPO		All Sub-Areas	2022	Annual	b-Areas-2022-A	LHD1-Dsl	LHD1 - Dsl	1,271.8	43,729.9	43,729.9	0	15,997.9	0.0151	0.0002		0.0153				0.0153	0.0133	0.0002		0.0134				0.0134	0.0406	0.0013
TMPO		All Sub-Areas	2022	Annual	b-Areas-2022-A	LHD1-Elec	LHD1 - Oth	0	0							0				0				0				0		
TMPO		All Sub-Areas	2022	Annual	b-Areas-2022-A	LHD1-Gas	LHD1 - Gas	1,449.8	45,462.7	45,462.7	0	21,600.2	0.0104	0.0011	0.0066	0.0181	0.0066	0.0016	0.0118	0.0381	0.0071	0.0007	0.0061	0.0139	0.0066	0.0016	0.0118	0.0339	0.1913	0.0059
TMPO		All Sub-Areas	2022	Annual	b-Areas-2022-A	LHD2-Dsl	LHD2 - Dsl	451.4	17,285.5	17,285.5	0	5,678.0	0.0042	0.0001		0.0043				0.0043	0.0037	0.0001		0.0038				0.0038	0.0101	0.0005
TMPO		All Sub-Areas	2022	Annual	b-Areas-2022-A	LHD2-Elec	LHD2 - Oth	0	0							0				0				0				0		
TMPO		All Sub-Areas	2022	Annual	b-Areas-2022-A	LHD2-Gas	LHD2 - Gas	141.7	4,662.0	4,662.0	0	2,110.5	0.0009	0.0001	0.0006	0.0016	0.0005	0.0001	0.0009	0.0032	0.0006	0.0001	0.0006	0.0013	0.0005	0.0001	0.0009	0.0029	0.0187	0.0006
TMPO		All Sub-Areas	2022	Annual	b-Areas-2022-A	MCY-Gas	MCY - Gas	1,515.9	7,503.5	7,503.5	0	3,031.7	0.0154		0.0098	0.0252	0.0072	0.0097	0.0135	0.0556	0.0133		0.0091	0.0223	0.0072	0.0097	0.0135	0.0527	0.1536	
TMPO		All Sub-Areas	2022	Annual	b-Areas-2022-A	MDV-Dsl	MDV - Dsl	218.5	9,059.2	9,059.2	0	1,033.4	0.0001			0.0001				0.0001	0.0001			0.0001				0.0001	0.0021	
TMPO		All Sub-Areas	2022	Annual	b-Areas-2022-A	MDV-Elec	MDV - Oth	13.7	515.2	0	515.2	70.5				0				0				0				0		
TMPO		All Sub-Areas	2022	Annual	b-Areas-2022-A	MDV-Gas	MDV - Gas	7,625.2	247,568.5	247,568.5	0	33,656.8	0.0134		0.0485	0.0619	0.0211	0.0051	0.0192	0.1073	0.0092		0.0443	0.0535	0.0211	0.0051	0.0192	0.0990	0.4962	
TMPO		All Sub-Areas	2022	Annual	b-Areas-2022-A	MDV-Phe	MDV - Gas	22.2	1,127.8	584.0	543.8	91.9	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0003	
TMPO		All Sub-Areas	2022	Annual	b-Areas-2022-A	MH-Dsl	MH - Dsl	118.5	1,126.6	1,126.6	0	11.8	0.0002			0.0002				0.0002	0.0002			0.0002				0.0002	0.0006	
TMPO		All Sub-Areas	2022	Annual	b-Areas-2022-A	MH-Gas	MH - Gas	250.6	2,007.6	2,007.6	0	25.1	0.0007		0.0000	0.0007	0.0015	0.0004	0.0000	0.0026	0.0005		0.0000	0.0005	0.0015	0.0004	0.0000	0.0024	0.0186	
TMPO		All Sub-Areas	2022	Annual	b-Areas-2022-A	Motor Coach-Dsl	Motor Coach - Dsl	10.8	1,544.9	1,544.9	0	248.2	0.0000	0.0001		0.0001				0.0001	0.0000	0.0000		0.0001				0.0001	0.0002	0.0007
TMPO		All Sub-Areas	2022	Annual	b-Areas-2022-A	OBUS-Elec	OBUS - Oth	0	0							0				0				0				0		
TMPO		All Sub-Areas	2022	Annual	b-Areas-2022-A	OBUS-Gas	OBUS - Gas	28.4	1,392.4	1,392.4	0	568.9	0.0002	0.0000	0.0002	0.0004	0.0001	0.0000	0.0001	0.0007	0.0002	0.0000	0.0002	0.0003	0.0001	0.0000	0.0001	0.0006	0.0035	0.0002
TMPO		All Sub-Areas	2022	Annual	b-Areas-2022-A	PTO-Dsl	PTO-Dsl	0	88.2	88.2	0		0.0000			0.0000				0.0000	0.0000			0.0000				0.0000	0.0000	
TMPO		All Sub-Areas	2022	Annual	b-Areas-2022-A	PTO-Elec	PTO-Oth	0	0							0				0				0				0		
TMPO		All Sub-Areas	2022	Annual	b-Areas-2022-A	SBUS-Dsl	SBUS - Dsl	44.0	931.2	931.2	0	636.8	0.0001	0.0000		0.0001				0.0001	0.0001	0.0000		0.0001				0.0001	0.0003	0.0002
TMPO		All Sub-Areas	2022	Annual	b-Areas-2022-A	SBUS-Elec	SBUS - Oth	0	0							0				0				0				0		
TMPO		All Sub-Areas	2022	Annual	b-Areas-2022-A	SBUS-Gas	SBUS - Gas	1.37	71.2	71.2	0	5.48	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0001
TMPO		All Sub-Areas	2022	Annual	b-Areas-2022-A	T6 CAIRP Class 4-Dsl	T6 CAIRP small-Dsl	0.0000	0.0001	0.0001	0	0.0000	0	0		0				0	0	0		0				0	0	0
TMPO		All Sub-Areas	2022	Annual	b-Areas-2022-A	T6 CAIRP Class 4-Elec	T6 CAIRP small-Oth	0	0							0				0				0				0		
TMPO		All Sub-Areas	2022	Annual	b-Areas-2022-A	T6 CAIRP Class 5-Dsl	T6 CAIRP small-Dsl	0.0000	0.0001	0.0001	0	0.0000	0	0		0				0	0	0		0				0	0	0
TMPO		All Sub-Areas	2022	Annual	b-Areas-2022-A	T6 CAIRP Class 5-Elec	T6 CAIRP small-Oth	0	0							0				0				0				0		
TMPO		All Sub-Areas	2022	Annual	b-Areas-2022-A	T6 CAIRP Class 6-Dsl	T6 CAIRP small-Dsl	0.0000	0.0001	0.0001	0	0.0000	0	0		0				0	0	0		0				0	0	0
TMPO		All Sub-Areas	2022	Annual	b-Areas-2022-A	T6 CAIRP Class 6-Elec	T6 CAIRP small-Oth	0	0							0				0				0				0		
TMPO		All Sub-Areas	2022	Annual	b-Areas-2022-A	T6 CAIRP Class 7-Dsl	T6 CAIRP heavy-Dsl	0.0000	0.0004	0.0004	0	0.0000	0	0		0				0	0	0		0				0	0	0
TMPO		All Sub-Areas	2022	Annual	b-Areas-2022-A	T6 CAIRP Class 7-Elec	T6 CAIRP heavy-Oth	0	0							0				0				0				0		
TMPO		All Sub-Areas	2022	Annual	b-Areas-2022-A	T6 Instate Delivery Class 4-Dsl	T6 instate small-Dsl	5.95	190.0	190.0	0	84.9	0.0000	0.0000		0.0000				0.0000	0.0000	0.0000		0.0000				0.0000	0.0000	0.0000
TMPO		All Sub-Areas	2022	Annual	b-Areas-2022-A	T6 Instate Delivery Class 4-Elec	T6 instate small-Oth	0	0							0				0				0				0		
TMPO		All Sub-Areas	2022	Annual	b-Areas-2022-A	T6 Instate Delivery Class 5-Dsl	T6 instate small-Dsl	2.85	95.3	95.3	0	40.6	0.0000	0.0000		0.0000				0.0000	0.0000	0.0000		0.0000				0.0000	0.0000	0.0000
TMPO		All Sub-Areas	2022	Annual	b-Areas-2022-A	T6 Instate Delivery Class 5-Elec	T6 instate small-Oth	0	0							0				0				0				0		
TMPO		All Sub-Areas	2022	Annual	b-Areas-2022-A	T6 Instate Delivery Class 6-Dsl	T6 instate small-Dsl	7.39	238.2	238.2	0	105.4	0.0001	0.0000		0.0001				0.0001	0.0001	0.0000		0.0001				0.0001	0.0002	0.0001
TMPO		All Sub-Areas	2022	Annual	b-Areas-2022-A	T6 Instate Delivery Class 6-Elec	T6 instate small-Oth	0	0							0				0				0				0		
TMPO		All Sub-Areas	2022	Annual	b-Areas-2022-A	T6 Instate Delivery Class 7-Dsl	T6 instate heavy-Dsl	3.69	205.8	205.8	0	52.7	0.0000	0.0000		0.0000				0.0000	0.0000	0.0000		0.0000				0.0000	0.0000	0.0000
TMPO		All Sub-Areas	2022	Annual	b-Areas-2022-A	T6 Instate Delivery Class 7-Elec	T6 instate heavy-Oth	0	0							0				0				0				0		
TMPO		All Sub-Areas	2022	Annual	b-Areas-2022-A	T6 Instate Other Class 4-Dsl	T6 instate small-Dsl	45.2	1,705.8	1,705.8	0	522.2	0.0003	0.0000		0.0003				0.0003	0.0002	0.0000		0.0003				0.0003	0.0007	0.0004
TMPO		All Sub-Areas	2022	Annual	b-Areas-2022-A	T6 Instate Other Class 4-Elec	T6 instate small-Oth	0	0							0				0				0				0		
TMPO		All Sub-Areas	2022	Annual	b-Areas-2022-A	T6 Instate Other Class 5-Dsl	T6 instate small-Dsl	48.8	2,047.5	2,047.5	0	564.1	0.0001	0.0000		0.0001				0.0001	0.0001	0.0000		0.0001				0.0001	0.0003	0.0004
TMPO		All Sub-Areas	2022	Annual	b-Areas-2022-A	T6 Instate Other Class 5-Elec	T6 instate small-Oth	0	0							0				0				0				0		
TMPO		All Sub-Areas	2022	Annual	b-Areas-2022-A	T6 Instate Other Class 6-Dsl	T6 instate small-Dsl	26.7	999.3	999.3	0	309.1	0.0002	0.0000		0.0003				0.0003	0.0002	0.0000		0.0002				0.0002	0.0006	0.0003
TMPO		All Sub-Areas	2022	Annual	b-Areas-2022-A	T6 Instate Other Class 6-Elec	T6 instate small-Oth	0	0							0				0				0				0		
TMPO		All Sub-Areas	2022	Annual	b-Areas-2022-A	T6 Instate Other Class 7-Dsl	T6 instate heavy-Dsl	13.4	615.4	615.4	0	155.4	0.0000	0.0000		0.0000				0.0000	0.0000	0.0000		0.0000				0.0000	0.0001	0.0001
TMPO		All Sub-Areas	2022	Annual	b-Areas-2022-A	T6 Instate Other Class 7-Elec	T6 instate heavy-Oth	0	0							0				0				0				0		
TMPO		All Sub-Areas	2022	Annual	b-Areas-2022-A	T6 Instate Tractor Class 6-Dsl	T6 instate small-Dsl	0.0000	0.0002	0.0002	0	0.0001	0	0		0				0	0	0		0				0	0	0
TMPO		All Sub-Areas	2022	Annual	b-Areas-2022-A	T6 Instate Tractor Class 6-Elec	T6 instate small-Oth	0	0							0				0				0				0		
TMPO		All Sub-Areas	2022	Annual	b-Areas-2022-A	T6 Instate Tractor Class 7-Dsl	T6 instate heavy-Dsl	0.0000	0.0003	0.0003	0	0.0001	0	0		0				0	0	0		0				0	0	0
TMPO		All Sub-Areas	2022	Annual	b-Areas-2022-A	T6 Instate Tractor Class 7-Elec	T6 instate heavy-Oth	0	0							0				0				0				0		
TMPO		All Sub-Areas	2022	Annual	b-Areas-2022-A	T6 OOS Class 4-Dsl	T6 OOS small-Dsl	0.0000	0.0000	0.0000	0	0.0000	0	0		0				0	0	0		0				0	0	0
TMPO		All Sub-Areas	2022	Annual	b-Areas-2022-A	T6 OOS Class 5-Dsl	T6 OOS small-Dsl	0.0000	0.0000	0.0000	0	0.0000	0	0		0				0	0	0		0				0	0	0
TMPO		All Sub-Areas	2022	Annual	b-Areas-2022-A	T6 OOS Class 6-Dsl	T6 OOS small-Dsl	0.0000	0.0000	0.0000	0	0.0000	0	0		0				0	0	0		0				0	0	0
TMPO		All Sub-Areas	2022	Annual	b-Areas-2022-A	T6 OOS Class 7-Dsl	T6 OOS heavy-Dsl	0.0000	0.0001	0.0001	0	0.0000	0	0		0				0	0	0		0				0	0	0
TMPO		All Sub-Areas	2022	Annual	b-Areas-2022-A	T6 Public Class 4-Dsl	T6 Public-Dsl	14.9	518.2	518.2	0	76.3	0.0001	0.0000		0.0001				0.0001	0.0001	0.0000		0.0001				0.0001	0.0001	0.0001
TMPO		All Sub-Areas	2022	Annual	b-Areas-2022-A	T6 Public Class 4-Elec	T6 Public-Oth	0	0							0				0				0				0		
TMPO		All Sub-Areas	2022	Annual	b-Areas-2022-A	T6 Public Class 5-Dsl	T6 Public-Dsl	23.5	865.6	865.6	0	120.6	0.0001	0.0000		0.0001				0.0001	0.0000	0.0000		0.0001				0.0001	0.0001	0.0002
TMPO		All Sub-Areas	2022	Annual	b-Areas-2022-A	T6 Public Class 5-Elec	T6 Public-Oth	0	0							0				0				0				0		
TMPO		All Sub-Areas	2022	Annual	b-Areas-2022-A	T6 Public Class 6-Dsl	T6 Public-Dsl	6.87	232.1	232.1	0	35.3	0.0000	0.0000		0.0000				0.0000	0.0000	0.0000		0.0000				0.0000	0.0001	0.0000
TMPO		All Sub-Areas	2022	Annual	b-Areas-2022-A	T6 Public Class 6-Elec	T6 Public-Oth	0	0							0				0				0				0		
TMPO		All Sub-Areas	2022	Annual	b-Areas-2022-A	T6 Public Class 7-Dsl	T6 Public-Dsl	67.9	2,995.6	2,995.6	0	348.1	0.0003	0.0000		0.0003				0.0003	0.0003	0.0000		0.0003				0.0003	0.0006	0.0004
TMPO		All Sub-Areas	2022	Annual	b-Areas-2022-A	T6 Public Class 7-Elec	T6 Public-Oth	0	0							0				0				0				0		
TMPO		All Sub-Areas	2022	Annual	b-Areas-2022-A	T6 Utility Class 5-Dsl	T6 Utility-Dsl	4.39	179.1	179.1	0	56.2	0.0000	0.0000		0.0000				0.0000	0.0000	0.0000		0.0000				0.0000	0.0000	0.0000
TMPO		All Sub-Areas	2022	Annual	b-Areas-2022-A	T6 Utility Class 5-Elec	T6 Utility-Oth	0	0							0				0				0				0		
TMPO		All Sub-Areas	2022	Annual	b-Areas-2022-A	T6 Utility Class 6-Dsl	T6 Utility-Dsl	0.8379	33.8	33.8	0	10.7	0.0000	0.0000		0.0000				0.0000	0.0000	0.0000		0.0000				0.0000	0.0000	0.0000
TMPO		All Sub-Areas	2022	Annual	b-Areas-2022-A	T6 Utility Class 6-Elec	T6 Utility-Oth	0	0							0				0				0				0		
TMPO		All Sub-Areas	2022	Annual	b-Areas-2022-A	T6 Utility Class 7-Dsl	T6 Utility-Dsl	0.9554	47.1	47.1	0	12.2	0.0000	0.0000		0.0000				0.0000	0.0000	0.0000		0.0000				0.0000	0.0000	0.0000
TMPO		All Sub-Areas	2022	Annual	b-Areas-2022-A	T6 Utility Class 7-Elec	T6 Utility-Oth	0	0							0				0				0				0		
TMPO		All Sub-Areas	2022	Annual	b-Areas-2022-A	T6TS-Elec	T6TS - Gas	0	0							0				0				0				0		
TMPO		All Sub-Areas	2022	Annual	b-Areas-2022-A	T6TS-Gas	T6TS - Gas	78.3	3,315.4	3,315.4	0	1,566.6	0.0012	0.0001	0.0007	0.0020	0.0004	0.0001	0.0009	0.0034	0.0008	0.0001	0.0007	0.0016	0.0004	0.0001	0.0009	0.0030	0.0193	0.0013
TMPO		All Sub-Areas	2022	Annual	b-Areas-2022-A	T7 CAIRP Class 8-Dsl	T7 CAIRP-Dsl	48.8	10,069.8	10,069.8	0	1,122.3	0.0003	0.0006		0.0009				0.0009	0.0002	0.0006		0.0008				0.0008	0.0010	0.0080
TMPO		All Sub-Areas	2022	Annual	b-Areas-2022-A	T7 CAIRP Class 8-Elec	T7 CAIRP-Oth	0	0							0				0				0				0		
TMPO		All Sub-Areas	2022	Annual	b-Areas-2022-A	T7 NNOOS Class 8-Dsl	T7 NNOOS-Dsl	43.8	11,905.6	11,905.6	0	1,006.4	0.0003	0.0007		0.0010				0.0010	0.0002	0.0006		0.0008				0.0008	0.0009	0.0091
TMPO		All Sub-Areas	2022	Annual	b-Areas-2022-A	T7 NOOS Class 8-Dsl	T7 NOOS-Dsl	18.3	4,325.1	4,325.1	0	419.4	0.0001	0.0003		0.0004				0.0004	0.0001	0.0003		0.0004				0.0004	0.0004	0.0037
TMPO		All Sub-Areas	2022	Annual	b-Areas-2022-A	T7 Other Port Class 8-Dsl	T7 Other Port-Dsl	0.0000	0.0005	0.0005	0	0.0000	0	0		0				0	0	0		0				0	0.0000	0.0000
TMPO		All Sub-Areas	2022	Annual	b-Areas-2022-A	T7 Other Port Class 8-Elec	T7 Other Port-Oth	0	0							0				0				0				0		
TMPO		All Sub-Areas	2022	Annual	b-Areas-2022-A	T7 POAK Class 8-Dsl	T7 POAK-Dsl	0.0000	0.0003	0.0003	0	0.0000	0	0		0				0	0	0		0				0	0	0.0000
TMPO		All Sub-Areas	2022	Annual	b-Areas-2022-A	T7 POAK Class 8-Elec	T7 POAK-Oth	0	0							0				0				0				0		
TMPO		All Sub-Areas	2022	Annual	b-Areas-2022-A	T7 POLA Class 8-Dsl	T7 POLA-Dsl	0.0000	0.0004	0.0004	0	0.0000	0	0		0				0	0	0		0				0	0.0000	0.0000
TMPO		All Sub-Areas	2022	Annual	b-Areas-2022-A	T7 POLA Class 8-Elec	T7 POLA-Oth	0	0							0				0				0				0		
TMPO		All Sub-Areas	2022	Annual	b-Areas-2022-A	T7 Public Class 8-Dsl	T7 Public-Dsl	116.6	5,154.5	5,154.5	0	598.0	0.0007	0.0002		0.0009				0.0009	0.0007	0.0002		0.0008				0.0008	0.0021	0.0013
TMPO		All Sub-Areas	2022	Annual	b-Areas-2022-A	T7 Public Class 8-Elec	T7 Public-Oth	0	0							0				0				0				0		
TMPO		All Sub-Areas	2022	Annual	b-Areas-2022-A	T7 Public Class 8-NG	T7 Public-NG	0.1862	11.1	11.1	0	0.9550	0.0000	0.0000		0.0000				0.0000	0.0000	0.0000		0.0000				0.0000	0.0001	0.0000
TMPO		All Sub-Areas	2022	Annual	b-Areas-2022-A	T7 SWCV Class 8-Dsl	T7 SWCV-Dsl	4.33	280.2	280.2	0	19.9	0.0000	0.0000		0.0000				0.0000	0.0000	0.0000		0.0000				0.0000	0.0000	0.0000
TMPO		All Sub-Areas	2022	Annual	b-Areas-2022-A	T7 SWCV Class 8-Elec	T7 SWCV-Oth	0	0							0				0				0				0		
TMPO		All Sub-Areas	2022	Annual	b-Areas-2022-A	T7 SWCV Class 8-NG	T7 SWCV-NG	0.0000	0.0000	0.0000	0	0.0000	0	0		0				0	0	0		0				0	0.0000	0
TMPO		All Sub-Areas	2022	Annual	b-Areas-2022-A	T7 Single Concrete/Transit Mix Class 8-Dsl	T7 Single-Dsl	0.0000	0.0003	0.0003	0	0.0001	0	0		0				0	0	0		0				0	0	0
TMPO		All Sub-Areas	2022	Annual	b-Areas-2022-A	T7 Single Concrete/Transit Mix Class 8-Elec	ingle Concrete/Transit Mix	0	0							0				0				0				0		
TMPO		All Sub-Areas	2022	Annual	b-Areas-2022-A	T7 Single Concrete/Transit Mix Class 8-NG	T7 Single-NG	0.0000	0.0000	0.0000	0	0.0000	0	0		0				0	0	0		0				0	0	0
TMPO		All Sub-Areas	2022	Annual	b-Areas-2022-A	T7 Single Dump Class 8-Dsl	T7 Single-Dsl	0.6333	46.8	46.8	0	5.97	0.0000	0.0000		0.0000				0.0000	0.0000	0.0000		0.0000				0.0000	0.0000	0.0000
TMPO		All Sub-Areas	2022	Annual	b-Areas-2022-A	T7 Single Dump Class 8-Elec	T7 Single Dump-Oth	0	0							0				0				0				0		
TMPO		All Sub-Areas	2022	Annual	b-Areas-2022-A	T7 Single Dump Class 8-NG	T7 Single-NG	0.0118	0.8725	0.8725	0	0.1113	0.0000	0.0000		0.0000				0.0000	0.0000	0.0000		0.0000				0.0000	0.0000	0.0000
TMPO		All Sub-Areas	2022	Annual	b-Areas-2022-A	T7 Single Other Class 8-Dsl	T7 Single-Dsl	7.11	377.7	377.7	0	67.0	0.0000	0.0000		0.0000				0.0000	0.0000	0.0000		0.0000				0.0000	0.0001	0.0002
TMPO		All Sub-Areas	2022	Annual	b-Areas-2022-A	T7 Single Other Class 8-NG	T7 Single-NG	0.3200	18.7	18.7	0	3.01	0.0000	0.0000		0.0000				0.0000	0.0000	0.0000		0.0000				0.0000	0.0002	0.0000
TMPO		All Sub-Areas	2022	Annual	b-Areas-2022-A	T7 Tractor Class 8-Dsl	T7 Tractor-Dsl	6.74	556.3	556.3	0	97.9	0.0000	0.0000		0.0001				0.0001	0.0000	0.0000		0.0000				0.0000	0.0001	0.0003
TMPO		All Sub-Areas	2022	Annual	b-Areas-2022-A	T7 Tractor Class 8-Elec	T7 Tractor-Oth	0	0							0				0				0				0		
TMPO		All Sub-Areas	2022	Annual	b-Areas-2022-A	T7 Tractor Class 8-NG	T7 Tractor-NG	0.0095	0.7410	0.7410	0	0.1373	0.0000	0.0000		0.0000				0.0000	0.0000	0.0000		0.0000				0.0000	0.0000	0.0000
TMPO		All Sub-Areas	2022	Annual	b-Areas-2022-A	T7 Utility Class 8-Dsl	T7 Utility-Dsl	2.99	141.4	141.4	0	38.3	0.0000	0.0000		0.0000				0.0000	0.0000	0.0000		0.0000				0.0000	0.0000	0.0000
TMPO		All Sub-Areas	2022	Annual	b-Areas-2022-A	T7 Utility Class 8-Elec	T7 Utility-Oth	0	0							0				0				0				0		
TMPO		All Sub-Areas	2022	Annual	b-Areas-2022-A	T7IS-Elec	T7IS - Gas	0	0							0				0				0				0		
TMPO		All Sub-Areas	2022	Annual	b-Areas-2022-A	T7IS-Gas	T7IS - Gas	0.0419	2.83	2.83	0	0.8391	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0003	
TMPO		All Sub-Areas	2022	Annual	b-Areas-2022-A	UBUS-Dsl	UBUS - Dsl	0.0002	0.0172	0.0172	0	0.0007	0.0000			0.0000				0.0000	0.0000			0.0000				0.0000	0.0000	
TMPO		All Sub-Areas	2022	Annual	b-Areas-2022-A	UBUS-Elec	UBUS - Oth	0.0003	0.0172	0	0.0172	0.0013				0				0				0				0		
TMPO		All Sub-Areas	2022	Annual	b-Areas-2022-A	UBUS-Gas	UBUS - Gas	0.0002	0.0172	0.0172	0	0.0007	0.0000		0.0000	0.0000	0.0000	0	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0	0.0000	0.0000	0.0000	
TMPO		All Sub-Areas	2022	Annual	b-Areas-2022-A	UBUS-NG	UBUS - NG	0.0002	0.0258	0.0258	0	0.0009	0.0000			0.0000				0.0000	0.0000			0.0000				0.0000	0.0000	

CO_STREX	CO_TOTEX	NOx_RUNEX	NOx_IDLEX	NOx_STREX	NOx_TOTEX	CO2_RUNEX	CO2_IDLEX	CO2_STREX	CO2_TOTEX	PM10_RUNEX	PM10_IDLEX	PM10_STREX	PM10_TOTEX	PM10_PMTW	PM10_PMBW	PM10_TOTAL	PM2_5_RUNEX	PM2_5_IDLEX	PM2_5_STREX	PM2_5_TOTEX	PM2_5_PMTW	PM2_5_PMBW	PM2_5_TOTAL	SOx_RUNEX	SOx_IDLEX	SOx_STREX	SOx_TOTEX	Fuel_GAS	Fuel_DSL	Fuel_NG
1.44	3.97	0.6238	0.0377	0.1374	0.7988	638.6	5.68	14.9	659.2	0.0084	0.0001	0.0005	0.0090	0.0137	0.0289	0.0516	0.0079	0.0001	0.0005	0.0085	0.0034	0.0101	0.0221	0.0064	0.0001	0.0002	0.0066	56.3	12.4	0.0121
	0.0012	0.0052	0.0002	0.0005	0.0058	2.30	0.0250		2.33	0.0001	0.0000		0.0002	0.0000	0.0001	0.0003	0.0001	0.0000		0.0001	0.0000	0.0000	0.0002	0.0000	0.0000		0.0000		0.2095	
	0.0001	0.0000	0.0000		0.0000	0.0448	0.0012		0.0459	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000				0			0.0057
	0.0008	0.0009			0.0009	0.4315			0.4315	0.0001			0.0001	0.0000	0.0000	0.0001	0.0001			0.0001	0.0000	0.0000	0.0001	0.0000			0.0000		0.0388	
	0				0				0				0	0.0002	0.0001	0.0002				0	0.0000	0.0000	0.0001				0			
0.3412	0.9469	0.0492		0.0222	0.0714	114.5		3.57	118.1	0.0007		0.0002	0.0008	0.0034	0.0042	0.0084	0.0006		0.0001	0.0008	0.0008	0.0015	0.0031	0.0012		0.0000	0.0012	12.7		
0.0016	0.0040	0.0000		0.0001	0.0002	1.48		0.0569	1.54	0.0000		0.0000	0.0000	0.0001	0.0000	0.0001	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.1643		
	0.0000	0.0000			0.0000	0.0009			0.0009	0.0000			0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000	0.0000	0.0000	0.0000			0.0000		0.0001	
	0				0				0				0	0.0000	0.0000	0.0000				0	0.0000	0.0000	0.0000				0			
0.1861	0.4545	0.0279		0.0104	0.0382	34.0		1.20	35.2	0.0003		0.0001	0.0003	0.0008	0.0013	0.0024	0.0002		0.0001	0.0003	0.0002	0.0004	0.0010	0.0003		0.0000	0.0004	3.83		
0.0000	0.0000	0.0000		0.0000	0.0000	0.0042		0.0002	0.0044	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0005		
	0.0004	0.0002			0.0002	0.8392			0.8392	0.0000			0.0000	0.0000	0.0000	0.0001	0.0000			0.0000	0.0000	0.0000	0.0000	0.0000			0.0000		0.0755	
	0				0				0				0	0.0000	0.0000	0.0000				0	0.0000	0.0000	0.0000				0			
0.4374	1.09	0.0746		0.0366	0.1112	174.0		5.40	179.4	0.0007		0.0002	0.0009	0.0041	0.0058	0.0107	0.0006		0.0001	0.0008	0.0010	0.0020	0.0038	0.0017		0.0001	0.0018	19.3		
0.0003	0.0007	0.0000		0.0000	0.0000	0.2543		0.0116	0.2659	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0284		
	0.0419	0.1542	0.0034		0.1576	30.2	0.1931		30.4	0.0030	0.0000		0.0031	0.0006	0.0038	0.0074	0.0029	0.0000		0.0029	0.0001	0.0013	0.0044	0.0003	0.0000		0.0003		2.74	
	0				0				0				0			0				0			0				0			
0.0924	0.2896	0.0248	0.0001	0.0183	0.0432	48.0	0.1833	0.4572	48.6	0.0002		0.0000	0.0002	0.0004	0.0039	0.0045	0.0001		0.0000	0.0002	0.0001	0.0014	0.0016	0.0005	0.0000	0.0000	0.0005	5.23		
	0.0105	0.0341	0.0011		0.0352	14.8	0.1080		15.0	0.0008	0.0000		0.0008	0.0002	0.0017	0.0028	0.0008	0.0000		0.0008	0.0001	0.0006	0.0015	0.0001	0.0000		0.0001		1.35	
	0				0				0				0			0				0			0				0			
0.0089	0.0282	0.0017	0.0000	0.0016	0.0034	5.38	0.0208	0.0473	5.45	0.0000		0.0000	0.0000	0.0000	0.0005	0.0005	0.0000		0.0000	0.0000	0.0000	0.0002	0.0002	0.0001	0.0000	0.0000	0.0001	0.5855		
0.0412	0.1948	0.0067		0.0008	0.0075	1.25		0.1347	1.39	0.0000		0.0000	0.0000	0.0000	0.0001	0.0002	0.0000		0.0000	0.0000	0.0000	0.0000	0.0001	0.0000		0.0000	0.0000	0.1884		
	0.0021	0.0006			0.0006	3.84			3.84	0.0001			0.0001	0.0001	0.0001	0.0003	0.0001			0.0001	0.0000	0.0000	0.0001	0.0000			0.0000		0.3458	
	0				0				0				0	0.0000	0.0000	0.0000				0	0.0000	0.0000	0.0000				0			
0.3103	0.8064	0.0649		0.0325	0.0974	113.7		3.95	117.7	0.0004		0.0001	0.0005	0.0022	0.0032	0.0059	0.0004		0.0001	0.0005	0.0005	0.0011	0.0022	0.0011		0.0000	0.0012	12.7		
0.0002	0.0005	0.0000		0.0000	0.0000	0.1812		0.0097	0.1909	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0204		
	0.0006	0.0060			0.0060	1.33			1.33	0.0002			0.0002	0.0000	0.0001	0.0002	0.0002			0.0002	0.0000	0.0000	0.0002	0.0000			0.0000		0.1199	
0.0002	0.0187	0.0019		0.0000	0.0019	4.27		0.0007	4.27	0.0000		0.0000	0.0000	0.0000	0.0001	0.0001	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.4578		
	0.0008	0.0036	0.0006	0.0005	0.0048	3.00	0.1272		3.13	0.0001	0.0000		0.0001	0.0000	0.0001	0.0002	0.0000	0.0000		0.0000	0.0000	0.0000	0.0001	0.0000	0.0000		0.0000		0.2814	
	0				0				0				0			0				0			0				0			
0.0037	0.0074	0.0013	0.0000	0.0003	0.0015	2.77	0.0116	0.0156	2.80	0.0000		0.0000	0.0000	0.0000	0.0001	0.0001	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.2996		
	0.0000	0.0004			0.0004	0.2092			0.2092	0.0000			0.0000			0.0000	0.0000			0.0000			0.0000	0.0000			0.0000		0.0188	
	0				0				0				0			0				0			0				0			
	0.0004	0.0077	0.0014	0.0002	0.0094	1.17	0.1084		1.27	0.0000	0.0000		0.0000	0.0000	0.0000	0.0001	0.0000	0.0000		0.0000	0.0000	0.0000	0.0001	0.0000	0.0000		0.0000		0.1147	
	0				0				0				0			0				0			0				0			
0.0001	0.0004	0.0000	0.0000	0.0000	0.0001	0.0623	0.0036	0.0002	0.0662	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0071		
	0	0	0	0	0.0000	0.0000	0.0000		0.0000	0	0		0	0	0	0	0	0		0	0	0	0	0	0		0		0.0000	
	0				0				0				0			0				0			0				0			
	0	0	0	0	0.0000	0.0000	0.0000		0.0000	0	0		0	0	0	0	0	0		0	0	0	0	0	0		0		0.0000	
	0				0				0				0			0				0			0				0			
	0	0	0	0	0	0.0000	0.0000		0.0000	0	0		0	0	0	0	0	0		0	0	0	0	0	0		0		0.0000	
	0				0				0				0			0				0			0				0			
	0	0.0000	0	0	0.0000	0.0000	0.0000		0.0000	0	0		0	0	0	0	0	0		0	0	0	0	0	0		0		0.0000	
	0				0				0				0			0				0			0				0			
	0.0001	0.0004	0.0001	0.0001	0.0007	0.2426	0.0146		0.2573	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000		0.0232	
	0				0				0				0			0				0			0				0			
	0.0000	0.0001	0.0000	0.0001	0.0002	0.1226	0.0066		0.1292	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000		0.0116	
	0				0				0				0			0				0			0				0			
	0.0003	0.0011	0.0001	0.0001	0.0014	0.3126	0.0174		0.3300	0.0000	0.0000		0.0000	0.0000	0.0000	0.0001	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000		0.0297	
	0				0				0				0			0				0			0				0			
	0.0000	0.0001	0.0000	0.0001	0.0002	0.2734	0.0082		0.2816	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000		0.0253	
	0				0				0				0			0				0			0				0			
	0.0011	0.0052	0.0010	0.0007	0.0069	2.14	0.1169		2.26	0.0001	0.0000		0.0001	0.0000	0.0001	0.0002	0.0001	0.0000		0.0001	0.0000	0.0000	0.0001	0.0000	0.0000		0.0000		0.2031	
	0				0				0				0			0				0			0				0			
	0.0006	0.0030	0.0008	0.0009	0.0048	2.57	0.1252		2.70	0.0000	0.0000		0.0000	0.0000	0.0001	0.0002	0.0000	0.0000		0.0000	0.0000	0.0000	0.0001	0.0000	0.0000		0.0000		0.2428	
	0				0				0				0			0				0			0				0			
	0.0009	0.0038	0.0006	0.0004	0.0047	1.24	0.0670		1.31	0.0001	0.0000		0.0001	0.0000	0.0000	0.0002	0.0001	0.0000		0.0001	0.0000	0.0000	0.0001	0.0000	0.0000		0.0000		0.1180	
	0				0				0				0			0				0			0				0			
	0.0002	0.0007	0.0002	0.0003	0.0012	0.7562	0.0337		0.7899	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000		0.0711	
	0				0				0				0			0				0			0				0			
	0	0.0000	0.0000	0	0.0000	0.0000	0.0000		0.0000	0	0		0	0	0	0	0	0		0	0	0	0	0	0		0		0.0000	
	0				0				0				0			0				0			0				0			
	0	0.0000	0.0000	0	0.0000	0.0000	0.0000		0.0000	0	0		0	0	0	0	0	0		0	0	0	0	0	0		0		0.0000	
	0				0				0				0			0				0			0				0			
	0	0	0	0	0	0.0000	0.0000		0.0000	0	0		0	0	0	0	0	0		0	0	0	0	0	0		0		0.0000	
	0	0	0	0	0	0.0000	0.0000		0.0000	0	0		0	0	0	0	0	0		0	0	0	0	0	0		0		0.0000	
	0	0	0	0	0	0.0000	0.0000		0.0000	0	0		0	0	0	0	0	0		0	0	0	0	0	0		0		0.0000	
	0	0	0	0	0	0.0000	0.0000		0.0000	0	0		0	0	0	0	0	0		0	0	0	0	0	0		0		0.0000	
	0.0002	0.0026	0.0008	0.0000	0.0034	0.7172	0.0601		0.7774	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000		0.0700	
	0				0				0				0			0				0			0				0			
	0.0003	0.0033	0.0010	0.0002	0.0045	1.17	0.0896		1.26	0.0000	0.0000		0.0000	0.0000	0.0000	0.0001	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000		0.1137	
	0				0				0				0			0				0			0				0			
	0.0001	0.0017	0.0003	0.0000	0.0021	0.3241	0.0260		0.3500	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000		0.0315	
	0				0				0				0			0				0			0				0			
	0.0011	0.0165	0.0031	0.0003	0.0199	4.09	0.2583		4.35	0.0001	0.0000		0.0001	0.0000	0.0002	0.0003	0.0001	0.0000		0.0001	0.0000	0.0001	0.0002	0.0000	0.0000		0.0000		0.3913	
	0				0				0				0			0				0			0				0			
	0.0000	0.0002	0.0000	0.0001	0.0003	0.2209	0.0082		0.2291	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000		0.0206	
	0				0				0				0			0				0			0				0			
	0.0000	0.0000	0.0000	0.0000	0.0001	0.0418	0.0016		0.0434	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000		0.0039	
	0				0				0				0			0				0			0				0			
	0.0000	0.0000	0.0000	0.0000	0.0001	0.0580	0.0018		0.0598	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000		0.0054	
	0				0				0				0			0				0			0				0			
	0				0				0				0			0				0			0				0			
0.0169	0.0375	0.0051	0.0000	0.0010	0.0061	6.72	0.0448	0.0643	6.83	0.0000		0.0000	0.0000	0.0000	0.0002	0.0002	0.0000		0.0000	0.0000	0.0000	0.0001	0.0001	0.0001	0.0000	0.0000	0.0001	0.7343		
	0.0090	0.0221	0.0069	0.0026	0.0316	17.3	1.36		18.7	0.0004	0.0000		0.0004	0.0004	0.0008	0.0016	0.0004	0.0000		0.0004	0.0001	0.0003	0.0008	0.0002	0.0000		0.0002		1.68	
	0				0				0				0			0				0			0				0			
	0.0100	0.0226	0.0076	0.0024	0.0326	20.6	1.48		22.1	0.0004	0.0000		0.0004	0.0005	0.0010	0.0019	0.0004	0.0000		0.0004	0.0001	0.0003	0.0009	0.0002	0.0000		0.0002		1.99	
	0.0042	0.0098	0.0032	0.0010	0.0140	7.45	0.6306		8.09	0.0002	0.0000		0.0002	0.0002	0.0004	0.0007	0.0002	0.0000		0.0002	0.0000	0.0001	0.0003	0.0001	0.0000		0.0001		0.7277	
	0.0000	0.0000	0.0000	0	0.0000	0.0000	0.0000		0.0000	0	0		0	0	0	0	0	0		0	0	0	0	0	0		0		0.0000	
	0				0				0				0			0				0			0				0			
	0.0000	0.0000	0.0000	0	0.0000	0.0000	0.0000		0.0000	0	0		0	0	0	0	0	0		0	0	0	0	0	0		0		0.0000	
	0				0				0				0			0				0			0				0			
	0.0000	0.0000	0.0000	0	0.0000	0.0000	0.0000		0.0000	0	0		0	0	0	0	0	0		0	0	0	0	0	0		0		0.0000	
	0				0				0				0			0				0			0				0			
	0.0034	0.0513	0.0043	0.0022	0.0578	10.7	0.4115		11.1	0.0003	0.0000		0.0003	0.0002	0.0006	0.0012	0.0003	0.0000		0.0003	0.0001	0.0002	0.0006	0.0001	0.0000		0.0001		1.00	
	0				0				0				0			0				0			0				0			
	0.0001	0.0000	0.0000		0.0000	0.0183	0.0012		0.0195	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000				0			0.0024
	0.0000	0.0053	0.0002	0.0000	0.0055	1.32	0.0173		1.33	0.0000	0.0000		0.0000	0.0000	0.0001	0.0001	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000		0.1199	
	0				0				0				0			0				0			0				0			
	0.0000	0	0		0	0.0000	0.0000		0.0000	0	0		0	0	0	0	0	0		0	0	0	0				0			0.0000
	0.0000	0.0000	0.0000	0	0.0000	0.0000	0.0000		0.0000	0	0		0	0	0	0	0	0		0	0	0	0	0	0		0		0.0000	
	0				0				0				0			0				0			0				0			
	0	0	0		0	0.0000	0.0000		0.0000	0	0		0	0	0	0	0	0		0	0	0	0				0			0.0000
	0.0000	0.0000	0.0000	0.0000	0.0001	0.0807	0.0028		0.0835	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000		0.0075	
	0				0				0				0			0				0			0				0			
	0.0000	0.0000	0.0000		0.0000	0.0010	0.0001		0.0012	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000				0			0.0001
	0.0003	0.0010	0.0002	0.0002	0.0013	0.6650	0.0379		0.7029	0.0000	0.0000		0.0000	0.0000	0.0000	0.0001	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000		0.0633	
	0.0002	0.0000	0.0000		0.0000	0.0275	0.0031		0.0306	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000				0			0.0038
	0.0004	0.0014	0.0003	0.0004	0.0021	0.9587	0.0654		1.02	0.0000	0.0000		0.0000	0.0000	0.0000	0.0001	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000		0.0922	
	0				0				0				0			0				0			0				0			
	0.0000	0.0000	0.0000		0.0000	0.0010	0.0002		0.0012	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000				0			0.0001
	0.0001	0.0003	0.0000	0.0002	0.0005	0.2706	0.0054		0.2761	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000		0.0248	
	0				0				0				0			0				0			0				0			
	0				0				0				0			0				0			0				0			
0.0000	0.0003	0.0000		0.0000	0.0000	0.0069		0.0000	0.0069	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0008		
	0.0000	0.0000			0.0000	0.0000			0.0000	0.0000			0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000	0.0000	0.0000	0.0000			0.0000		0.0000	
	0				0				0				0	0.0000	0.0000	0.0000				0	0.0000	0.0000	0.0000				0			
0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000	0.0000	0		0	0	0.0000	0.0000	0.0000	0		0	0	0	0.0000	0.0000	0.0000		0	0.0000	0.0000		
	0.0000	0.0000			0.0000	0.0000			0.0000	0			0	0.0000	0.0000	0.0000	0			0	0.0000	0.0000	0.0000				0			0.0000

Area	GAI	Sub-Area	Cal. Year	Season	Title	Veh_Tech	EMFAC2011 Category	Population	Total_VMT	cVMT	eVMT	Trips	TOG_RUNEX	TOG_IDLEX
TMPO		All Sub-Areas	2050	Annual	b-Areas-2050-A	All Vehicles	All Vehicles	35,225.3	1,376,794.7	1,211,505.2	165,289.5	175,118.1	0.0119	0.0029
TMPO		All Sub-Areas	2050	Annual	b-Areas-2050-A	All Other Buses-Dsl	All Other Buses - Dsl	39.9	1,741.3	1,741.3	0	354.8	0.0000	0.0000
TMPO		All Sub-Areas	2050	Annual	b-Areas-2050-A	All Other Buses-NG	All Other Buses - Oth	0.7110	29.0	29.0	0	6.33	0.0000	0.0000
TMPO		All Sub-Areas	2050	Annual	b-Areas-2050-A	LDA-Dsl	LDA - Dsl	9.31	341.4	341.4	0	41.0	0.0000	
TMPO		All Sub-Areas	2050	Annual	b-Areas-2050-A	LDA-Elec	LDA - Oth	2,003.2	83,593.2	0	83,593.2	9,249.3		
TMPO		All Sub-Areas	2050	Annual	b-Areas-2050-A	LDA-Gas	LDA - Gas	14,355.2	569,507.9	569,507.9	0	65,924.3	0.0024	
TMPO		All Sub-Areas	2050	Annual	b-Areas-2050-A	LDA-Phe	LDA - Gas	680.2	27,219.3	11,096.2	16,123.1	2,812.8	0.0001	
TMPO		All Sub-Areas	2050	Annual	b-Areas-2050-A	LDT1-Dsl	LDT1 - Dsl	0.0101	0.4086	0.4086	0	0.0461	0.0000	
TMPO		All Sub-Areas	2050	Annual	b-Areas-2050-A	LDT1-Elec	LDT1 - Oth	26.9	1,146.7	0	1,146.7	124.7		
TMPO		All Sub-Areas	2050	Annual	b-Areas-2050-A	LDT1-Gas	LDT1 - Gas	947.5	34,699.1	34,699.1	0	4,155.1	0.0002	
TMPO		All Sub-Areas	2050	Annual	b-Areas-2050-A	LDT1-Phe	LDT1 - Gas	20.5	857.0	348.7	508.3	85.0	0.0000	
TMPO		All Sub-Areas	2050	Annual	b-Areas-2050-A	LDT2-Dsl	LDT2 - Dsl	33.8	1,260.8	1,260.8	0	149.5	0.0000	
TMPO		All Sub-Areas	2050	Annual	b-Areas-2050-A	LDT2-Elec	LDT2 - Oth	322.6	9,423.9	0	9,423.9	1,491.9		
TMPO		All Sub-Areas	2050	Annual	b-Areas-2050-A	LDT2-Gas	LDT2 - Gas	8,555.4	325,537.8	325,537.8	0	38,175.4	0.0019	
TMPO		All Sub-Areas	2050	Annual	b-Areas-2050-A	LDT2-Phe	LDT2 - Gas	221.4	8,946.7	3,646.1	5,300.6	915.5	0.0000	
TMPO		All Sub-Areas	2050	Annual	b-Areas-2050-A	LHD1-Dsl	LHD1 - Dsl	194.6	6,948.1	6,948.1	0	2,447.3	0.0008	0.0000
TMPO		All Sub-Areas	2050	Annual	b-Areas-2050-A	LHD1-Elec	LHD1 - Oth	388.0	17,541.6	0	17,541.6	5,481.1		
TMPO		All Sub-Areas	2050	Annual	b-Areas-2050-A	LHD1-Gas	LHD1 - Gas	368.2	12,931.3	12,931.3	0	5,485.3	0.0001	0.0002
TMPO		All Sub-Areas	2050	Annual	b-Areas-2050-A	LHD2-Dsl	LHD2 - Dsl	115.4	3,679.8	3,679.8	0	1,451.8	0.0005	0.0000
TMPO		All Sub-Areas	2050	Annual	b-Areas-2050-A	LHD2-Elec	LHD2 - Oth	84.2	3,797.0	0	3,797.0	1,113.6		
TMPO		All Sub-Areas	2050	Annual	b-Areas-2050-A	LHD2-Gas	LHD2 - Gas	30.1	1,145.6	1,145.6	0	448.4	0.0000	0.0000
TMPO		All Sub-Areas	2050	Annual	b-Areas-2050-A	MCY-Gas	MCY - Gas	810.8	4,266.1	4,266.1	0	1,621.6	0.0041	
TMPO		All Sub-Areas	2050	Annual	b-Areas-2050-A	MDV-Dsl	MDV - Dsl	63.6	2,056.5	2,056.5	0	267.7	0.0000	
TMPO		All Sub-Areas	2050	Annual	b-Areas-2050-A	MDV-Elec	MDV - Oth	286.4	8,322.8	0	8,322.8	1,321.7		
TMPO		All Sub-Areas	2050	Annual	b-Areas-2050-A	MDV-Gas	MDV - Gas	4,693.7	177,260.5	177,260.5	0	20,947.9	0.0010	
TMPO		All Sub-Areas	2050	Annual	b-Areas-2050-A	MDV-Phe	MDV - Gas	135.5	5,387.9	2,195.1	3,192.8	560.2	0.0000	
TMPO		All Sub-Areas	2050	Annual	b-Areas-2050-A	MH-Dsl	MH - Dsl	32.1	292.7	292.7	0	3.21	0.0000	
TMPO		All Sub-Areas	2050	Annual	b-Areas-2050-A	MH-Gas	MH - Gas	36.3	426.2	426.2	0	3.64	0.0000	
TMPO		All Sub-Areas	2050	Annual	b-Areas-2050-A	Motor Coach-Dsl	Motor Coach - Dsl	11.2	1,416.5	1,416.5	0	258.4	0.0000	0.0001
TMPO		All Sub-Areas	2050	Annual	b-Areas-2050-A	OBUS-Elec	OBUS - Oth	2.75	207.3	0	207.3	55.1		
TMPO		All Sub-Areas	2050	Annual	b-Areas-2050-A	OBUS-Gas	OBUS - Gas	4.84	170.9	170.9	0	96.8	0.0000	0.0000
TMPO		All Sub-Areas	2050	Annual	b-Areas-2050-A	PTO-Dsl	PTO-Dsl	0	139.7	139.7	0		0.0000	
TMPO		All Sub-Areas	2050	Annual	b-Areas-2050-A	PTO-Elec	PTO-Oth	0	4.31	0	4.31			
TMPO		All Sub-Areas	2050	Annual	b-Areas-2050-A	SBUS-Dsl	SBUS - Dsl	18.1	367.3	367.3	0	262.7	0.0000	0.0000
TMPO		All Sub-Areas	2050	Annual	b-Areas-2050-A	SBUS-Elec	SBUS - Oth	2.61	467.9	0	467.9	233.6		
TMPO		All Sub-Areas	2050	Annual	b-Areas-2050-A	SBUS-Gas	SBUS - Gas	1.86	96.5	96.5	0	7.43	0.0000	0.0000
TMPO		All Sub-Areas	2050	Annual	b-Areas-2050-A	T6 CAIRP Class 4-Dsl	T6 CAIRP small-Dsl	0.0000	0.0000	0.0000	0	0.0000	0	0
TMPO		All Sub-Areas	2050	Annual	b-Areas-2050-A	T6 CAIRP Class 4-Elec	T6 CAIRP small-Oth	0.0000	0.0001	0	0.0001	0.0000		
TMPO		All Sub-Areas	2050	Annual	b-Areas-2050-A	T6 CAIRP Class 5-Dsl	T6 CAIRP small-Dsl	0.0000	0.0000	0.0000	0	0.0000	0	0
TMPO		All Sub-Areas	2050	Annual	b-Areas-2050-A	T6 CAIRP Class 5-Elec	T6 CAIRP small-Oth	0.0000	0.0001	0	0.0001	0.0000		
TMPO		All Sub-Areas	2050	Annual	b-Areas-2050-A	T6 CAIRP Class 6-Dsl	T6 CAIRP small-Dsl	0.0000	0.0000	0.0000	0	0.0000	0	0
TMPO		All Sub-Areas	2050	Annual	b-Areas-2050-A	T6 CAIRP Class 6-Elec	T6 CAIRP small-Oth	0.0000	0.0000	0	0.0000	0.0000		
TMPO		All Sub-Areas	2050	Annual	b-Areas-2050-A	T6 CAIRP Class 7-Dsl	T6 CAIRP heavy-Dsl	0.0000	0.0002	0.0002	0	0.0000	0	0
TMPO		All Sub-Areas	2050	Annual	b-Areas-2050-A	T6 CAIRP Class 7-Elec	T6 CAIRP heavy-Oth	0.0000	0.0001	0	0.0001	0.0000		
TMPO		All Sub-Areas	2050	Annual	b-Areas-2050-A	T6 Instate Delivery Class 4-Dsl	T6 instate small-Dsl	4.23	134.5	134.5	0	60.3	0.0000	0.0000
TMPO		All Sub-Areas	2050	Annual	b-Areas-2050-A	T6 Instate Delivery Class 4-Elec	T6 instate small-Oth	5.44	180.0	0	180.0	77.7		
TMPO		All Sub-Areas	2050	Annual	b-Areas-2050-A	T6 Instate Delivery Class 5-Dsl	T6 instate small-Dsl	2.64	84.6	84.6	0	37.6	0.0000	0.0000
TMPO		All Sub-Areas	2050	Annual	b-Areas-2050-A	T6 Instate Delivery Class 5-Elec	T6 instate small-Oth	3.48	115.7	0	115.7	49.7		
TMPO		All Sub-Areas	2050	Annual	b-Areas-2050-A	T6 Instate Delivery Class 6-Dsl	T6 instate small-Dsl	6.11	194.9	194.9	0	87.1	0.0000	0.0000
TMPO		All Sub-Areas	2050	Annual	b-Areas-2050-A	T6 Instate Delivery Class 6-Elec	T6 instate small-Oth	7.90	262.6	0	262.6	112.8		
TMPO		All Sub-Areas	2050	Annual	b-Areas-2050-A	T6 Instate Delivery Class 7-Dsl	T6 instate heavy-Dsl	3.00	146.1	146.1	0	42.8	0.0000	0.0000
TMPO		All Sub-Areas	2050	Annual	b-Areas-2050-A	T6 Instate Delivery Class 7-Elec	T6 instate heavy-Oth	1.98	98.9	0	98.9	28.3		
TMPO		All Sub-Areas	2050	Annual	b-Areas-2050-A	T6 Instate Other Class 4-Dsl	T6 instate small-Dsl	31.5	1,191.4	1,191.4	0	363.9	0.0000	0.0000
TMPO		All Sub-Areas	2050	Annual	b-Areas-2050-A	T6 Instate Other Class 4-Elec	T6 instate small-Oth	40.3	1,640.0	0	1,640.0	466.1		
TMPO		All Sub-Areas	2050	Annual	b-Areas-2050-A	T6 Instate Other Class 5-Dsl	T6 instate small-Dsl	37.1	1,402.8	1,402.8	0	428.6	0.0000	0.0000
TMPO		All Sub-Areas	2050	Annual	b-Areas-2050-A	T6 Instate Other Class 5-Elec	T6 instate small-Oth	47.5	1,929.9	0	1,929.9	549.1		
TMPO		All Sub-Areas	2050	Annual	b-Areas-2050-A	T6 Instate Other Class 6-Dsl	T6 instate small-Dsl	17.0	639.4	639.4	0	196.7	0.0000	0.0000
TMPO		All Sub-Areas	2050	Annual	b-Areas-2050-A	T6 Instate Other Class 6-Elec	T6 instate small-Oth	21.5	870.8	0	870.8	248.1		
TMPO		All Sub-Areas	2050	Annual	b-Areas-2050-A	T6 Instate Other Class 7-Dsl	T6 instate heavy-Dsl	13.9	584.7	584.7	0	160.8	0.0000	0.0000
TMPO		All Sub-Areas	2050	Annual	b-Areas-2050-A	T6 Instate Other Class 7-Elec	T6 instate heavy-Oth	10.7	547.9	0	547.9	123.8		
TMPO		All Sub-Areas	2050	Annual	b-Areas-2050-A	T6 Instate Tractor Class 6-Dsl	T6 instate small-Dsl	0.0000	0.0001	0.0001	0	0.0000	0	0
TMPO		All Sub-Areas	2050	Annual	b-Areas-2050-A	T6 Instate Tractor Class 6-Elec	T6 instate small-Oth	0.0000	0.0001	0	0.0001	0.0000		
TMPO		All Sub-Areas	2050	Annual	b-Areas-2050-A	T6 Instate Tractor Class 7-Dsl	T6 instate heavy-Dsl	0.0000	0.0002	0.0002	0	0.0000	0	0
TMPO		All Sub-Areas	2050	Annual	b-Areas-2050-A	T6 Instate Tractor Class 7-Elec	T6 instate heavy-Oth	0.0000	0.0000	0	0.0000	0.0000		
TMPO		All Sub-Areas	2050	Annual	b-Areas-2050-A	T6 OOS Class 4-Dsl	T6 OOS small-Dsl	0.0000	0.0000	0.0000	0	0.0000	0	0
TMPO		All Sub-Areas	2050	Annual	b-Areas-2050-A	T6 OOS Class 5-Dsl	T6 OOS small-Dsl	0.0000	0.0000	0.0000	0	0.0000	0	0
TMPO		All Sub-Areas	2050	Annual	b-Areas-2050-A	T6 OOS Class 6-Dsl	T6 OOS small-Dsl	0.0000	0.0000	0.0000	0	0.0000	0	0
TMPO		All Sub-Areas	2050	Annual	b-Areas-2050-A	T6 OOS Class 7-Dsl	T6 OOS heavy-Dsl	0.0000	0.0001	0.0001	0	0.0000	0	0
TMPO		All Sub-Areas	2050	Annual	b-Areas-2050-A	T6 Public Class 4-Dsl	T6 Public-Dsl	6.58	227.4	227.4	0	33.7	0.0000	0.0000
TMPO		All Sub-Areas	2050	Annual	b-Areas-2050-A	T6 Public Class 4-Elec	T6 Public-Oth	6.49	247.7	0	247.7	33.3		
TMPO		All Sub-Areas	2050	Annual	b-Areas-2050-A	T6 Public Class 5-Dsl	T6 Public-Dsl	11.4	393.9	393.9	0	58.4	0.0000	0.0000
TMPO		All Sub-Areas	2050	Annual	b-Areas-2050-A	T6 Public Class 5-Elec	T6 Public-Oth	11.3	430.4	0	430.4	57.9		
TMPO		All Sub-Areas	2050	Annual	b-Areas-2050-A	T6 Public Class 6-Dsl	T6 Public-Dsl	3.04	105.0	105.0	0	15.6	0.0000	0.0000
TMPO		All Sub-Areas	2050	Annual	b-Areas-2050-A	T6 Public Class 6-Elec	T6 Public-Oth	2.97	112.9	0	112.9	15.2		
TMPO		All Sub-Areas	2050	Annual	b-Areas-2050-A	T6 Public Class 7-Dsl	T6 Public-Dsl	35.1	1,483.2	1,483.2	0	180.2	0.0000	0.0000
TMPO		All Sub-Areas	2050	Annual	b-Areas-2050-A	T6 Public Class 7-Elec	T6 Public-Oth	26.8	1,251.0	0	1,251.0	137.5		
TMPO		All Sub-Areas	2050	Annual	b-Areas-2050-A	T6 Utility Class 5-Dsl	T6 Utility-Dsl	1.59	63.7	63.7	0	20.3	0.0000	0.0000
TMPO		All Sub-Areas	2050	Annual	b-Areas-2050-A	T6 Utility Class 5-Elec	T6 Utility-Oth	2.42	98.6	0	98.6	31.0		
TMPO		All Sub-Areas	2050	Annual	b-Areas-2050-A	T6 Utility Class 6-Dsl	T6 Utility-Dsl	0.2995	12.0	12.0	0	3.83	0.0000	0.0000
TMPO		All Sub-Areas	2050	Annual	b-Areas-2050-A	T6 Utility Class 6-Elec	T6 Utility-Oth	0.4565	18.6	0	18.6	5.84		
TMPO		All Sub-Areas	2050	Annual	b-Areas-2050-A	T6 Utility Class 7-Dsl	T6 Utility-Dsl	0.3336	16.6	16.6	0	4.27	0.0000	0.0000
TMPO		All Sub-Areas	2050	Annual	b-Areas-2050-A	T6 Utility Class 7-Elec	T6 Utility-Oth	0.5085	26.1	0	26.1	6.51		
TMPO		All Sub-Areas	2050	Annual	b-Areas-2050-A	T6TS-Elec	T6TS - Gas	26.0	1,749.8	0	1,749.8	520.7		
TMPO		All Sub-Areas	2050	Annual	b-Areas-2050-A	T6TS-Gas	T6TS - Gas	33.5	1,521.1	1,521.1	0	671.1	0.0000	0.0001
TMPO		All Sub-Areas	2050	Annual	b-Areas-2050-A	T7 CAIRP Class 8-Dsl	T7 CAIRP-Dsl	58.8	12,170.8	12,170.8	0	1,352.4	0.0002	0.0008
TMPO		All Sub-Areas	2050	Annual	b-Areas-2050-A	T7 CAIRP Class 8-Elec	T7 CAIRP-Oth	16.4	3,512.5	0	3,512.5	376.9		
TMPO		All Sub-Areas	2050	Annual	b-Areas-2050-A	T7 NNOOS Class 8-Dsl	T7 NNOOS-Dsl	65.1	18,542.5	18,542.5	0	1,495.8	0.0003	0.0011
TMPO		All Sub-Areas	2050	Annual	b-Areas-2050-A	T7 NOOS Class 8-Dsl	T7 NOOS-Dsl	28.1	6,736.2	6,736.2	0	645.2	0.0001	0.0005
TMPO		All Sub-Areas	2050	Annual	b-Areas-2050-A	T7 Other Port Class 8-Dsl	T7 Other Port-Dsl	0.0000	0.0004	0.0004	0	0.0000	0	0
TMPO		All Sub-Areas	2050	Annual	b-Areas-2050-A	T7 Other Port Class 8-Elec	T7 Other Port-Oth	0.0000	0.0001	0	0.0001	0.0000		
TMPO		All Sub-Areas	2050	Annual	b-Areas-2050-A	T7 POAK Class 8-Dsl	T7 POAK-Dsl	0.0000	0.0002	0.0002	0	0.0000	0	0
TMPO		All Sub-Areas	2050	Annual	b-Areas-2050-A	T7 POAK Class 8-Elec	T7 POAK-Oth	0.0000	0.0000	0	0.0000	0.0000		
TMPO		All Sub-Areas	2050	Annual	b-Areas-2050-A	T7 POLA Class 8-Dsl	T7 POLA-Dsl	0.0000	0.0003	0.0003	0	0.0000	0	0
TMPO		All Sub-Areas	2050	Annual	b-Areas-2050-A	T7 POLA Class 8-Elec	T7 POLA-Oth	0.0000	0.0001	0	0.0001	0.0000		
TMPO		All Sub-Areas	2050	Annual	b-Areas-2050-A	T7 Public Class 8-Dsl	T7 Public-Dsl	64.4	2,610.3	2,610.3	0	330.6	0.0001	0.0001
TMPO		All Sub-Areas	2050	Annual	b-Areas-2050-A	T7 Public Class 8-Elec	T7 Public-Oth	48.5	2,210.7	0	2,210.7	249.1		
TMPO		All Sub-Areas	2050	Annual	b-Areas-2050-A	T7 Public Class 8-NG	T7 Public-NG	0.2164	8.86	8.86	0	1.11	0.0000	0.0000
TMPO		All Sub-Areas	2050	Annual	b-Areas-2050-A	T7 SWCV Class 8-Dsl	T7 SWCV-Dsl	1.94	125.6	125.6	0	8.91	0.0000	0.0000
TMPO		All Sub-Areas	2050	Annual	b-Areas-2050-A	T7 SWCV Class 8-Elec	T7 SWCV-Oth	1.74	112.5	0	112.5	8.02		
TMPO		All Sub-Areas	2050	Annual	b-Areas-2050-A	T7 SWCV Class 8-NG	T7 SWCV-NG	0.0000	0.0000	0.0000	0	0.0000	0	0
TMPO		All Sub-Areas	2050	Annual	b-Areas-2050-A	T7 Single Concrete/Transit Mix Class 8-Dsl	T7 Single-Dsl	0.0000	0.0001	0.0001	0	0.0000	0	0
TMPO		All Sub-Areas	2050	Annual	b-Areas-2050-A	T7 Single Concrete/Transit Mix Class 8-Elec	ingle Concrete/Transit Mix	0.0000	0.0001	0	0.0001	0.0000		
TMPO		All Sub-Areas	2050	Annual	b-Areas-2050-A	T7 Single Concrete/Transit Mix Class 8-NG	T7 Single-NG	0.0000	0.0000	0.0000	0	0.0000	0	0
TMPO		All Sub-Areas	2050	Annual	b-Areas-2050-A	T7 Single Dump Class 8-Dsl	T7 Single-Dsl	0.4398	20.7	20.7	0	4.14	0.0000	0.0000
TMPO		All Sub-Areas	2050	Annual	b-Areas-2050-A	T7 Single Dump Class 8-Elec	T7 Single Dump-Oth	0.3814	21.7	0	21.7	3.59		
TMPO		All Sub-Areas	2050	Annual	b-Areas-2050-A	T7 Single Dump Class 8-NG	T7 Single-NG	0.0082	0.3868	0.3868	0	0.0773	0.0000	0.0000
TMPO		All Sub-Areas	2050	Annual	b-Areas-2050-A	T7 Single Other Class 8-Dsl	T7 Single-Dsl	2.45	655.0	655.0	0	23.1	0.0000	0.0000
TMPO		All Sub-Areas	2050	Annual	b-Areas-2050-A	T7 Single Other Class 8-NG	T7 Single-NG	0.1129	27.5	27.5	0	1.06	0.0000	0.0000
TMPO		All Sub-Areas	2050	Annual	b-Areas-2050-A	T7 Tractor Class 8-Dsl	T7 Tractor-Dsl	11.3	731.5	731.5	0	164.2	0.0000	0.0000
TMPO		All Sub-Areas	2050	Annual	b-Areas-2050-A	T7 Tractor Class 8-Elec	T7 Tractor-Oth	2.21	155.3	0	155.3	32.2		
TMPO		All Sub-Areas	2050	Annual	b-Areas-2050-A	T7 Tractor Class 8-NG	T7 Tractor-NG	0.0148	1.04	1.04	0	0.2151	0.0000	0.0000
TMPO		All Sub-Areas	2050	Annual	b-Areas-2050-A	T7 Utility Class 8-Dsl	T7 Utility-Dsl	1.62	66.9	66.9	0	20.8	0.0000	0.0000
TMPO		All Sub-Areas	2050	Annual	b-Areas-2050-A	T7 Utility Class 8-Elec	T7 Utility-Oth	1.34	61.2	0	61.2	17.1		
TMPO		All Sub-Areas	2050	Annual	b-Areas-2050-A	T7IS-Elec	T7IS - Gas	0.0376	5.60	0	5.60	0.7517		
TMPO		All Sub-Areas	2050	Annual	b-Areas-2050-A	T7IS-Gas	T7IS - Gas	0.0438	5.02	5.02	0	0.8758	0.0000	
TMPO		All Sub-Areas	2050	Annual	b-Areas-2050-A	UBUS-Dsl	UBUS - Dsl	0.0002	0.0136	0.0136	0	0.0010	0.0000	
TMPO		All Sub-Areas	2050	Annual	b-Areas-2050-A	UBUS-Elec	UBUS - Oth	0.0001	0.0136	0	0.0136	0.0005		
TMPO		All Sub-Areas	2050	Annual	b-Areas-2050-A	UBUS-Gas	UBUS - Gas	0.0001	0.0068	0.0068	0	0.0003	0	
TMPO		All Sub-Areas	2050	Annual	b-Areas-2050-A	UBUS-NG	UBUS - NG	0.0001	0.0068	0.0068	0	0.0004	0.0000	
TMPO		All Sub-Areas	2050	Annual	b-Areas-2050-A	All Vehicles	All Vehicles	35,225.3	1,376,794.7	1,211,505.2	165,289.5	175,118.1	0.0119	0.0029

Area	GAI	Sub-Area	Cal. Year	Season	Title	Veh_Tech	EMFAC2011 Category	Population	Total_VMT	cVMT	eVMT	Trips	TOG_RUNEX	TOG_IDLEX
TMPO		All Sub-Areas	2050	Annual	ib-Areas-2050-A	All Other Buses-Dsl	All Other Buses - Dsl	39.9	1,741.3	1,741.3	0	354.8	0.0000	0.0000
TMPO		All Sub-Areas	2050	Annual	ib-Areas-2050-A	All Other Buses-NG	All Other Buses - Oth	0.7110	29.0	29.0	0	6.33	0.0000	0.0000
TMPO		All Sub-Areas	2050	Annual	ib-Areas-2050-A	LDA-Dsl	LDA - Dsl	9.31	341.4	341.4	0	41.0	0.0000	
TMPO		All Sub-Areas	2050	Annual	ib-Areas-2050-A	LDA-Elec	LDA - Oth	2,003.2	83,593.2	0	83,593.2	9,249.3		
TMPO		All Sub-Areas	2050	Annual	ib-Areas-2050-A	LDA-Gas	LDA - Gas	14,355.2	569,507.9	569,507.9	0	65,924.3	0.0024	
TMPO		All Sub-Areas	2050	Annual	ib-Areas-2050-A	LDA-Phe	LDA - Gas	680.2	27,219.3	11,096.2	16,123.1	2,812.8	0.0001	
TMPO		All Sub-Areas	2050	Annual	ib-Areas-2050-A	LDT1-Dsl	LDT1 - Dsl	0.0101	0.4086	0.4086	0	0.0461	0.0000	
TMPO		All Sub-Areas	2050	Annual	ib-Areas-2050-A	LDT1-Elec	LDT1 - Oth	26.9	1,146.7	0	1,146.7	124.7		
TMPO		All Sub-Areas	2050	Annual	ib-Areas-2050-A	LDT1-Gas	LDT1 - Gas	947.5	34,699.1	34,699.1	0	4,155.1	0.0002	
TMPO		All Sub-Areas	2050	Annual	ib-Areas-2050-A	LDT1-Phe	LDT1 - Gas	20.5	857.0	348.7	508.3	85.0	0.0000	
TMPO		All Sub-Areas	2050	Annual	ib-Areas-2050-A	LDT2-Dsl	LDT2 - Dsl	33.8	1,260.8	1,260.8	0	149.5	0.0000	
TMPO		All Sub-Areas	2050	Annual	ib-Areas-2050-A	LDT2-Elec	LDT2 - Oth	322.6	9,423.9	0	9,423.9	1,491.9		
TMPO		All Sub-Areas	2050	Annual	ib-Areas-2050-A	LDT2-Gas	LDT2 - Gas	8,555.4	325,537.8	325,537.8	0	38,175.4	0.0019	
TMPO		All Sub-Areas	2050	Annual	ib-Areas-2050-A	LDT2-Phe	LDT2 - Gas	221.4	8,946.7	3,646.1	5,300.6	915.5	0.0000	
TMPO		All Sub-Areas	2050	Annual	ib-Areas-2050-A	LHD1-Dsl	LHD1 - Dsl	194.6	6,948.1	6,948.1	0	2,447.3	0.0008	0.0000
TMPO		All Sub-Areas	2050	Annual	ib-Areas-2050-A	LHD1-Elec	LHD1 - Oth	388.0	17,541.6	0	17,541.6	5,481.1		
TMPO		All Sub-Areas	2050	Annual	ib-Areas-2050-A	LHD1-Gas	LHD1 - Gas	368.2	12,931.3	12,931.3	0	5,485.3	0.0001	0.0002
TMPO		All Sub-Areas	2050	Annual	ib-Areas-2050-A	LHD2-Dsl	LHD2 - Dsl	115.4	3,679.8	3,679.8	0	1,451.8	0.0005	0.0000
TMPO		All Sub-Areas	2050	Annual	ib-Areas-2050-A	LHD2-Elec	LHD2 - Oth	84.2	3,797.0	0	3,797.0	1,113.6		
TMPO		All Sub-Areas	2050	Annual	ib-Areas-2050-A	LHD2-Gas	LHD2 - Gas	30.1	1,145.6	1,145.6	0	448.4	0.0000	0.0000
TMPO		All Sub-Areas	2050	Annual	ib-Areas-2050-A	MCY-Gas	MCY - Gas	810.8	4,266.1	4,266.1	0	1,621.6	0.0041	
TMPO		All Sub-Areas	2050	Annual	ib-Areas-2050-A	MDV-Dsl	MDV - Dsl	63.6	2,056.5	2,056.5	0	267.7	0.0000	
TMPO		All Sub-Areas	2050	Annual	ib-Areas-2050-A	MDV-Elec	MDV - Oth	286.4	8,322.8	0	8,322.8	1,321.7		
TMPO		All Sub-Areas	2050	Annual	ib-Areas-2050-A	MDV-Gas	MDV - Gas	4,693.7	177,260.5	177,260.5	0	20,947.9	0.0010	
TMPO		All Sub-Areas	2050	Annual	ib-Areas-2050-A	MDV-Phe	MDV - Gas	135.5	5,387.9	2,195.1	3,192.8	560.2	0.0000	
TMPO		All Sub-Areas	2050	Annual	ib-Areas-2050-A	MH-Dsl	MH - Dsl	32.1	292.7	292.7	0	3.21	0.0000	
TMPO		All Sub-Areas	2050	Annual	ib-Areas-2050-A	MH-Gas	MH - Gas	36.3	426.2	426.2	0	3.64	0.0000	
TMPO		All Sub-Areas	2050	Annual	ib-Areas-2050-A	Motor Coach-Dsl	Motor Coach - Dsl	11.2	1,416.5	1,416.5	0	258.4	0.0000	0.0001
TMPO		All Sub-Areas	2050	Annual	ib-Areas-2050-A	OBUS-Elec	OBUS - Oth	2.75	207.3	0	207.3	55.1		
TMPO		All Sub-Areas	2050	Annual	ib-Areas-2050-A	OBUS-Gas	OBUS - Gas	4.84	170.9	170.9	0	96.8	0.0000	0.0000
TMPO		All Sub-Areas	2050	Annual	ib-Areas-2050-A	PTO-Dsl	PTO-Dsl	0	139.7	139.7	0		0.0000	
TMPO		All Sub-Areas	2050	Annual	ib-Areas-2050-A	PTO-Elec	PTO-Oth	0	4.31	0	4.31			
TMPO		All Sub-Areas	2050	Annual	ib-Areas-2050-A	SBUS-Dsl	SBUS - Dsl	18.1	367.3	367.3	0	262.7	0.0000	0.0000
TMPO		All Sub-Areas	2050	Annual	ib-Areas-2050-A	SBUS-Elec	SBUS - Oth	2.61	467.9	0	467.9	233.6		
TMPO		All Sub-Areas	2050	Annual	ib-Areas-2050-A	SBUS-Gas	SBUS - Gas	1.86	96.5	96.5	0	7.43	0.0000	0.0000
TMPO		All Sub-Areas	2050	Annual	ib-Areas-2050-A	T6 CAIRP Class 4-Dsl	T6 CAIRP small-Dsl	0.0000	0.0000	0.0000	0	0.0000	0	0
TMPO		All Sub-Areas	2050	Annual	ib-Areas-2050-A	T6 CAIRP Class 4-Elec	T6 CAIRP small-Oth	0.0000	0.0001	0	0.0001	0.0000		
TMPO		All Sub-Areas	2050	Annual	ib-Areas-2050-A	T6 CAIRP Class 5-Dsl	T6 CAIRP small-Dsl	0.0000	0.0000	0.0000	0	0.0000	0	0
TMPO		All Sub-Areas	2050	Annual	ib-Areas-2050-A	T6 CAIRP Class 5-Elec	T6 CAIRP small-Oth	0.0000	0.0001	0	0.0001	0.0000		
TMPO		All Sub-Areas	2050	Annual	ib-Areas-2050-A	T6 CAIRP Class 6-Dsl	T6 CAIRP small-Dsl	0.0000	0.0000	0.0000	0	0.0000	0	0
TMPO		All Sub-Areas	2050	Annual	ib-Areas-2050-A	T6 CAIRP Class 6-Elec	T6 CAIRP small-Oth	0.0000	0.0000	0	0.0000	0.0000		
TMPO		All Sub-Areas	2050	Annual	ib-Areas-2050-A	T6 CAIRP Class 7-Dsl	T6 CAIRP heavy-Dsl	0.0000	0.0002	0.0002	0	0.0000	0	0
TMPO		All Sub-Areas	2050	Annual	ib-Areas-2050-A	T6 CAIRP Class 7-Elec	T6 CAIRP heavy-Oth	0.0000	0.0001	0	0.0001	0.0000		
TMPO		All Sub-Areas	2050	Annual	ib-Areas-2050-A	T6 Instate Delivery Class 4-Dsl	T6 instate small-Dsl	4.23	134.5	134.5	0	60.3	0.0000	0.0000
TMPO		All Sub-Areas	2050	Annual	ib-Areas-2050-A	T6 Instate Delivery Class 4-Elec	T6 instate small-Oth	5.44	180.0	0	180.0	77.7		
TMPO		All Sub-Areas	2050	Annual	ib-Areas-2050-A	T6 Instate Delivery Class 5-Dsl	T6 instate small-Dsl	2.64	84.6	84.6	0	37.6	0.0000	0.0000
TMPO		All Sub-Areas	2050	Annual	ib-Areas-2050-A	T6 Instate Delivery Class 5-Elec	T6 instate small-Oth	3.48	115.7	0	115.7	49.7		
TMPO		All Sub-Areas	2050	Annual	ib-Areas-2050-A	T6 Instate Delivery Class 6-Dsl	T6 instate small-Dsl	6.11	194.9	194.9	0	87.1	0.0000	0.0000
TMPO		All Sub-Areas	2050	Annual	ib-Areas-2050-A	T6 Instate Delivery Class 6-Elec	T6 instate small-Oth	7.90	262.6	0	262.6	112.8		
TMPO		All Sub-Areas	2050	Annual	ib-Areas-2050-A	T6 Instate Delivery Class 7-Dsl	T6 instate heavy-Dsl	3.00	146.1	146.1	0	42.8	0.0000	0.0000
TMPO		All Sub-Areas	2050	Annual	ib-Areas-2050-A	T6 Instate Delivery Class 7-Elec	T6 instate heavy-Oth	1.98	98.9	0	98.9	28.3		
TMPO		All Sub-Areas	2050	Annual	ib-Areas-2050-A	T6 Instate Other Class 4-Dsl	T6 instate small-Dsl	31.5	1,191.4	1,191.4	0	363.9	0.0000	0.0000
TMPO		All Sub-Areas	2050	Annual	ib-Areas-2050-A	T6 Instate Other Class 4-Elec	T6 instate small-Oth	40.3	1,640.0	0	1,640.0	466.1		
TMPO		All Sub-Areas	2050	Annual	ib-Areas-2050-A	T6 Instate Other Class 5-Dsl	T6 instate small-Dsl	37.1	1,402.8	1,402.8	0	428.6	0.0000	0.0000
TMPO		All Sub-Areas	2050	Annual	ib-Areas-2050-A	T6 Instate Other Class 5-Elec	T6 instate small-Oth	47.5	1,929.9	0	1,929.9	549.1		
TMPO		All Sub-Areas	2050	Annual	ib-Areas-2050-A	T6 Instate Other Class 6-Dsl	T6 instate small-Dsl	17.0	639.4	639.4	0	196.7	0.0000	0.0000
TMPO		All Sub-Areas	2050	Annual	ib-Areas-2050-A	T6 Instate Other Class 6-Elec	T6 instate small-Oth	21.5	870.8	0	870.8	248.1		
TMPO		All Sub-Areas	2050	Annual	ib-Areas-2050-A	T6 Instate Other Class 7-Dsl	T6 instate heavy-Dsl	13.9	584.7	584.7	0	160.8	0.0000	0.0000
TMPO		All Sub-Areas	2050	Annual	ib-Areas-2050-A	T6 Instate Other Class 7-Elec	T6 instate heavy-Oth	10.7	547.9	0	547.9	123.8		
TMPO		All Sub-Areas	2050	Annual	ib-Areas-2050-A	T6 Instate Tractor Class 6-Dsl	T6 instate small-Dsl	0.0000	0.0001	0.0001	0	0.0000	0	0
TMPO		All Sub-Areas	2050	Annual	ib-Areas-2050-A	T6 Instate Tractor Class 6-Elec	T6 instate small-Oth	0.0000	0.0001	0	0.0001	0.0000		
TMPO		All Sub-Areas	2050	Annual	ib-Areas-2050-A	T6 Instate Tractor Class 7-Dsl	T6 instate heavy-Dsl	0.0000	0.0002	0.0002	0	0.0000	0	0
TMPO		All Sub-Areas	2050	Annual	ib-Areas-2050-A	T6 Instate Tractor Class 7-Elec	T6 instate heavy-Oth	0.0000	0.0000	0	0.0000	0.0000		
TMPO		All Sub-Areas	2050	Annual	ib-Areas-2050-A	T6 OOS Class 4-Dsl	T6 OOS small-Dsl	0.0000	0.0000	0.0000	0	0.0000	0	0
TMPO		All Sub-Areas	2050	Annual	ib-Areas-2050-A	T6 OOS Class 5-Dsl	T6 OOS small-Dsl	0.0000	0.0000	0.0000	0	0.0000	0	0
TMPO		All Sub-Areas	2050	Annual	ib-Areas-2050-A	T6 OOS Class 6-Dsl	T6 OOS small-Dsl	0.0000	0.0000	0.0000	0	0.0000	0	0
TMPO		All Sub-Areas	2050	Annual	ib-Areas-2050-A	T6 OOS Class 7-Dsl	T6 OOS heavy-Dsl	0.0000	0.0001	0.0001	0	0.0000	0	0
TMPO		All Sub-Areas	2050	Annual	ib-Areas-2050-A	T6 Public Class 4-Dsl	T6 Public-Dsl	6.58	227.4	227.4	0	33.7	0.0000	0.0000
TMPO		All Sub-Areas	2050	Annual	ib-Areas-2050-A	T6 Public Class 4-Elec	T6 Public-Oth	6.49	247.7	0	247.7	33.3		
TMPO		All Sub-Areas	2050	Annual	ib-Areas-2050-A	T6 Public Class 5-Dsl	T6 Public-Dsl	11.4	393.9	393.9	0	58.4	0.0000	0.0000
TMPO		All Sub-Areas	2050	Annual	ib-Areas-2050-A	T6 Public Class 5-Elec	T6 Public-Oth	11.3	430.4	0	430.4	57.9		
TMPO		All Sub-Areas	2050	Annual	ib-Areas-2050-A	T6 Public Class 6-Dsl	T6 Public-Dsl	3.04	105.0	105.0	0	15.6	0.0000	0.0000
TMPO		All Sub-Areas	2050	Annual	ib-Areas-2050-A	T6 Public Class 6-Elec	T6 Public-Oth	2.97	112.9	0	112.9	15.2		
TMPO		All Sub-Areas	2050	Annual	ib-Areas-2050-A	T6 Public Class 7-Dsl	T6 Public-Dsl	35.1	1,483.2	1,483.2	0	180.2	0.0000	0.0000
TMPO		All Sub-Areas	2050	Annual	ib-Areas-2050-A	T6 Public Class 7-Elec	T6 Public-Oth	26.8	1,251.0	0	1,251.0	137.5		
TMPO		All Sub-Areas	2050	Annual	ib-Areas-2050-A	T6 Utility Class 5-Dsl	T6 Utility-Dsl	1.59	63.7	63.7	0	20.3	0.0000	0.0000
TMPO		All Sub-Areas	2050	Annual	ib-Areas-2050-A	T6 Utility Class 5-Elec	T6 Utility-Oth	2.42	98.6	0	98.6	31.0		
TMPO		All Sub-Areas	2050	Annual	ib-Areas-2050-A	T6 Utility Class 6-Dsl	T6 Utility-Dsl	0.2995	12.0	12.0	0	3.83	0.0000	0.0000
TMPO		All Sub-Areas	2050	Annual	ib-Areas-2050-A	T6 Utility Class 6-Elec	T6 Utility-Oth	0.4565	18.6	0	18.6	5.84		
TMPO		All Sub-Areas	2050	Annual	ib-Areas-2050-A	T6 Utility Class 7-Dsl	T6 Utility-Dsl	0.3336	16.6	16.6	0	4.27	0.0000	0.0000
TMPO		All Sub-Areas	2050	Annual	ib-Areas-2050-A	T6 Utility Class 7-Elec	T6 Utility-Oth	0.5085	26.1	0	26.1	6.51		
TMPO		All Sub-Areas	2050	Annual	ib-Areas-2050-A	T6TS-Elec	T6TS - Gas	26.0	1,749.8	0	1,749.8	520.7		
TMPO		All Sub-Areas	2050	Annual	ib-Areas-2050-A	T6TS-Gas	T6TS - Gas	33.5	1,521.1	1,521.1	0	671.1	0.0000	0.0001
TMPO		All Sub-Areas	2050	Annual	ib-Areas-2050-A	T7 CAIRP Class 8-Dsl	T7 CAIRP-Dsl	58.8	12,170.8	12,170.8	0	1,352.4	0.0002	0.0008
TMPO		All Sub-Areas	2050	Annual	ib-Areas-2050-A	T7 CAIRP Class 8-Elec	T7 CAIRP-Oth	16.4	3,512.5	0	3,512.5	376.9		
TMPO		All Sub-Areas	2050	Annual	ib-Areas-2050-A	T7 NNOOS Class 8-Dsl	T7 NNOOS-Dsl	65.1	18,542.5	18,542.5	0	1,495.8	0.0003	0.0011
TMPO		All Sub-Areas	2050	Annual	ib-Areas-2050-A	T7 NOOS Class 8-Dsl	T7 NOOS-Dsl	28.1	6,736.2	6,736.2	0	645.2	0.0001	0.0005
TMPO		All Sub-Areas	2050	Annual	ib-Areas-2050-A	T7 Other Port Class 8-Dsl	T7 Other Port-Dsl	0.0000	0.0004	0.0004	0	0.0000	0	0
TMPO		All Sub-Areas	2050	Annual	ib-Areas-2050-A	T7 Other Port Class 8-Elec	T7 Other Port-Oth	0.0000	0.0001	0	0.0001	0.0000		
TMPO		All Sub-Areas	2050	Annual	ib-Areas-2050-A	T7 POAK Class 8-Dsl	T7 POAK-Dsl	0.0000	0.0002	0.0002	0	0.0000	0	0
TMPO		All Sub-Areas	2050	Annual	ib-Areas-2050-A	T7 POAK Class 8-Elec	T7 POAK-Oth	0.0000	0.0000	0	0.0000	0.0000		
TMPO		All Sub-Areas	2050	Annual	ib-Areas-2050-A	T7 POLA Class 8-Dsl	T7 POLA-Dsl	0.0000	0.0003	0.0003	0	0.0000	0	0
TMPO		All Sub-Areas	2050	Annual	ib-Areas-2050-A	T7 POLA Class 8-Elec	T7 POLA-Oth	0.0000	0.0001	0	0.0001	0.0000		
TMPO		All Sub-Areas	2050	Annual	ib-Areas-2050-A	T7 Public Class 8-Dsl	T7 Public-Dsl	64.4	2,610.3	2,610.3	0	330.6	0.0001	0.0001
TMPO		All Sub-Areas	2050	Annual	ib-Areas-2050-A	T7 Public Class 8-Elec	T7 Public-Oth	48.5	2,210.7	0	2,210.7	249.1		
TMPO		All Sub-Areas	2050	Annual	ib-Areas-2050-A	T7 Public Class 8-NG	T7 Public-NG	0.2164	8.86	8.86	0	1.11	0.0000	0.0000
TMPO		All Sub-Areas	2050	Annual	ib-Areas-2050-A	T7 SWCV Class 8-Dsl	T7 SWCV-Dsl	1.94	125.6	125.6	0	8.91	0.0000	0.0000
TMPO		All Sub-Areas	2050	Annual	ib-Areas-2050-A	T7 SWCV Class 8-Elec	T7 SWCV-Oth	1.74	112.5	0	112.5	8.02		
TMPO		All Sub-Areas	2050	Annual	ib-Areas-2050-A	T7 SWCV Class 8-NG	T7 SWCV-NG	0.0000	0.0000	0.0000	0	0.0000	0	0
TMPO		All Sub-Areas	2050	Annual	ib-Areas-2050-A	T7 Single Concrete/Transit Mix Class 8-Dsl	T7 Single-Dsl	0.0000	0.0001	0.0001	0	0.0000	0	0
TMPO		All Sub-Areas	2050	Annual	ib-Areas-2050-A	T7 Single Concrete/Transit Mix Class 8-Elec	ingle Concrete/Transit Mix	0.0000	0.0001	0	0.0001	0.0000		
TMPO		All Sub-Areas	2050	Annual	ib-Areas-2050-A	T7 Single Concrete/Transit Mix Class 8-NG	T7 Single-NG	0.0000	0.0000	0.0000	0	0.0000	0	0
TMPO		All Sub-Areas	2050	Annual	ib-Areas-2050-A	T7 Single Dump Class 8-Dsl	T7 Single-Dsl	0.4398	20.7	20.7	0	4.14	0.0000	0.0000
TMPO		All Sub-Areas	2050	Annual	ib-Areas-2050-A	T7 Single Dump Class 8-Elec	T7 Single Dump-Oth	0.3814	21.7	0	21.7	3.59		
TMPO		All Sub-Areas	2050	Annual	ib-Areas-2050-A	T7 Single Dump Class 8-NG	T7 Single-NG	0.0082	0.3868	0.3868	0	0.0773	0.0000	0.0000
TMPO		All Sub-Areas	2050	Annual	ib-Areas-2050-A	T7 Single Other Class 8-Dsl	T7 Single-Dsl	2.45	655.0	655.0	0	23.1	0.0000	0.0000
TMPO		All Sub-Areas	2050	Annual	ib-Areas-2050-A	T7 Single Other Class 8-NG	T7 Single-NG	0.1129	27.5	27.5	0	1.06	0.0000	0.0000
TMPO		All Sub-Areas	2050	Annual	ib-Areas-2050-A	T7 Tractor Class 8-Dsl	T7 Tractor-Dsl	11.3	731.5	731.5	0	164.2	0.0000	0.0000
TMPO		All Sub-Areas	2050	Annual	ib-Areas-2050-A	T7 Tractor Class 8-Elec	T7 Tractor-Oth	2.21	155.3	0	155.3	32.2		
TMPO		All Sub-Areas	2050	Annual	ib-Areas-2050-A	T7 Tractor Class 8-NG	T7 Tractor-NG	0.0148	1.04	1.04	0	0.2151	0.0000	0.0000
TMPO		All Sub-Areas	2050	Annual	ib-Areas-2050-A	T7 Utility Class 8-Dsl	T7 Utility-Dsl	1.62	66.9	66.9	0	20.8	0.0000	0.0000
TMPO		All Sub-Areas	2050	Annual	ib-Areas-2050-A	T7 Utility Class 8-Elec	T7 Utility-Oth	1.34	61.2	0	61.2	17.1		
TMPO		All Sub-Areas	2050	Annual	ib-Areas-2050-A	T7IS-Elec	T7IS - Gas	0.0376	5.60	0	5.60	0.7517		
TMPO		All Sub-Areas	2050	Annual	ib-Areas-2050-A	T7IS-Gas	T7IS - Gas	0.0438	5.02	5.02	0	0.8758	0.0000	
TMPO		All Sub-Areas	2050	Annual	ib-Areas-2050-A	UBUS-Dsl	UBUS - Dsl	0.0002	0.0136	0.0136	0	0.0010	0.0000	
TMPO		All Sub-Areas	2050	Annual	ib-Areas-2050-A	UBUS-Elec	UBUS - Oth	0.0001	0.0136	0	0.0136	0.0005		
TMPO		All Sub-Areas	2050	Annual	ib-Areas-2050-A	UBUS-Gas	UBUS - Gas	0.0001	0.0068	0.0068	0	0.0003	0	
TMPO		All Sub-Areas	2050	Annual	ib-Areas-2050-A	UBUS-NG	UBUS - NG	0.0001	0.0068	0.0068	0	0.0004	0.0000	

Veh_Tech	TOG_STREX	TOG_TOTEX	TOG_DIURN	TOG_HTSK	TOG_RUNLS	TOG_TOTAL	ROG_RUNEX	ROG_IDLEX	ROG_STREX	ROG_TOTEX	ROG_DIURN	ROG_HTSK	ROG_RUNLS	ROG_TOTAL
All Vehicles	0.0330	0.0478	0.0448	0.0108	0.0396	0.1430	0.0090	0.0025	0.0302	0.0416	0.0448	0.0108	0.0396	0.1368
All Other Buses-Dsl		0.0000				0.0000	0.0000	0.0000		0.0000				0.0000
All Other Buses-NG		0.0000				0.0000	0.0000	0.0000		0.0000				0.0000
LDA-Dsl		0.0000				0.0000	0.0000			0.0000				0.0000
LDA-Elec		0				0				0				0
LDA-Gas	0.0122	0.0145	0.0157	0.0022	0.0126	0.0450	0.0016		0.0111	0.0127	0.0157	0.0022	0.0126	0.0432
LDA-Phe	0.0008	0.0008	0.0007	0.0001	0.0003	0.0020	0.0000		0.0007	0.0007	0.0007	0.0001	0.0003	0.0019
LDT1-Dsl		0.0000				0.0000	0.0000			0.0000				0.0000
LDT1-Elec		0				0				0				0
LDT1-Gas	0.0009	0.0010	0.0018	0.0002	0.0013	0.0044	0.0001		0.0008	0.0009	0.0018	0.0002	0.0013	0.0043
LDT1-Phe	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0001
LDT2-Dsl		0.0000				0.0000	0.0000			0.0000				0.0000
LDT2-Elec		0				0				0				0
LDT2-Gas	0.0101	0.0119	0.0139	0.0018	0.0103	0.0380	0.0013		0.0092	0.0105	0.0139	0.0018	0.0103	0.0365
LDT2-Phe	0.0003	0.0003	0.0003	0.0000	0.0001	0.0007	0.0000		0.0002	0.0002	0.0003	0.0000	0.0001	0.0006
LHD1-Dsl		0.0008				0.0008	0.0007	0.0000		0.0007				0.0007
LHD1-Elec		0				0				0				0
LHD1-Gas	0.0007	0.0009	0.0011	0.0001	0.0016	0.0037	0.0001	0.0001	0.0006	0.0008	0.0011	0.0001	0.0016	0.0036
LHD2-Dsl		0.0006				0.0006	0.0005	0.0000		0.0005				0.0005
LHD2-Elec		0				0				0				0
LHD2-Gas	0.0000	0.0001	0.0001	0.0000	0.0001	0.0003	0.0000	0.0000	0.0000	0.0001	0.0001	0.0000	0.0001	0.0003
MCY-Gas	0.0022	0.0063	0.0034	0.0052	0.0074	0.0222	0.0033		0.0021	0.0053	0.0034	0.0052	0.0074	0.0212
MDV-Dsl		0.0000				0.0000	0.0000			0.0000				0.0000
MDV-Elec		0				0				0				0
MDV-Gas	0.0056	0.0066	0.0075	0.0010	0.0056	0.0207	0.0007		0.0051	0.0058	0.0075	0.0010	0.0056	0.0199
MDV-Phe	0.0002	0.0002	0.0002	0.0000	0.0001	0.0004	0.0000		0.0001	0.0001	0.0002	0.0000	0.0001	0.0004
MH-Dsl		0.0000				0.0000	0.0000			0.0000				0.0000
MH-Gas	0.0000	0.0000	0.0001	0.0000	0.0000	0.0001	0.0000		0.0000	0.0000	0.0001	0.0000	0.0000	0.0001
Motor Coach-Dsl		0.0001				0.0001	0.0000	0.0000		0.0001				0.0001
OBUS-Elec		0				0				0				0
OBUS-Gas	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001
PTO-Dsl		0.0000				0.0000	0.0000			0.0000				0.0000
PTO-Elec		0				0				0				0
SBUS-Dsl		0.0000				0.0000	0.0000	0.0000		0.0000				0.0000
SBUS-Elec		0				0				0				0
SBUS-Gas	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
T6 CAIRP Class 4-Dsl		0				0	0	0		0				0
T6 CAIRP Class 4-Elec		0				0				0				0
T6 CAIRP Class 5-Dsl		0				0	0	0		0				0
T6 CAIRP Class 5-Elec		0				0				0				0
T6 CAIRP Class 6-Dsl		0				0	0	0		0				0
T6 CAIRP Class 6-Elec		0				0				0				0
T6 CAIRP Class 7-Dsl		0				0	0	0		0				0
T6 CAIRP Class 7-Elec		0				0				0				0
T6 Instate Delivery Class 4-Dsl		0.0000				0.0000	0.0000	0.0000		0.0000				0.0000
T6 Instate Delivery Class 4-Elec		0				0				0				0
T6 Instate Delivery Class 5-Dsl		0.0000				0.0000	0.0000	0.0000		0.0000				0.0000
T6 Instate Delivery Class 5-Elec		0				0				0				0
T6 Instate Delivery Class 6-Dsl		0.0000				0.0000	0.0000	0.0000		0.0000				0.0000
T6 Instate Delivery Class 6-Elec		0				0				0				0
T6 Instate Delivery Class 7-Dsl		0.0000				0.0000	0.0000	0.0000		0.0000				0.0000
T6 Instate Delivery Class 7-Elec		0				0				0				0
T6 Instate Other Class 4-Dsl		0.0000				0.0000	0.0000	0.0000		0.0000				0.0000
T6 Instate Other Class 4-Elec		0				0				0				0
T6 Instate Other Class 5-Dsl		0.0000				0.0000	0.0000	0.0000		0.0000				0.0000
T6 Instate Other Class 5-Elec		0				0				0				0
T6 Instate Other Class 6-Dsl		0.0000				0.0000	0.0000	0.0000		0.0000				0.0000
T6 Instate Other Class 6-Elec		0				0				0				0
T6 Instate Other Class 7-Dsl		0.0000				0.0000	0.0000	0.0000		0.0000				0.0000
T6 Instate Other Class 7-Elec		0				0				0				0
T6 Instate Tractor Class 6-Dsl		0				0	0	0		0				0
T6 Instate Tractor Class 6-Elec		0				0				0				0
T6 Instate Tractor Class 7-Dsl		0				0	0	0		0				0
T6 Instate Tractor Class 7-Elec		0				0				0				0
T6 OOS Class 4-Dsl		0				0	0	0		0				0
T6 OOS Class 5-Dsl		0				0	0	0		0				0
T6 OOS Class 6-Dsl		0				0	0	0		0				0
T6 OOS Class 7-Dsl		0				0	0	0		0				0
T6 Public Class 4-Dsl		0.0000				0.0000	0.0000	0.0000		0.0000				0.0000
T6 Public Class 4-Elec		0				0				0				0
T6 Public Class 5-Dsl		0.0000				0.0000	0.0000	0.0000		0.0000				0.0000
T6 Public Class 5-Elec		0				0				0				0
T6 Public Class 6-Dsl		0.0000				0.0000	0.0000	0.0000		0.0000				0.0000
T6 Public Class 6-Elec		0				0				0				0
T6 Public Class 7-Dsl		0.0000				0.0000	0.0000	0.0000		0.0000				0.0000
T6 Public Class 7-Elec		0				0				0				0
T6 Utility Class 5-Dsl		0.0000				0.0000	0.0000	0.0000		0.0000				0.0000
T6 Utility Class 5-Elec		0				0				0				0
T6 Utility Class 6-Dsl		0.0000				0.0000	0.0000	0.0000		0.0000				0.0000
T6 Utility Class 6-Elec		0				0				0				0
T6 Utility Class 7-Dsl		0.0000				0.0000	0.0000	0.0000		0.0000				0.0000
T6 Utility Class 7-Elec		0				0				0				0
T6TS-Elec		0				0				0				0
T6TS-Gas	0.0002	0.0003	0.0001	0.0000	0.0002	0.0006	0.0000	0.0000	0.0002	0.0002	0.0001	0.0000	0.0002	0.0006
T7 CAIRP Class 8-Dsl		0.0009				0.0009	0.0002	0.0007		0.0008				0.0008
T7 CAIRP Class 8-Elec		0				0				0				0
T7 NNOOS Class 8-Dsl		0.0013				0.0013	0.0002	0.0009		0.0012				0.0012
T7 NOOS Class 8-Dsl		0.0006				0.0006	0.0001	0.0004		0.0005				0.0005
T7 Other Port Class 8-Dsl		0				0	0	0		0				0
T7 Other Port Class 8-Elec		0				0				0				0
T7 POAK Class 8-Dsl		0				0	0	0		0				0
T7 POAK Class 8-Elec		0				0				0				0
T7 POLA Class 8-Dsl		0				0	0	0		0				0
T7 POLA Class 8-Elec		0				0				0				0
T7 Public Class 8-Dsl		0.0002				0.0002	0.0001	0.0001		0.0001				0.0001
T7 Public Class 8-Elec		0				0				0				0
T7 Public Class 8-NG		0.0000				0.0000	0.0000	0.0000		0.0000				0.0000
T7 SWCV Class 8-Dsl		0.0000				0.0000	0.0000	0.0000		0.0000				0.0000
T7 SWCV Class 8-Elec		0				0				0				0
T7 SWCV Class 8-NG		0				0	0	0		0				0
T7 Single Concrete/Transit Mix Class 8-Dsl		0				0	0	0		0				0
T7 Single Concrete/Transit Mix Class 8-Elec		0				0				0				0
T7 Single Concrete/Transit Mix Class 8-NG		0				0	0	0		0				0
T7 Single Dump Class 8-Dsl		0.0000				0.0000	0.0000	0.0000		0.0000				0.0000
T7 Single Dump Class 8-Elec		0				0				0				0
T7 Single Dump Class 8-NG		0.0000				0.0000	0.0000	0.0000		0.0000				0.0000
T7 Single Other Class 8-Dsl		0.0000				0.0000	0.0000	0.0000		0.0000				0.0000
T7 Single Other Class 8-NG		0.0000				0.0000	0.0000	0.0000		0.0000				0.0000
T7 Tractor Class 8-Dsl		0.0001				0.0001	0.0000	0.0000		0.0001				0.0001
T7 Tractor Class 8-Elec		0				0				0				0
T7 Tractor Class 8-NG		0.0000				0.0000	0.0000	0.0000		0.0000				0.0000
T7 Utility Class 8-Dsl		0.0000				0.0000	0.0000	0.0000		0.0000				0.0000
T7 Utility Class 8-Elec		0				0				0				0
T7IS-Elec		0				0				0				0
T7IS-Gas	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
UBUS-Dsl		0.0000				0.0000	0.0000			0.0000				0.0000
UBUS-Elec		0				0				0				0
UBUS-Gas	0	0	0	0	0	0.0000	0		0	0	0	0	0	0.0000
UBUS-NG		0.0000				0.0000	0.0000			0.0000				0.0000
All Vehicles	0.0330	0.0478	0.0448	0.0108	0.0396	0.1430	0.0090	0.0025	0.0302	0.0416	0.0448	0.0108	0.0396	0.1368

Veh_Tech	TOG_STREX	TOG_TOTEX	TOG_DIURN	TOG_HTSK	TOG_RUNLS	TOG_TOTAL	ROG_RUNEX	ROG_IDLEX	ROG_STREX	ROG_TOTEX	ROG_DIURN	ROG_HTSK	ROG_RUNLS	ROG_TOTAL
All Other Buses-Dsl		0.0000				0.0000	0.0000	0.0000		0.0000				0.0000
All Other Buses-NG		0.0000				0.0000	0.0000	0.0000		0.0000				0.0000
LDA-Dsl		0.0000				0.0000	0.0000			0.0000				0.0000
LDA-Elec		0				0				0				0
LDA-Gas	0.0122	0.0145	0.0157	0.0022	0.0126	0.0450	0.0016		0.0111	0.0127	0.0157	0.0022	0.0126	0.0432
LDA-Phe	0.0008	0.0008	0.0007	0.0001	0.0003	0.0020	0.0000		0.0007	0.0007	0.0007	0.0001	0.0003	0.0019
LDT1-Dsl		0.0000				0.0000	0.0000			0.0000				0.0000
LDT1-Elec		0				0				0				0
LDT1-Gas	0.0009	0.0010	0.0018	0.0002	0.0013	0.0044	0.0001		0.0008	0.0009	0.0018	0.0002	0.0013	0.0043
LDT1-Phe	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0001
LDT2-Dsl		0.0000				0.0000	0.0000			0.0000				0.0000
LDT2-Elec		0				0				0				0
LDT2-Gas	0.0101	0.0119	0.0139	0.0018	0.0103	0.0380	0.0013		0.0092	0.0105	0.0139	0.0018	0.0103	0.0365
LDT2-Phe	0.0003	0.0003	0.0003	0.0000	0.0001	0.0007	0.0000		0.0002	0.0002	0.0003	0.0000	0.0001	0.0006
LHD1-Dsl		0.0008				0.0008	0.0007	0.0000		0.0007				0.0007
LHD1-Elec		0				0				0				0
LHD1-Gas	0.0007	0.0009	0.0011	0.0001	0.0016	0.0037	0.0001	0.0001	0.0006	0.0008	0.0011	0.0001	0.0016	0.0036
LHD2-Dsl		0.0006				0.0006	0.0005	0.0000		0.0005				0.0005
LHD2-Elec		0				0				0				0
LHD2-Gas	0.0000	0.0001	0.0001	0.0000	0.0001	0.0003	0.0000	0.0000	0.0000	0.0001	0.0001	0.0000	0.0001	0.0003
MCY-Gas	0.0022	0.0063	0.0034	0.0052	0.0074	0.0222	0.0033		0.0021	0.0053	0.0034	0.0052	0.0074	0.0212
MDV-Dsl		0.0000				0.0000	0.0000			0.0000				0.0000
MDV-Elec		0				0				0				0
MDV-Gas	0.0056	0.0066	0.0075	0.0010	0.0056	0.0207	0.0007		0.0051	0.0058	0.0075	0.0010	0.0056	0.0199
MDV-Phe	0.0002	0.0002	0.0002	0.0000	0.0001	0.0004	0.0000		0.0001	0.0001	0.0002	0.0000	0.0001	0.0004
MH-Dsl		0.0000				0.0000	0.0000			0.0000				0.0000
MH-Gas	0.0000	0.0000	0.0001	0.0000	0.0000	0.0001	0.0000		0.0000	0.0000	0.0001	0.0000	0.0000	0.0001
Motor Coach-Dsl		0.0001				0.0001	0.0000	0.0000		0.0001				0.0001
OBUS-Elec		0				0				0				0
OBUS-Gas	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001
PTO-Dsl		0.0000				0.0000	0.0000			0.0000				0.0000
PTO-Elec		0				0				0				0
SBUS-Dsl		0.0000				0.0000	0.0000	0.0000		0.0000				0.0000
SBUS-Elec		0				0				0				0
SBUS-Gas	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
T6 CAIRP Class 4-Dsl		0				0	0	0		0				0
T6 CAIRP Class 4-Elec		0				0				0				0
T6 CAIRP Class 5-Dsl		0				0	0	0		0				0
T6 CAIRP Class 5-Elec		0				0				0				0
T6 CAIRP Class 6-Dsl		0				0	0	0		0				0
T6 CAIRP Class 6-Elec		0				0				0				0
T6 CAIRP Class 7-Dsl		0				0	0	0		0				0
T6 CAIRP Class 7-Elec		0				0				0				0
T6 Instate Delivery Class 4-Dsl		0.0000				0.0000	0.0000	0.0000		0.0000				0.0000
T6 Instate Delivery Class 4-Elec		0				0				0				0
T6 Instate Delivery Class 5-Dsl		0.0000				0.0000	0.0000	0.0000		0.0000				0.0000
T6 Instate Delivery Class 5-Elec		0				0				0				0
T6 Instate Delivery Class 6-Dsl		0.0000				0.0000	0.0000	0.0000		0.0000				0.0000
T6 Instate Delivery Class 6-Elec		0				0				0				0
T6 Instate Delivery Class 7-Dsl		0.0000				0.0000	0.0000	0.0000		0.0000				0.0000
T6 Instate Delivery Class 7-Elec		0				0				0				0
T6 Instate Other Class 4-Dsl		0.0000				0.0000	0.0000	0.0000		0.0000				0.0000
T6 Instate Other Class 4-Elec		0				0				0				0
T6 Instate Other Class 5-Dsl		0.0000				0.0000	0.0000	0.0000		0.0000				0.0000
T6 Instate Other Class 5-Elec		0				0				0				0
T6 Instate Other Class 6-Dsl		0.0000				0.0000	0.0000	0.0000		0.0000				0.0000
T6 Instate Other Class 6-Elec		0				0				0				0
T6 Instate Other Class 7-Dsl		0.0000				0.0000	0.0000	0.0000		0.0000				0.0000
T6 Instate Other Class 7-Elec		0				0				0				0
T6 Instate Tractor Class 6-Dsl		0				0	0	0		0				0
T6 Instate Tractor Class 6-Elec		0				0				0				0
T6 Instate Tractor Class 7-Dsl		0				0	0	0		0				0
T6 Instate Tractor Class 7-Elec		0				0				0				0
T6 OOS Class 4-Dsl		0				0	0	0		0				0
T6 OOS Class 5-Dsl		0				0	0	0		0				0
T6 OOS Class 6-Dsl		0				0	0	0		0				0
T6 OOS Class 7-Dsl		0				0	0	0		0				0
T6 Public Class 4-Dsl		0.0000				0.0000	0.0000	0.0000		0.0000				0.0000
T6 Public Class 4-Elec		0				0				0				0
T6 Public Class 5-Dsl		0.0000				0.0000	0.0000	0.0000		0.0000				0.0000
T6 Public Class 5-Elec		0				0				0				0
T6 Public Class 6-Dsl		0.0000				0.0000	0.0000	0.0000		0.0000				0.0000
T6 Public Class 6-Elec		0				0				0				0
T6 Public Class 7-Dsl		0.0000				0.0000	0.0000	0.0000		0.0000				0.0000
T6 Public Class 7-Elec		0				0				0				0
T6 Utility Class 5-Dsl		0.0000				0.0000	0.0000	0.0000		0.0000				0.0000
T6 Utility Class 5-Elec		0				0				0				0
T6 Utility Class 6-Dsl		0.0000				0.0000	0.0000	0.0000		0.0000				0.0000
T6 Utility Class 6-Elec		0				0				0				0
T6 Utility Class 7-Dsl		0.0000				0.0000	0.0000	0.0000		0.0000				0.0000
T6 Utility Class 7-Elec		0				0				0				0
T6TS-Elec		0				0				0				0
T6TS-Gas	0.0002	0.0003	0.0001	0.0000	0.0002	0.0006	0.0000	0.0000	0.0002	0.0002	0.0001	0.0000	0.0002	0.0006
T7 CAIRP Class 8-Dsl		0.0009				0.0009	0.0002	0.0007		0.0008				0.0008
T7 CAIRP Class 8-Elec		0				0				0				0
T7 NNOOS Class 8-Dsl		0.0013				0.0013	0.0002	0.0009		0.0012				0.0012
T7 NOOS Class 8-Dsl		0.0006				0.0006	0.0001	0.0004		0.0005				0.0005
T7 Other Port Class 8-Dsl		0				0	0	0		0				0
T7 Other Port Class 8-Elec		0				0				0				0
T7 POAK Class 8-Dsl		0				0	0	0		0				0
T7 POAK Class 8-Elec		0				0				0				0
T7 POLA Class 8-Dsl		0				0	0	0		0				0
T7 POLA Class 8-Elec		0				0				0				0
T7 Public Class 8-Dsl		0.0002				0.0002	0.0001	0.0001		0.0001				0.0001
T7 Public Class 8-Elec		0				0				0				0
T7 Public Class 8-NG		0.0000				0.0000	0.0000	0.0000		0.0000				0.0000
T7 SWCV Class 8-Dsl		0.0000				0.0000	0.0000	0.0000		0.0000				0.0000
T7 SWCV Class 8-Elec		0				0				0				0
T7 SWCV Class 8-NG		0				0	0	0		0				0
T7 Single Concrete/Transit Mix Class 8-Dsl		0				0	0	0		0				0
T7 Single Concrete/Transit Mix Class 8-Elec		0				0				0				0
T7 Single Concrete/Transit Mix Class 8-NG		0				0	0	0		0				0
T7 Single Dump Class 8-Dsl		0.0000				0.0000	0.0000	0.0000		0.0000				0.0000
T7 Single Dump Class 8-Elec		0				0				0				0
T7 Single Dump Class 8-NG		0.0000				0.0000	0.0000	0.0000		0.0000				0.0000
T7 Single Other Class 8-Dsl		0.0000				0.0000	0.0000	0.0000		0.0000				0.0000
T7 Single Other Class 8-NG		0.0000				0.0000	0.0000	0.0000		0.0000				0.0000
T7 Tractor Class 8-Dsl		0.0001				0.0001	0.0000	0.0000		0.0001				0.0001
T7 Tractor Class 8-Elec		0				0				0				0
T7 Tractor Class 8-NG		0.0000				0.0000	0.0000	0.0000		0.0000				0.0000
T7 Utility Class 8-Dsl		0.0000				0.0000	0.0000	0.0000		0.0000				0.0000
T7 Utility Class 8-Elec		0				0				0				0
T7IS-Elec		0				0				0				0
T7IS-Gas	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
UBUS-Dsl		0.0000				0.0000	0.0000			0.0000				0.0000
UBUS-Elec		0				0				0				0
UBUS-Gas	0	0	0	0	0	0.0000	0		0	0	0	0	0	0.0000
UBUS-NG		0.0000				0.0000	0.0000			0.0000				0.0000

Veh_Tech	CO_RUNEX	CO_IDLEX	CO_STREX	CO_TOTEX	NOx_RUNEX	NOx_IDLEX	NOx_STREX	NOx_TOTEX	CO2_RUNEX	CO2_IDLEX	CO2_STREX	CO2_TOTEX	PM10_RUNEX	PM10_IDLEX
All Vehicles	0.7401	0.0370	0.4092	1.19	0.1048	0.0244	0.0488	0.1781	386.7	4.69	8.71	400.1	0.0022	0.0000
All Other Buses-Dsl	0.0002	0.0001		0.0003	0.0016	0.0001	0.0003	0.0020	1.94	0.0231		1.97	0.0000	0.0000
All Other Buses-NG	0.0001	0.0000		0.0001	0.0000	0.0000		0.0000	0.0275	0.0009		0.0284	0.0000	0.0000
LDA-Dsl	0.0001			0.0001	0.0000			0.0000	0.0620			0.0620	0.0000	
LDA-Elec				0				0				0		
LDA-Gas	0.3188		0.1562	0.4751	0.0143		0.0139	0.0282	128.8		3.62	132.5	0.0003	
LDA-Phe	0.0055		0.0055	0.0110	0.0001		0.0004	0.0005	3.44		0.1619	3.60	0.0000	
LDT1-Dsl	0.0000			0.0000	0.0000			0.0000	0.0001			0.0001	0.0000	
LDT1-Elec				0				0				0		
LDT1-Gas	0.0203		0.0106	0.0309	0.0009		0.0010	0.0019	9.10		0.2713	9.37	0.0000	
LDT1-Phe	0.0002		0.0002	0.0003	0.0000		0.0000	0.0000	0.1082		0.0056	0.1138	0.0000	
LDT2-Dsl	0.0002			0.0002	0.0000			0.0000	0.3163			0.3163	0.0000	
LDT2-Elec				0				0				0		
LDT2-Gas	0.2120		0.1194	0.3313	0.0092		0.0102	0.0193	88.9		2.60	91.5	0.0002	
LDT2-Phe	0.0018		0.0018	0.0036	0.0000		0.0001	0.0002	1.13		0.0642	1.20	0.0000	
LHD1-Dsl	0.0017	0.0002		0.0019	0.0022	0.0002		0.0024	4.59	0.0250		4.61	0.0001	0.0000
LHD1-Elec				0				0				0		
LHD1-Gas	0.0081	0.0015	0.0228	0.0325	0.0003	0.0000	0.0030	0.0034	10.6	0.0407	0.1095	10.8	0.0000	
LHD2-Dsl	0.0013	0.0001		0.0014	0.0019	0.0002		0.0021	2.89	0.0248		2.91	0.0001	0.0000
LHD2-Elec				0				0				0		
LHD2-Gas	0.0007	0.0001	0.0019	0.0028	0.0000	0.0000	0.0002	0.0002	1.05	0.0038	0.0086	1.06	0.0000	
MCY-Gas	0.0479		0.0203	0.0682	0.0024		0.0001	0.0025	0.7323		0.0374	0.7697	0.0000	
MDV-Dsl	0.0003			0.0003	0.0000			0.0000	0.6790			0.6790	0.0000	
MDV-Elec				0				0				0		
MDV-Gas	0.1162		0.0660	0.1822	0.0050		0.0058	0.0108	58.7		1.75	60.4	0.0001	
MDV-Phe	0.0011		0.0011	0.0022	0.0000		0.0001	0.0001	0.6810		0.0481	0.7291	0.0000	
MH-Dsl	0.0001			0.0001	0.0008			0.0008	0.3490			0.3490	0.0000	
MH-Gas	0.0001		0.0000	0.0001	0.0001		0.0000	0.0001	0.9061		0.0001	0.9062	0.0000	
Motor Coach-Dsl	0.0001	0.0007		0.0008	0.0014	0.0002	0.0003	0.0019	2.36	0.1018		2.46	0.0000	0.0000
OBUS-Elec				0				0				0		
OBUS-Gas	0.0000	0.0000	0.0003	0.0004	0.0001	0.0000	0.0000	0.0001	0.2891	0.0018	0.0024	0.2933	0.0000	
PTO-Dsl	0.0001			0.0001	0.0009			0.0009	0.3339			0.3339	0.0000	
PTO-Elec				0				0				0		
SBUS-Dsl	0.0000	0.0001		0.0002	0.0001	0.0001	0.0002	0.0004	0.4107	0.0359		0.4466	0.0000	0.0000
SBUS-Elec				0				0				0		
SBUS-Gas	0.0000	0.0002	0.0001	0.0003	0.0000	0.0000	0.0000	0.0000	0.0734	0.0042	0.0003	0.0779	0.0000	
T6 CAIRP Class 4-Dsl	0	0		0	0	0	0	0	0.0000	0.0000		0.0000	0	0
T6 CAIRP Class 4-Elec				0				0				0		
T6 CAIRP Class 5-Dsl	0	0		0	0	0	0	0	0.0000	0.0000		0.0000	0	0
T6 CAIRP Class 5-Elec				0				0				0		
T6 CAIRP Class 6-Dsl	0	0		0	0	0	0	0	0.0000	0.0000		0.0000	0	0
T6 CAIRP Class 6-Elec				0				0				0		
T6 CAIRP Class 7-Dsl	0	0		0	0	0	0	0	0.0000	0.0000		0.0000	0	0
T6 CAIRP Class 7-Elec				0				0				0		
T6 Instate Delivery Class 4-Dsl	0.0000	0.0000		0.0000	0.0001	0.0000	0.0001	0.0001	0.1521	0.0080		0.1601	0.0000	0.0000
T6 Instate Delivery Class 4-Elec				0				0				0		
T6 Instate Delivery Class 5-Dsl	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0001	0.0956	0.0050		0.1006	0.0000	0.0000
T6 Instate Delivery Class 5-Elec				0				0				0		
T6 Instate Delivery Class 6-Dsl	0.0000	0.0000		0.0001	0.0001	0.0000	0.0001	0.0002	0.2204	0.0116		0.2320	0.0000	0.0000
T6 Instate Delivery Class 6-Elec				0				0				0		
T6 Instate Delivery Class 7-Dsl	0.0000	0.0000		0.0000	0.0001	0.0000	0.0001	0.0002	0.1712	0.0059		0.1771	0.0000	0.0000
T6 Instate Delivery Class 7-Elec				0				0				0		
T6 Instate Other Class 4-Dsl	0.0001	0.0003		0.0003	0.0003	0.0002	0.0005	0.0010	1.31	0.0641		1.37	0.0000	0.0000
T6 Instate Other Class 4-Elec				0				0				0		
T6 Instate Other Class 5-Dsl	0.0001	0.0003		0.0004	0.0004	0.0002	0.0005	0.0012	1.54	0.0755		1.62	0.0000	0.0000
T6 Instate Other Class 5-Elec				0				0				0		
T6 Instate Other Class 6-Dsl	0.0000	0.0001		0.0002	0.0002	0.0001	0.0002	0.0005	0.7022	0.0347		0.7368	0.0000	0.0000
T6 Instate Other Class 6-Elec				0				0				0		
T6 Instate Other Class 7-Dsl	0.0000	0.0001		0.0001	0.0002	0.0001	0.0002	0.0006	0.6427	0.0291		0.6718	0.0000	0.0000
T6 Instate Other Class 7-Elec				0				0				0		
T6 Instate Tractor Class 6-Dsl	0	0		0	0.0000	0.0000	0	0.0000	0.0000	0.0000		0.0000	0	0
T6 Instate Tractor Class 6-Elec				0				0				0		
T6 Instate Tractor Class 7-Dsl	0	0		0	0.0000	0.0000	0	0.0000	0.0000	0.0000		0.0000	0	0
T6 Instate Tractor Class 7-Elec				0				0				0		
T6 OOS Class 4-Dsl	0	0		0	0	0	0	0	0.0000	0		0.0000	0	0
T6 OOS Class 5-Dsl	0	0		0	0	0	0	0	0.0000	0		0.0000	0	0
T6 OOS Class 6-Dsl	0	0		0	0	0	0	0	0.0000	0		0.0000	0	0
T6 OOS Class 7-Dsl	0	0		0	0	0	0	0	0.0000	0		0.0000	0	0
T6 Public Class 4-Dsl	0.0000	0.0001		0.0001	0.0001	0.0001	0.0000	0.0002	0.2681	0.0197		0.2878	0.0000	0.0000
T6 Public Class 4-Elec				0				0				0		
T6 Public Class 5-Dsl	0.0000	0.0001		0.0002	0.0002	0.0001	0.0001	0.0004	0.4650	0.0341		0.4991	0.0000	0.0000
T6 Public Class 5-Elec				0				0				0		
T6 Public Class 6-Dsl	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0001	0.1236	0.0091		0.1327	0.0000	0.0000
T6 Public Class 6-Elec				0				0				0		
T6 Public Class 7-Dsl	0.0001	0.0004		0.0005	0.0006	0.0004	0.0003	0.0013	1.72	0.1035		1.83	0.0000	0.0000
T6 Public Class 7-Elec				0				0				0		
T6 Utility Class 5-Dsl	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0706	0.0024		0.0731	0.0000	0.0000
T6 Utility Class 5-Elec				0				0				0		
T6 Utility Class 6-Dsl	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0133	0.0005		0.0138	0.0000	0.0000
T6 Utility Class 6-Elec				0				0				0		
T6 Utility Class 7-Dsl	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0184	0.0005		0.0189	0.0000	0.0000
T6 Utility Class 7-Elec				0				0				0		
T6TS-Elec				0				0				0		
T6TS-Gas	0.0003	0.0006	0.0029	0.0037	0.0001	0.0000	0.0004	0.0005	2.56	0.0159	0.0229	2.60	0.0000	
T7 CAIRP Class 8-Dsl	0.0005	0.0100		0.0105	0.0162	0.0052	0.0024	0.0238	17.0	1.29		18.3	0.0004	0.0000
T7 CAIRP Class 8-Elec				0				0				0		
T7 NNOOS Class 8-Dsl	0.0008	0.0137		0.0145	0.0273	0.0110	0.0039	0.0422	24.8	1.70		26.5	0.0006	0.0000
T7 NOOS Class 8-Dsl	0.0003	0.0059		0.0062	0.0102	0.0047	0.0017	0.0166	9.01	0.7330		9.74	0.0002	0.0000
T7 Other Port Class 8-Dsl	0	0.0000		0.0000	0.0000	0	0	0.0000	0.0000	0.0000		0.0000	0	0
T7 Other Port Class 8-Elec				0				0				0		
T7 POAK Class 8-Dsl	0	0.0000		0.0000	0.0000	0	0	0.0000	0.0000	0.0000		0.0000	0	0
T7 POAK Class 8-Elec				0				0				0		
T7 POLA Class 8-Dsl	0	0.0000		0.0000	0.0000	0	0	0.0000	0.0000	0.0000		0.0000	0	0
T7 POLA Class 8-Elec				0				0				0		
T7 Public Class 8-Dsl	0.0004	0.0012		0.0016	0.0039	0.0007	0.0020	0.0066	4.52	0.1758		4.70	0.0000	0.0000
T7 Public Class 8-Elec				0				0				0		
T7 Public Class 8-NG	0.0001	0.0000		0.0001	0.0000	0.0000		0.0000	0.0133	0.0013		0.0146	0.0000	0.0000
T7 SWCV Class 8-Dsl	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0001	0.4202	0.0057		0.4258	0.0000	0.0000
T7 SWCV Class 8-Elec				0				0				0		
T7 SWCV Class 8-NG	0	0		0	0	0		0	0.0000	0.0000		0.0000	0	0
T7 Single Concrete/Transit Mix Class 8-Dsl	0	0		0	0.0000	0	0	0.0000	0.0000	0.0000		0.0000	0	0
T7 Single Concrete/Transit Mix Class 8-Elec				0				0				0		
T7 Single Concrete/Transit Mix Class 8-NG	0	0		0	0	0		0	0.0000	0.0000		0.0000	0	0
T7 Single Dump Class 8-Dsl	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0333	0.0018		0.0351	0.0000	0.0000
T7 Single Dump Class 8-Elec				0				0				0		
T7 Single Dump Class 8-NG	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000	0.0005	0.0001		0.0005	0.0000	0.0000
T7 Single Other Class 8-Dsl	0.0001	0.0001		0.0002	0.0022	0.0001	0.0001	0.0023	1.16	0.0136		1.17	0.0000	0.0000
T7 Single Other Class 8-NG	0.0003	0.0000		0.0003	0.0000	0.0000		0.0000	0.0404	0.0011		0.0415	0.0000	0.0000
T7 Tractor Class 8-Dsl	0.0000	0.0006		0.0007	0.0009	0.0004	0.0006	0.0019	1.01	0.0819		1.09	0.0000	0.0000
T7 Tractor Class 8-Elec				0				0				0		
T7 Tractor Class 8-NG	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000	0.0011	0.0002		0.0014	0.0000	0.0000
T7 Utility Class 8-Dsl	0.0000	0.0000		0.0000	0.0001	0.0000	0.0001	0.0002	0.1121	0.0023		0.1144	0.0000	0.0000
T7 Utility Class 8-Elec				0				0				0		
T7IS-Elec				0				0				0		
T7IS-Gas	0.0002		0.0000	0.0002	0.0000		0.0000	0.0000	0.0096		0.0000	0.0096	0.0000	
UBUS-Dsl	0.0000			0.0000	0.0000			0.0000	0.0000			0.0000	0.0000	
UBUS-Elec				0				0				0		
UBUS-Gas	0.0000		0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000	0.0000	0	
UBUS-NG	0.0000			0.0000	0.0000			0.0000	0.0000			0.0000	0.0000	
All Vehicles	0.7401	0.0370	0.4092	1.19	0.1048	0.0244	0.0488	0.1781	386.7	4.69	8.71	400.1	0.0022	0.0000

Veh_Tech	CO_RUNEX	CO_IDLEX	CO_STREX	CO_TOTEX	NOx_RUNEX	NOx_IDLEX	NOx_STREX	NOx_TOTEX	CO2_RUNEX	CO2_IDLEX	CO2_STREX	CO2_TOTEX	PM10_RUNEX	PM10_IDLEX
All Other Buses-Dsl	0.0002	0.0001		0.0003	0.0016	0.0001	0.0003	0.0020	1.94	0.0231		1.97	0.0000	0.0000
All Other Buses-NG	0.0001	0.0000		0.0001	0.0000	0.0000		0.0000	0.0275	0.0009		0.0284	0.0000	0.0000
LDA-Dsl	0.0001			0.0001	0.0000			0.0000	0.0620			0.0620	0.0000	
LDA-Elec				0				0				0		
LDA-Gas	0.3188		0.1562	0.4751	0.0143		0.0139	0.0282	128.8		3.62	132.5	0.0003	
LDA-Phe	0.0055		0.0055	0.0110	0.0001		0.0004	0.0005	3.44		0.1619	3.60	0.0000	
LDT1-Dsl	0.0000			0.0000	0.0000			0.0000	0.0001			0.0001	0.0000	
LDT1-Elec				0				0				0		
LDT1-Gas	0.0203		0.0106	0.0309	0.0009		0.0010	0.0019	9.10		0.2713	9.37	0.0000	
LDT1-Phe	0.0002		0.0002	0.0003	0.0000		0.0000	0.0000	0.1082		0.0056	0.1138	0.0000	
LDT2-Dsl	0.0002			0.0002	0.0000			0.0000	0.3163			0.3163	0.0000	
LDT2-Elec				0				0				0		
LDT2-Gas	0.2120		0.1194	0.3313	0.0092		0.0102	0.0193	88.9		2.60	91.5	0.0002	
LDT2-Phe	0.0018		0.0018	0.0036	0.0000		0.0001	0.0002	1.13		0.0642	1.20	0.0000	
LHD1-Dsl	0.0017	0.0002		0.0019	0.0022	0.0002		0.0024	4.59	0.0250		4.61	0.0001	0.0000
LHD1-Elec				0				0				0		
LHD1-Gas	0.0081	0.0015	0.0228	0.0325	0.0003	0.0000	0.0030	0.0034	10.6	0.0407	0.1095	10.8	0.0000	
LHD2-Dsl	0.0013	0.0001		0.0014	0.0019	0.0002		0.0021	2.89	0.0248		2.91	0.0001	0.0000
LHD2-Elec				0				0				0		
LHD2-Gas	0.0007	0.0001	0.0019	0.0028	0.0000	0.0000	0.0002	0.0002	1.05	0.0038	0.0086	1.06	0.0000	
MCY-Gas	0.0479		0.0203	0.0682	0.0024		0.0001	0.0025	0.7323		0.0374	0.7697	0.0000	
MDV-Dsl	0.0003			0.0003	0.0000			0.0000	0.6790			0.6790	0.0000	
MDV-Elec				0				0				0		
MDV-Gas	0.1162		0.0660	0.1822	0.0050		0.0058	0.0108	58.7		1.75	60.4	0.0001	
MDV-Phe	0.0011		0.0011	0.0022	0.0000		0.0001	0.0001	0.6810		0.0481	0.7291	0.0000	
MH-Dsl	0.0001			0.0001	0.0008			0.0008	0.3490			0.3490	0.0000	
MH-Gas	0.0001		0.0000	0.0001	0.0001		0.0000	0.0001	0.9061		0.0001	0.9062	0.0000	
Motor Coach-Dsl	0.0001	0.0007		0.0008	0.0014	0.0002	0.0003	0.0019	2.36	0.1018		2.46	0.0000	0.0000
OBUS-Elec				0				0				0		
OBUS-Gas	0.0000	0.0000	0.0003	0.0004	0.0001	0.0000	0.0000	0.0001	0.2891	0.0018	0.0024	0.2933	0.0000	
PTO-Dsl	0.0001			0.0001	0.0009			0.0009	0.3339			0.3339	0.0000	
PTO-Elec				0				0				0		
SBUS-Dsl	0.0000	0.0001		0.0002	0.0001	0.0001	0.0002	0.0004	0.4107	0.0359		0.4466	0.0000	0.0000
SBUS-Elec				0				0				0		
SBUS-Gas	0.0000	0.0002	0.0001	0.0003	0.0000	0.0000	0.0000	0.0000	0.0734	0.0042	0.0003	0.0779	0.0000	
T6 CAIRP Class 4-Dsl	0	0		0	0	0	0	0	0.0000	0.0000		0.0000	0	0
T6 CAIRP Class 4-Elec				0				0				0		
T6 CAIRP Class 5-Dsl	0	0		0	0	0	0	0	0.0000	0.0000		0.0000	0	0
T6 CAIRP Class 5-Elec				0				0				0		
T6 CAIRP Class 6-Dsl	0	0		0	0	0	0	0	0.0000	0.0000		0.0000	0	0
T6 CAIRP Class 6-Elec				0				0				0		
T6 CAIRP Class 7-Dsl	0	0		0	0	0	0	0	0.0000	0.0000		0.0000	0	0
T6 CAIRP Class 7-Elec				0				0				0		
T6 Instate Delivery Class 4-Dsl	0.0000	0.0000		0.0000	0.0001	0.0000	0.0001	0.0001	0.1521	0.0080		0.1601	0.0000	0.0000
T6 Instate Delivery Class 4-Elec				0				0				0		
T6 Instate Delivery Class 5-Dsl	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0001	0.0956	0.0050		0.1006	0.0000	0.0000
T6 Instate Delivery Class 5-Elec				0				0				0		
T6 Instate Delivery Class 6-Dsl	0.0000	0.0000		0.0001	0.0001	0.0000	0.0001	0.0002	0.2204	0.0116		0.2320	0.0000	0.0000
T6 Instate Delivery Class 6-Elec				0				0				0		
T6 Instate Delivery Class 7-Dsl	0.0000	0.0000		0.0000	0.0001	0.0000	0.0001	0.0002	0.1712	0.0059		0.1771	0.0000	0.0000
T6 Instate Delivery Class 7-Elec				0				0				0		
T6 Instate Other Class 4-Dsl	0.0001	0.0003		0.0003	0.0003	0.0002	0.0005	0.0010	1.31	0.0641		1.37	0.0000	0.0000
T6 Instate Other Class 4-Elec				0				0				0		
T6 Instate Other Class 5-Dsl	0.0001	0.0003		0.0004	0.0004	0.0002	0.0005	0.0012	1.54	0.0755		1.62	0.0000	0.0000
T6 Instate Other Class 5-Elec				0				0				0		
T6 Instate Other Class 6-Dsl	0.0000	0.0001		0.0002	0.0002	0.0001	0.0002	0.0005	0.7022	0.0347		0.7368	0.0000	0.0000
T6 Instate Other Class 6-Elec				0				0				0		
T6 Instate Other Class 7-Dsl	0.0000	0.0001		0.0001	0.0002	0.0001	0.0002	0.0006	0.6427	0.0291		0.6718	0.0000	0.0000
T6 Instate Other Class 7-Elec				0				0				0		
T6 Instate Tractor Class 6-Dsl	0	0		0	0.0000	0.0000	0	0.0000	0.0000	0.0000		0.0000	0	0
T6 Instate Tractor Class 6-Elec				0				0				0		
T6 Instate Tractor Class 7-Dsl	0	0		0	0.0000	0.0000	0	0.0000	0.0000	0.0000		0.0000	0	0
T6 Instate Tractor Class 7-Elec				0				0				0		
T6 OOS Class 4-Dsl	0	0		0	0	0	0	0	0.0000	0		0.0000	0	0
T6 OOS Class 5-Dsl	0	0		0	0	0	0	0	0.0000	0		0.0000	0	0
T6 OOS Class 6-Dsl	0	0		0	0	0	0	0	0.0000	0		0.0000	0	0
T6 OOS Class 7-Dsl	0	0		0	0	0	0	0	0.0000	0		0.0000	0	0
T6 Public Class 4-Dsl	0.0000	0.0001		0.0001	0.0001	0.0001	0.0000	0.0002	0.2681	0.0197		0.2878	0.0000	0.0000
T6 Public Class 4-Elec				0				0				0		
T6 Public Class 5-Dsl	0.0000	0.0001		0.0002	0.0002	0.0001	0.0001	0.0004	0.4650	0.0341		0.4991	0.0000	0.0000
T6 Public Class 5-Elec				0				0				0		
T6 Public Class 6-Dsl	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0001	0.1236	0.0091		0.1327	0.0000	0.0000
T6 Public Class 6-Elec				0				0				0		
T6 Public Class 7-Dsl	0.0001	0.0004		0.0005	0.0006	0.0004	0.0003	0.0013	1.72	0.1035		1.83	0.0000	0.0000
T6 Public Class 7-Elec				0				0				0		
T6 Utility Class 5-Dsl	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0706	0.0024		0.0731	0.0000	0.0000
T6 Utility Class 5-Elec				0				0				0		
T6 Utility Class 6-Dsl	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0133	0.0005		0.0138	0.0000	0.0000
T6 Utility Class 6-Elec				0				0				0		
T6 Utility Class 7-Dsl	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0184	0.0005		0.0189	0.0000	0.0000
T6 Utility Class 7-Elec				0				0				0		
T6TS-Elec				0				0				0		
T6TS-Gas	0.0003	0.0006	0.0029	0.0037	0.0001	0.0000	0.0004	0.0005	2.56	0.0159	0.0229	2.60	0.0000	
T7 CAIRP Class 8-Dsl	0.0005	0.0100		0.0105	0.0162	0.0052	0.0024	0.0238	17.0	1.29		18.3	0.0004	0.0000
T7 CAIRP Class 8-Elec				0				0				0		
T7 NNOOS Class 8-Dsl	0.0008	0.0137		0.0145	0.0273	0.0110	0.0039	0.0422	24.8	1.70		26.5	0.0006	0.0000
T7 NOOS Class 8-Dsl	0.0003	0.0059		0.0062	0.0102	0.0047	0.0017	0.0166	9.01	0.7330		9.74	0.0002	0.0000
T7 Other Port Class 8-Dsl	0	0.0000		0.0000	0.0000	0	0	0.0000	0.0000	0.0000		0.0000	0	0
T7 Other Port Class 8-Elec				0				0				0		
T7 POAK Class 8-Dsl	0	0.0000		0.0000	0.0000	0	0	0.0000	0.0000	0.0000		0.0000	0	0
T7 POAK Class 8-Elec				0				0				0		
T7 POLA Class 8-Dsl	0	0.0000		0.0000	0.0000	0	0	0.0000	0.0000	0.0000		0.0000	0	0
T7 POLA Class 8-Elec				0				0				0		
T7 Public Class 8-Dsl	0.0004	0.0012		0.0016	0.0039	0.0007	0.0020	0.0066	4.52	0.1758		4.70	0.0000	0.0000
T7 Public Class 8-Elec				0				0				0		
T7 Public Class 8-NG	0.0001	0.0000		0.0001	0.0000	0.0000		0.0000	0.0133	0.0013		0.0146	0.0000	0.0000
T7 SWCV Class 8-Dsl	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0001	0.4202	0.0057		0.4258	0.0000	0.0000
T7 SWCV Class 8-Elec				0				0				0		
T7 SWCV Class 8-NG	0	0		0	0	0		0	0.0000	0.0000		0.0000	0	0
T7 Single Concrete/Transit Mix Class 8-Dsl	0	0		0	0.0000	0	0	0.0000	0.0000	0.0000		0.0000	0	0
T7 Single Concrete/Transit Mix Class 8-Elec				0				0				0		
T7 Single Concrete/Transit Mix Class 8-NG	0	0		0	0	0		0	0.0000	0.0000		0.0000	0	0
T7 Single Dump Class 8-Dsl	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0333	0.0018		0.0351	0.0000	0.0000
T7 Single Dump Class 8-Elec				0				0				0		
T7 Single Dump Class 8-NG	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000	0.0005	0.0001		0.0005	0.0000	0.0000
T7 Single Other Class 8-Dsl	0.0001	0.0001		0.0002	0.0022	0.0001	0.0001	0.0023	1.16	0.0136		1.17	0.0000	0.0000
T7 Single Other Class 8-NG	0.0003	0.0000		0.0003	0.0000	0.0000		0.0000	0.0404	0.0011		0.0415	0.0000	0.0000
T7 Tractor Class 8-Dsl	0.0000	0.0006		0.0007	0.0009	0.0004	0.0006	0.0019	1.01	0.0819		1.09	0.0000	0.0000
T7 Tractor Class 8-Elec				0				0				0		
T7 Tractor Class 8-NG	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000	0.0011	0.0002		0.0014	0.0000	0.0000
T7 Utility Class 8-Dsl	0.0000	0.0000		0.0000	0.0001	0.0000	0.0001	0.0002	0.1121	0.0023		0.1144	0.0000	0.0000
T7 Utility Class 8-Elec				0				0				0		
T7IS-Elec				0				0				0		
T7IS-Gas	0.0002		0.0000	0.0002	0.0000		0.0000	0.0000	0.0096		0.0000	0.0096	0.0000	
UBUS-Dsl	0.0000			0.0000	0.0000			0.0000	0.0000			0.0000	0.0000	
UBUS-Elec				0				0				0		
UBUS-Gas	0.0000		0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000	0.0000	0	
UBUS-NG	0.0000			0.0000	0.0000			0.0000	0.0000			0.0000	0.0000	

Veh_Tech	PM10_STREX	PM10_TOTEX	PM10_PMTW	PM10_PMBW	PM10_TOTAL	PM2_5_RUNEX	PM2_5_IDLEX	PM2_5_STREX	PM2_5_TOTEX	PM2_5_PMTW	PM2_5_PMBW	PM2_5_TOTAL	SOx_RUNEX	SOx_IDLEX
All Vehicles	0.0001	0.0024	0.0137	0.0220	0.0381	0.0021	0.0000	0.0001	0.0023	0.0034	0.0077	0.0134	0.0038	0.0000
All Other Buses-Dsl		0.0000	0.0000	0.0001	0.0001	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
All Other Buses-NG		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000		
LDA-Dsl		0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000	0.0000	0.0000	0.0000	
LDA-Elec		0	0.0007	0.0004	0.0011				0	0.0002	0.0001	0.0003		
LDA-Gas	0.0001	0.0003	0.0050	0.0062	0.0116	0.0003		0.0001	0.0003	0.0013	0.0022	0.0037	0.0013	
LDA-Phe	0.0000	0.0000	0.0002	0.0001	0.0004	0.0000		0.0000	0.0000	0.0001	0.0000	0.0001	0.0000	
LDT1-Dsl		0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000	0.0000	0.0000	0.0000	
LDT1-Elec		0	0.0000	0.0000	0.0000				0	0.0000	0.0000	0.0000		
LDT1-Gas	0.0000	0.0000	0.0003	0.0004	0.0008	0.0000		0.0000	0.0000	0.0001	0.0002	0.0002	0.0001	
LDT1-Phe	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
LDT2-Dsl		0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000	0.0000	0.0000	0.0000	
LDT2-Elec		0	0.0001	0.0000	0.0001				0	0.0000	0.0000	0.0000		
LDT2-Gas	0.0000	0.0002	0.0029	0.0041	0.0071	0.0002		0.0000	0.0002	0.0007	0.0014	0.0023	0.0009	
LDT2-Phe	0.0000	0.0000	0.0001	0.0000	0.0001	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
LHD1-Dsl		0.0002	0.0001	0.0006	0.0008	0.0001	0.0000		0.0001	0.0000	0.0002	0.0004	0.0000	0.0000
LHD1-Elec		0	0.0002	0.0008	0.0009				0	0.0000	0.0003	0.0003		
LHD1-Gas	0.0000	0.0000	0.0001	0.0011	0.0012	0.0000		0.0000	0.0000	0.0000	0.0004	0.0004	0.0001	0.0000
LHD2-Dsl		0.0001	0.0000	0.0004	0.0005	0.0001	0.0000		0.0001	0.0000	0.0001	0.0002	0.0000	0.0000
LHD2-Elec		0	0.0000	0.0002	0.0002				0	0.0000	0.0001	0.0001		
LHD2-Gas	0.0000	0.0000	0.0000	0.0001	0.0001	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
MCY-Gas	0.0000	0.0000	0.0000	0.0001	0.0001	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
MDV-Dsl		0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000	0.0000	0.0000	0.0000	
MDV-Elec		0	0.0001	0.0000	0.0001				0	0.0000	0.0000	0.0000		
MDV-Gas	0.0000	0.0001	0.0016	0.0022	0.0039	0.0001		0.0000	0.0001	0.0004	0.0008	0.0013	0.0006	
MDV-Phe	0.0000	0.0000	0.0000	0.0000	0.0001	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
MH-Dsl		0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000	0.0000	0.0000	0.0000	
MH-Gas	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Motor Coach-Dsl		0.0000	0.0000	0.0001	0.0002	0.0000	0.0000		0.0000	0.0000	0.0000	0.0001	0.0000	0.0000
OBUS-Elec		0	0.0000	0.0000	0.0000				0	0.0000	0.0000	0.0000		
OBUS-Gas	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
PTO-Dsl		0.0000			0.0000	0.0000			0.0000			0.0000	0.0000	
PTO-Elec		0			0				0			0		
SBUS-Dsl		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
SBUS-Elec		0	0.0000	0.0000	0.0000				0	0.0000	0.0000	0.0000		
SBUS-Gas	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
T6 CAIRP Class 4-Dsl		0	0	0	0	0	0		0	0	0	0	0	0
T6 CAIRP Class 4-Elec		0	0	0	0				0	0	0	0		
T6 CAIRP Class 5-Dsl		0	0	0	0	0	0		0	0	0	0	0	0
T6 CAIRP Class 5-Elec		0	0	0	0				0	0	0	0		
T6 CAIRP Class 6-Dsl		0	0	0	0	0	0		0	0	0	0	0	0
T6 CAIRP Class 6-Elec		0	0	0	0				0	0	0	0		
T6 CAIRP Class 7-Dsl		0	0	0	0	0	0		0	0	0	0	0	0
T6 CAIRP Class 7-Elec		0	0	0	0				0	0	0	0		
T6 Instate Delivery Class 4-Dsl		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
T6 Instate Delivery Class 4-Elec		0	0.0000	0.0000	0.0000				0	0.0000	0.0000	0.0000		
T6 Instate Delivery Class 5-Dsl		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
T6 Instate Delivery Class 5-Elec		0	0.0000	0.0000	0.0000				0	0.0000	0.0000	0.0000		
T6 Instate Delivery Class 6-Dsl		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
T6 Instate Delivery Class 6-Elec		0	0.0000	0.0000	0.0000				0	0.0000	0.0000	0.0000		
T6 Instate Delivery Class 7-Dsl		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
T6 Instate Delivery Class 7-Elec		0	0.0000	0.0000	0.0000				0	0.0000	0.0000	0.0000		
T6 Instate Other Class 4-Dsl		0.0000	0.0000	0.0001	0.0001	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
T6 Instate Other Class 4-Elec		0	0.0000	0.0000	0.0001				0	0.0000	0.0000	0.0000		
T6 Instate Other Class 5-Dsl		0.0000	0.0000	0.0001	0.0001	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
T6 Instate Other Class 5-Elec		0	0.0000	0.0000	0.0001				0	0.0000	0.0000	0.0000		
T6 Instate Other Class 6-Dsl		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
T6 Instate Other Class 6-Elec		0	0.0000	0.0000	0.0000				0	0.0000	0.0000	0.0000		
T6 Instate Other Class 7-Dsl		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
T6 Instate Other Class 7-Elec		0	0.0000	0.0000	0.0000				0	0.0000	0.0000	0.0000		
T6 Instate Tractor Class 6-Dsl		0	0	0	0	0	0		0	0	0	0	0	0
T6 Instate Tractor Class 6-Elec		0	0	0	0				0	0	0	0		
T6 Instate Tractor Class 7-Dsl		0	0	0	0	0	0		0	0	0	0	0	0
T6 Instate Tractor Class 7-Elec		0	0	0	0				0	0	0	0		
T6 OOS Class 4-Dsl		0	0	0	0	0	0		0	0	0	0	0	0
T6 OOS Class 5-Dsl		0	0	0	0	0	0		0	0	0	0	0	0
T6 OOS Class 6-Dsl		0	0	0	0	0	0		0	0	0	0	0	0
T6 OOS Class 7-Dsl		0	0	0	0	0	0		0	0	0	0	0	0
T6 Public Class 4-Dsl		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
T6 Public Class 4-Elec		0	0.0000	0.0000	0.0000				0	0.0000	0.0000	0.0000		
T6 Public Class 5-Dsl		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
T6 Public Class 5-Elec		0	0.0000	0.0000	0.0000				0	0.0000	0.0000	0.0000		
T6 Public Class 6-Dsl		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
T6 Public Class 6-Elec		0	0.0000	0.0000	0.0000				0	0.0000	0.0000	0.0000		
T6 Public Class 7-Dsl		0.0000	0.0000	0.0001	0.0001	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
T6 Public Class 7-Elec		0	0.0000	0.0000	0.0000				0	0.0000	0.0000	0.0000		
T6 Utility Class 5-Dsl		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
T6 Utility Class 5-Elec		0	0.0000	0.0000	0.0000				0	0.0000	0.0000	0.0000		
T6 Utility Class 6-Dsl		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
T6 Utility Class 6-Elec		0	0.0000	0.0000	0.0000				0	0.0000	0.0000	0.0000		
T6 Utility Class 7-Dsl		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
T6 Utility Class 7-Elec		0	0.0000	0.0000	0.0000				0	0.0000	0.0000	0.0000		
T6TS-Elec		0	0.0000	0.0000	0.0001				0	0.0000	0.0000	0.0000		
T6TS-Gas	0.0000	0.0000	0.0000	0.0001	0.0001	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
T7 CAIRP Class 8-Dsl		0.0004	0.0005	0.0011	0.0020	0.0004	0.0000		0.0004	0.0001	0.0004	0.0009	0.0002	0.0000
T7 CAIRP Class 8-Elec		0	0.0001	0.0002	0.0003				0	0.0000	0.0001	0.0001		
T7 NNOOS Class 8-Dsl		0.0006	0.0007	0.0017	0.0030	0.0006	0.0000		0.0006	0.0002	0.0006	0.0013	0.0002	0.0000
T7 NOOS Class 8-Dsl		0.0002	0.0003	0.0006	0.0011	0.0002	0.0000		0.0002	0.0001	0.0002	0.0005	0.0001	0.0000
T7 Other Port Class 8-Dsl		0	0	0	0	0	0		0	0	0	0	0	0
T7 Other Port Class 8-Elec		0	0	0	0				0	0	0	0		
T7 POAK Class 8-Dsl		0	0	0	0	0	0		0	0	0	0	0	0
T7 POAK Class 8-Elec		0	0	0	0				0	0	0	0		
T7 POLA Class 8-Dsl		0	0	0	0	0	0		0	0	0	0	0	0
T7 POLA Class 8-Elec		0	0	0	0				0	0	0	0		
T7 Public Class 8-Dsl		0.0000	0.0001	0.0003	0.0004	0.0000	0.0000		0.0000	0.0000	0.0001	0.0002	0.0000	0.0000
T7 Public Class 8-Elec		0	0.0001	0.0001	0.0002				0	0.0000	0.0000	0.0001		
T7 Public Class 8-NG		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000		
T7 SWCV Class 8-Dsl		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
T7 SWCV Class 8-Elec		0	0.0000	0.0000	0.0000				0	0.0000	0.0000	0.0000		
T7 SWCV Class 8-NG		0	0	0	0	0	0		0	0	0	0		
T7 Single Concrete/Transit Mix Class 8-Dsl		0	0	0	0	0	0		0	0	0	0	0	0
T7 Single Concrete/Transit Mix Class 8-Elec		0	0	0	0				0	0	0	0		
T7 Single Concrete/Transit Mix Class 8-NG		0	0	0	0	0	0		0	0	0	0		
T7 Single Dump Class 8-Dsl		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
T7 Single Dump Class 8-Elec		0	0.0000	0.0000	0.0000				0	0.0000	0.0000	0.0000		
T7 Single Dump Class 8-NG		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000		
T7 Single Other Class 8-Dsl		0.0000	0.0000	0.0001	0.0001	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
T7 Single Other Class 8-NG		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000		
T7 Tractor Class 8-Dsl		0.0000	0.0000	0.0001	0.0001	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
T7 Tractor Class 8-Elec		0	0.0000	0.0000	0.0000				0	0.0000	0.0000	0.0000		
T7 Tractor Class 8-NG		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000		
T7 Utility Class 8-Dsl		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
T7 Utility Class 8-Elec		0	0.0000	0.0000	0.0000				0	0.0000	0.0000	0.0000		
T7IS-Elec		0	0.0000	0.0000	0.0000				0	0.0000	0.0000	0.0000		
T7IS-Gas	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
UBUS-Dsl		0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0	0.0000	0.0000	0	
UBUS-Elec		0	0.0000	0.0000	0.0000				0	0.0000	0.0000	0.0000		
UBUS-Gas	0	0	0	0.0000	0.0000	0		0	0	0	0.0000	0.0000	0	
UBUS-NG		0.0000	0	0.0000	0.0000	0.0000			0.0000	0	0.0000	0.0000		
All Vehicles	0.0001	0.0024	0.0137	0.0220	0.0381	0.0021	0.0000	0.0001	0.0023	0.0034	0.0077	0.0134	0.0038	0.0000

Veh_Tech	PM10_STREX	PM10_TOTEX	PM10_PMTW	PM10_PMBW	PM10_TOTAL	PM2_5_RUNEX	PM2_5_IDLEX	PM2_5_STREX	PM2_5_TOTEX	PM2_5_PMTW	PM2_5_PMBW	PM2_5_TOTAL	SOx_RUNEX	SOx_IDLEX
All Other Buses-Dsl		0.0000	0.0000	0.0001	0.0001	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
All Other Buses-NG		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000		
LDA-Dsl		0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000	0.0000	0.0000	0.0000	
LDA-Elec		0	0.0007	0.0004	0.0011				0	0.0002	0.0001	0.0003		
LDA-Gas	0.0001	0.0003	0.0050	0.0062	0.0116	0.0003		0.0001	0.0003	0.0013	0.0022	0.0037	0.0013	
LDA-Phe	0.0000	0.0000	0.0002	0.0001	0.0004	0.0000		0.0000	0.0000	0.0001	0.0000	0.0001	0.0000	
LDT1-Dsl		0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000	0.0000	0.0000	0.0000	
LDT1-Elec		0	0.0000	0.0000	0.0000				0	0.0000	0.0000	0.0000		
LDT1-Gas	0.0000	0.0000	0.0003	0.0004	0.0008	0.0000		0.0000	0.0000	0.0001	0.0002	0.0002	0.0001	
LDT1-Phe	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
LDT2-Dsl		0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000	0.0000	0.0000	0.0000	
LDT2-Elec		0	0.0001	0.0000	0.0001				0	0.0000	0.0000	0.0000		
LDT2-Gas	0.0000	0.0002	0.0029	0.0041	0.0071	0.0002		0.0000	0.0002	0.0007	0.0014	0.0023	0.0009	
LDT2-Phe	0.0000	0.0000	0.0001	0.0000	0.0001	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
LHD1-Dsl		0.0002	0.0001	0.0006	0.0008	0.0001	0.0000		0.0001	0.0000	0.0002	0.0004	0.0000	0.0000
LHD1-Elec		0	0.0002	0.0008	0.0009				0	0.0000	0.0003	0.0003		
LHD1-Gas	0.0000	0.0000	0.0001	0.0011	0.0012	0.0000		0.0000	0.0000	0.0000	0.0004	0.0004	0.0001	0.0000
LHD2-Dsl		0.0001	0.0000	0.0004	0.0005	0.0001	0.0000		0.0001	0.0000	0.0001	0.0002	0.0000	0.0000
LHD2-Elec		0	0.0000	0.0002	0.0002				0	0.0000	0.0001	0.0001		
LHD2-Gas	0.0000	0.0000	0.0000	0.0001	0.0001	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
MCY-Gas	0.0000	0.0000	0.0000	0.0001	0.0001	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
MDV-Dsl		0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000	0.0000	0.0000	0.0000	
MDV-Elec		0	0.0001	0.0000	0.0001				0	0.0000	0.0000	0.0000		
MDV-Gas	0.0000	0.0001	0.0016	0.0022	0.0039	0.0001		0.0000	0.0001	0.0004	0.0008	0.0013	0.0006	
MDV-Phe	0.0000	0.0000	0.0000	0.0000	0.0001	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
MH-Dsl		0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000	0.0000	0.0000	0.0000	
MH-Gas	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Motor Coach-Dsl		0.0000	0.0000	0.0001	0.0002	0.0000	0.0000		0.0000	0.0000	0.0000	0.0001	0.0000	0.0000
OBUS-Elec		0	0.0000	0.0000	0.0000				0	0.0000	0.0000	0.0000		
OBUS-Gas	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
PTO-Dsl		0.0000			0.0000	0.0000			0.0000			0.0000	0.0000	
PTO-Elec		0			0				0			0		
SBUS-Dsl		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
SBUS-Elec		0	0.0000	0.0000	0.0000				0	0.0000	0.0000	0.0000		
SBUS-Gas	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
T6 CAIRP Class 4-Dsl		0	0	0	0	0	0		0	0	0	0	0	0
T6 CAIRP Class 4-Elec		0	0	0	0				0	0	0	0		
T6 CAIRP Class 5-Dsl		0	0	0	0	0	0		0	0	0	0	0	0
T6 CAIRP Class 5-Elec		0	0	0	0				0	0	0	0		
T6 CAIRP Class 6-Dsl		0	0	0	0	0	0		0	0	0	0	0	0
T6 CAIRP Class 6-Elec		0	0	0	0				0	0	0	0		
T6 CAIRP Class 7-Dsl		0	0	0	0	0	0		0	0	0	0	0	0
T6 CAIRP Class 7-Elec		0	0	0	0				0	0	0	0		
T6 Instate Delivery Class 4-Dsl		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
T6 Instate Delivery Class 4-Elec		0	0.0000	0.0000	0.0000				0	0.0000	0.0000	0.0000		
T6 Instate Delivery Class 5-Dsl		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
T6 Instate Delivery Class 5-Elec		0	0.0000	0.0000	0.0000				0	0.0000	0.0000	0.0000		
T6 Instate Delivery Class 6-Dsl		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
T6 Instate Delivery Class 6-Elec		0	0.0000	0.0000	0.0000				0	0.0000	0.0000	0.0000		
T6 Instate Delivery Class 7-Dsl		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
T6 Instate Delivery Class 7-Elec		0	0.0000	0.0000	0.0000				0	0.0000	0.0000	0.0000		
T6 Instate Other Class 4-Dsl		0.0000	0.0000	0.0001	0.0001	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
T6 Instate Other Class 4-Elec		0	0.0000	0.0000	0.0001				0	0.0000	0.0000	0.0000		
T6 Instate Other Class 5-Dsl		0.0000	0.0000	0.0001	0.0001	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
T6 Instate Other Class 5-Elec		0	0.0000	0.0000	0.0001				0	0.0000	0.0000	0.0000		
T6 Instate Other Class 6-Dsl		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
T6 Instate Other Class 6-Elec		0	0.0000	0.0000	0.0000				0	0.0000	0.0000	0.0000		
T6 Instate Other Class 7-Dsl		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
T6 Instate Other Class 7-Elec		0	0.0000	0.0000	0.0000				0	0.0000	0.0000	0.0000		
T6 Instate Tractor Class 6-Dsl		0	0	0	0	0	0		0	0	0	0	0	0
T6 Instate Tractor Class 6-Elec		0	0	0	0				0	0	0	0		
T6 Instate Tractor Class 7-Dsl		0	0	0	0	0	0		0	0	0	0	0	0
T6 Instate Tractor Class 7-Elec		0	0	0	0				0	0	0	0		
T6 OOS Class 4-Dsl		0	0	0	0	0	0		0	0	0	0	0	0
T6 OOS Class 5-Dsl		0	0	0	0	0	0		0	0	0	0	0	0
T6 OOS Class 6-Dsl		0	0	0	0	0	0		0	0	0	0	0	0
T6 OOS Class 7-Dsl		0	0	0	0	0	0		0	0	0	0	0	0
T6 Public Class 4-Dsl		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
T6 Public Class 4-Elec		0	0.0000	0.0000	0.0000				0	0.0000	0.0000	0.0000		
T6 Public Class 5-Dsl		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
T6 Public Class 5-Elec		0	0.0000	0.0000	0.0000				0	0.0000	0.0000	0.0000		
T6 Public Class 6-Dsl		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
T6 Public Class 6-Elec		0	0.0000	0.0000	0.0000				0	0.0000	0.0000	0.0000		
T6 Public Class 7-Dsl		0.0000	0.0000	0.0001	0.0001	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
T6 Public Class 7-Elec		0	0.0000	0.0000	0.0000				0	0.0000	0.0000	0.0000		
T6 Utility Class 5-Dsl		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
T6 Utility Class 5-Elec		0	0.0000	0.0000	0.0000				0	0.0000	0.0000	0.0000		
T6 Utility Class 6-Dsl		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
T6 Utility Class 6-Elec		0	0.0000	0.0000	0.0000				0	0.0000	0.0000	0.0000		
T6 Utility Class 7-Dsl		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
T6 Utility Class 7-Elec		0	0.0000	0.0000	0.0000				0	0.0000	0.0000	0.0000		
T6TS-Elec		0	0.0000	0.0000	0.0001				0	0.0000	0.0000	0.0000		
T6TS-Gas	0.0000	0.0000	0.0000	0.0001	0.0001	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
T7 CAIRP Class 8-Dsl		0.0004	0.0005	0.0011	0.0020	0.0004	0.0000		0.0004	0.0001	0.0004	0.0009	0.0002	0.0000
T7 CAIRP Class 8-Elec		0	0.0001	0.0002	0.0003				0	0.0000	0.0001	0.0001		
T7 NNOOS Class 8-Dsl		0.0006	0.0007	0.0017	0.0030	0.0006	0.0000		0.0006	0.0002	0.0006	0.0013	0.0002	0.0000
T7 NOOS Class 8-Dsl		0.0002	0.0003	0.0006	0.0011	0.0002	0.0000		0.0002	0.0001	0.0002	0.0005	0.0001	0.0000
T7 Other Port Class 8-Dsl		0	0	0	0	0	0		0	0	0	0	0	0
T7 Other Port Class 8-Elec		0	0	0	0				0	0	0	0		
T7 POAK Class 8-Dsl		0	0	0	0	0	0		0	0	0	0	0	0
T7 POAK Class 8-Elec		0	0	0	0				0	0	0	0		
T7 POLA Class 8-Dsl		0	0	0	0	0	0		0	0	0	0	0	0
T7 POLA Class 8-Elec		0	0	0	0				0	0	0	0		
T7 Public Class 8-Dsl		0.0000	0.0001	0.0003	0.0004	0.0000	0.0000		0.0000	0.0000	0.0001	0.0002	0.0000	0.0000
T7 Public Class 8-Elec		0	0.0001	0.0001	0.0002				0	0.0000	0.0000	0.0001		
T7 Public Class 8-NG		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000		
T7 SWCV Class 8-Dsl		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
T7 SWCV Class 8-Elec		0	0.0000	0.0000	0.0000				0	0.0000	0.0000	0.0000		
T7 SWCV Class 8-NG		0	0	0	0	0	0		0	0	0	0		
T7 Single Concrete/Transit Mix Class 8-Dsl		0	0	0	0	0	0		0	0	0	0	0	0
T7 Single Concrete/Transit Mix Class 8-Elec		0	0	0	0				0	0	0	0		
T7 Single Concrete/Transit Mix Class 8-NG		0	0	0	0	0	0		0	0	0	0		
T7 Single Dump Class 8-Dsl		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
T7 Single Dump Class 8-Elec		0	0.0000	0.0000	0.0000				0	0.0000	0.0000	0.0000		
T7 Single Dump Class 8-NG		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000		
T7 Single Other Class 8-Dsl		0.0000	0.0000	0.0001	0.0001	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
T7 Single Other Class 8-NG		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000		
T7 Tractor Class 8-Dsl		0.0000	0.0000	0.0001	0.0001	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
T7 Tractor Class 8-Elec		0	0.0000	0.0000	0.0000				0	0.0000	0.0000	0.0000		
T7 Tractor Class 8-NG		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000		
T7 Utility Class 8-Dsl		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
T7 Utility Class 8-Elec		0	0.0000	0.0000	0.0000				0	0.0000	0.0000	0.0000		
T7IS-Elec		0	0.0000	0.0000	0.0000				0	0.0000	0.0000	0.0000		
T7IS-Gas	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
UBUS-Dsl		0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0	0.0000	0.0000	0	
UBUS-Elec		0	0.0000	0.0000	0.0000				0	0.0000	0.0000	0.0000		
UBUS-Gas	0	0	0	0.0000	0.0000	0		0	0	0	0.0000	0.0000	0	
UBUS-NG		0.0000	0	0.0000	0.0000	0.0000			0.0000	0	0.0000	0.0000		

Veh_Tech	SOx_STREX	SOx_TOTEX	Fuel_GAS	Fuel_DSL	Fuel_NG
All Vehicles	0.0001	0.0040	33.8	7.57	0.0106
All Other Buses-Dsl		0.0000		0.1769	
All Other Buses-NG		0			0.0035
LDA-Dsl		0.0000		0.0056	
LDA-Elec		0			
LDA-Gas	0.0000	0.0013	14.2		
LDA-Phe	0.0000	0.0000	0.3858		
LDT1-Dsl		0.0000		0.0000	
LDT1-Elec		0			
LDT1-Gas	0.0000	0.0001	1.00		
LDT1-Phe	0.0000	0.0000	0.0122		
LDT2-Dsl		0.0000		0.0285	
LDT2-Elec		0			
LDT2-Gas	0.0000	0.0009	9.80		
LDT2-Phe	0.0000	0.0000	0.1279		
LHD1-Dsl		0.0000		0.4149	
LHD1-Elec		0			
LHD1-Gas	0.0000	0.0001	1.15		
LHD2-Dsl		0.0000		0.2620	
LHD2-Elec		0			
LHD2-Gas	0.0000	0.0000	0.1132		
MCY-Gas	0.0000	0.0000	0.0954		
MDV-Dsl		0.0000		0.0611	
MDV-Elec		0			
MDV-Gas	0.0000	0.0006	6.47		
MDV-Phe	0.0000	0.0000	0.0780		
MH-Dsl		0.0000		0.0314	
MH-Gas	0.0000	0.0000	0.0965		
Motor Coach-Dsl		0.0000		0.2216	
OBUS-Elec		0			
OBUS-Gas	0.0000	0.0000	0.0313		
PTO-Dsl		0.0000		0.0301	
PTO-Elec		0			
SBUS-Dsl		0.0000		0.0402	
SBUS-Elec		0			
SBUS-Gas	0.0000	0.0000	0.0084		
T6 CAIRP Class 4-Dsl		0		0.0000	
T6 CAIRP Class 4-Elec		0			
T6 CAIRP Class 5-Dsl		0		0.0000	
T6 CAIRP Class 5-Elec		0			
T6 CAIRP Class 6-Dsl		0		0.0000	
T6 CAIRP Class 6-Elec		0			
T6 CAIRP Class 7-Dsl		0		0.0000	
T6 CAIRP Class 7-Elec		0			
T6 Instate Delivery Class 4-Dsl		0.0000		0.0144	
T6 Instate Delivery Class 4-Elec		0			
T6 Instate Delivery Class 5-Dsl		0.0000		0.0091	
T6 Instate Delivery Class 5-Elec		0			
T6 Instate Delivery Class 6-Dsl		0.0000		0.0209	
T6 Instate Delivery Class 6-Elec		0			
T6 Instate Delivery Class 7-Dsl		0.0000		0.0159	
T6 Instate Delivery Class 7-Elec		0			
T6 Instate Other Class 4-Dsl		0.0000		0.1235	
T6 Instate Other Class 4-Elec		0			
T6 Instate Other Class 5-Dsl		0.0000		0.1455	
T6 Instate Other Class 5-Elec		0			
T6 Instate Other Class 6-Dsl		0.0000		0.0663	
T6 Instate Other Class 6-Elec		0			
T6 Instate Other Class 7-Dsl		0.0000		0.0605	
T6 Instate Other Class 7-Elec		0			
T6 Instate Tractor Class 6-Dsl		0		0.0000	
T6 Instate Tractor Class 6-Elec		0			
T6 Instate Tractor Class 7-Dsl		0		0.0000	
T6 Instate Tractor Class 7-Elec		0			
T6 OOS Class 4-Dsl		0		0.0000	
T6 OOS Class 5-Dsl		0		0.0000	
T6 OOS Class 6-Dsl		0		0.0000	
T6 OOS Class 7-Dsl		0		0.0000	
T6 Public Class 4-Dsl		0.0000		0.0259	
T6 Public Class 4-Elec		0			
T6 Public Class 5-Dsl		0.0000		0.0449	
T6 Public Class 5-Elec		0			
T6 Public Class 6-Dsl		0.0000		0.0119	
T6 Public Class 6-Elec		0			
T6 Public Class 7-Dsl		0.0000		0.1644	
T6 Public Class 7-Elec		0			
T6 Utility Class 5-Dsl		0.0000		0.0066	
T6 Utility Class 5-Elec		0			
T6 Utility Class 6-Dsl		0.0000		0.0012	
T6 Utility Class 6-Elec		0			
T6 Utility Class 7-Dsl		0.0000		0.0017	
T6 Utility Class 7-Elec		0			
T6TS-Elec		0			
T6TS-Gas	0.0000	0.0000	0.2770		
T7 CAIRP Class 8-Dsl		0.0002		1.65	
T7 CAIRP Class 8-Elec		0			
T7 NNOOS Class 8-Dsl		0.0003		2.39	
T7 NOOS Class 8-Dsl		0.0001		0.8768	
T7 Other Port Class 8-Dsl		0		0.0000	
T7 Other Port Class 8-Elec		0			
T7 POAK Class 8-Dsl		0		0.0000	
T7 POAK Class 8-Elec		0			
T7 POLA Class 8-Dsl		0		0.0000	
T7 POLA Class 8-Elec		0			
T7 Public Class 8-Dsl		0.0000		0.4228	
T7 Public Class 8-Elec		0			
T7 Public Class 8-NG		0			0.0018
T7 SWCV Class 8-Dsl		0.0000		0.0383	
T7 SWCV Class 8-Elec		0			
T7 SWCV Class 8-NG		0			0.0000
T7 Single Concrete/Transit Mix Class 8-Dsl		0		0.0000	
T7 Single Concrete/Transit Mix Class 8-Elec		0			
T7 Single Concrete/Transit Mix Class 8-NG		0			0.0000
T7 Single Dump Class 8-Dsl		0.0000		0.0032	
T7 Single Dump Class 8-Elec		0			
T7 Single Dump Class 8-NG		0			0.0001
T7 Single Other Class 8-Dsl		0.0000		0.1055	
T7 Single Other Class 8-NG		0			0.0051
T7 Tractor Class 8-Dsl		0.0000		0.0984	
T7 Tractor Class 8-Elec		0			
T7 Tractor Class 8-NG		0			0.0002
T7 Utility Class 8-Dsl		0.0000		0.0103	
T7 Utility Class 8-Elec		0			
T7IS-Elec		0			
T7IS-Gas	0.0000	0.0000	0.0011		
UBUS-Dsl		0		0.0000	
UBUS-Elec		0			
UBUS-Gas	0	0	0.0000		
UBUS-NG		0			0.0000
All Vehicles	0.0001	0.0040	33.8	7.57	0.0106

Veh_Tech	SOx_STREX	SOx_TOTEX	Fuel_GAS	Fuel_DSL	Fuel_NG
All Other Buses-Dsl		0.0000		0.1769	
All Other Buses-NG		0			0.0035
LDA-Dsl		0.0000		0.0056	
LDA-Elec		0			
LDA-Gas	0.0000	0.0013	14.2		
LDA-Phe	0.0000	0.0000	0.3858		
LDT1-Dsl		0.0000		0.0000	
LDT1-Elec		0			
LDT1-Gas	0.0000	0.0001	1.00		
LDT1-Phe	0.0000	0.0000	0.0122		
LDT2-Dsl		0.0000		0.0285	
LDT2-Elec		0			
LDT2-Gas	0.0000	0.0009	9.80		
LDT2-Phe	0.0000	0.0000	0.1279		
LHD1-Dsl		0.0000		0.4149	
LHD1-Elec		0			
LHD1-Gas	0.0000	0.0001	1.15		
LHD2-Dsl		0.0000		0.2620	
LHD2-Elec		0			
LHD2-Gas	0.0000	0.0000	0.1132		
MCY-Gas	0.0000	0.0000	0.0954		
MDV-Dsl		0.0000		0.0611	
MDV-Elec		0			
MDV-Gas	0.0000	0.0006	6.47		
MDV-Phe	0.0000	0.0000	0.0780		
MH-Dsl		0.0000		0.0314	
MH-Gas	0.0000	0.0000	0.0965		
Motor Coach-Dsl		0.0000		0.2216	
OBUS-Elec		0			
OBUS-Gas	0.0000	0.0000	0.0313		
PTO-Dsl		0.0000		0.0301	
PTO-Elec		0			
SBUS-Dsl		0.0000		0.0402	
SBUS-Elec		0			
SBUS-Gas	0.0000	0.0000	0.0084		
T6 CAIRP Class 4-Dsl		0		0.0000	
T6 CAIRP Class 4-Elec		0			
T6 CAIRP Class 5-Dsl		0		0.0000	
T6 CAIRP Class 5-Elec		0			
T6 CAIRP Class 6-Dsl		0		0.0000	
T6 CAIRP Class 6-Elec		0			
T6 CAIRP Class 7-Dsl		0		0.0000	
T6 CAIRP Class 7-Elec		0			
T6 Instate Delivery Class 4-Dsl		0.0000		0.0144	
T6 Instate Delivery Class 4-Elec		0			
T6 Instate Delivery Class 5-Dsl		0.0000		0.0091	
T6 Instate Delivery Class 5-Elec		0			
T6 Instate Delivery Class 6-Dsl		0.0000		0.0209	
T6 Instate Delivery Class 6-Elec		0			
T6 Instate Delivery Class 7-Dsl		0.0000		0.0159	
T6 Instate Delivery Class 7-Elec		0			
T6 Instate Other Class 4-Dsl		0.0000		0.1235	
T6 Instate Other Class 4-Elec		0			
T6 Instate Other Class 5-Dsl		0.0000		0.1455	
T6 Instate Other Class 5-Elec		0			
T6 Instate Other Class 6-Dsl		0.0000		0.0663	
T6 Instate Other Class 6-Elec		0			
T6 Instate Other Class 7-Dsl		0.0000		0.0605	
T6 Instate Other Class 7-Elec		0			
T6 Instate Tractor Class 6-Dsl		0		0.0000	
T6 Instate Tractor Class 6-Elec		0			
T6 Instate Tractor Class 7-Dsl		0		0.0000	
T6 Instate Tractor Class 7-Elec		0			
T6 OOS Class 4-Dsl		0		0.0000	
T6 OOS Class 5-Dsl		0		0.0000	
T6 OOS Class 6-Dsl		0		0.0000	
T6 OOS Class 7-Dsl		0		0.0000	
T6 Public Class 4-Dsl		0.0000		0.0259	
T6 Public Class 4-Elec		0			
T6 Public Class 5-Dsl		0.0000		0.0449	
T6 Public Class 5-Elec		0			
T6 Public Class 6-Dsl		0.0000		0.0119	
T6 Public Class 6-Elec		0			
T6 Public Class 7-Dsl		0.0000		0.1644	
T6 Public Class 7-Elec		0			
T6 Utility Class 5-Dsl		0.0000		0.0066	
T6 Utility Class 5-Elec		0			
T6 Utility Class 6-Dsl		0.0000		0.0012	
T6 Utility Class 6-Elec		0			
T6 Utility Class 7-Dsl		0.0000		0.0017	
T6 Utility Class 7-Elec		0			
T6TS-Elec		0			
T6TS-Gas	0.0000	0.0000	0.2770		
T7 CAIRP Class 8-Dsl		0.0002		1.65	
T7 CAIRP Class 8-Elec		0			
T7 NNOOS Class 8-Dsl		0.0003		2.39	
T7 NOOS Class 8-Dsl		0.0001		0.8768	
T7 Other Port Class 8-Dsl		0		0.0000	
T7 Other Port Class 8-Elec		0			
T7 POAK Class 8-Dsl		0		0.0000	
T7 POAK Class 8-Elec		0			
T7 POLA Class 8-Dsl		0		0.0000	
T7 POLA Class 8-Elec		0			
T7 Public Class 8-Dsl		0.0000		0.4228	
T7 Public Class 8-Elec		0			
T7 Public Class 8-NG		0			0.0018
T7 SWCV Class 8-Dsl		0.0000		0.0383	
T7 SWCV Class 8-Elec		0			
T7 SWCV Class 8-NG		0			0.0000
T7 Single Concrete/Transit Mix Class 8-Dsl		0		0.0000	
T7 Single Concrete/Transit Mix Class 8-Elec		0			
T7 Single Concrete/Transit Mix Class 8-NG		0			0.0000
T7 Single Dump Class 8-Dsl		0.0000		0.0032	
T7 Single Dump Class 8-Elec		0			
T7 Single Dump Class 8-NG		0			0.0001
T7 Single Other Class 8-Dsl		0.0000		0.1055	
T7 Single Other Class 8-NG		0			0.0051
T7 Tractor Class 8-Dsl		0.0000		0.0984	
T7 Tractor Class 8-Elec		0			
T7 Tractor Class 8-NG		0			0.0002
T7 Utility Class 8-Dsl		0.0000		0.0103	
T7 Utility Class 8-Elec		0			
T7IS-Elec		0			
T7IS-Gas	0.0000	0.0000	0.0011		
UBUS-Dsl		0		0.0000	
UBUS-Elec		0			
UBUS-Gas	0	0	0.0000		
UBUS-NG		0			0.0000

Appendix C

Basinwide Mobile Source Greenhouse Gas Emissions Calculations

TRPA 2025 RTP/SCS GHG Emissions Estimates

Annual Emissions (metric tons per year)

Year	SJCOG			
	CO_2	CH_4	N_2O	CO_2e
Baseline (2022)	220,227	11	15	224,999
2050 Project	**133,892**	**3**	**7**	**136,185**
Net Change (2022 to 2050 Project)	**(86,335)**	**(8)**	**(8)**	**(88,814)**
% Change (2022 to 2050 Project)	**-39.20%**	**-73.87%**	**-50.60%**	**-39.47%**

2022 Population	53,515
2050 Population	57,854

**GWPs of 25 for CH_4 and 298 for N_2O were utilized to calculate CO_2e (IPCC AR4 estimates).*

	TMPO - CA & NV	
	Existing (2022)	**2050 Project**
Daily VMT	1,404,998	1,376,795
Daily Trips	152,828	157,958
Daily Vehicles	29,169	31,787

- Daily VMT provided by TRPA. Daily Trips and Daily Vehicles based on EMFAC2021 Planning Inventory outputs for the respective year.

Source: EMFAC2021 (v1.0.2) Emission Rates
Region Type: MPO
Region: TMPO
Calendar Year: 2022, 2050
Season: Annual
Vehicle Classification: EMFAC2011 Categories
Units: miles/day for CVMT and EVMT, trips/day for Trips, g/mile for RUNEX, PMBW and PM

Region	Calendar Year	Vehicle Category	Model Yea	Speed	Fuel	Populatior
TMPO	2022	All Other Buses	Aggregate	Aggregate	Diesel	25.63696
TMPO	2022	All Other Buses	Aggregate	Aggregate	Natural Ga	0.638498
TMPO	2022	LDA	Aggregate	Aggregate	Gasoline	7621.438
TMPO	2022	LDA	Aggregate	Aggregate	Diesel	39.70006
TMPO	2022	LDA	Aggregate	Aggregate	Electricity	265.2795
TMPO	2022	LDA	Aggregate	Aggregate	Plug-in Hyl	141.364
TMPO	2022	LDT1	Aggregate	Aggregate	Gasoline	2299.222
TMPO	2022	LDT1	Aggregate	Aggregate	Diesel	0.099085
TMPO	2022	LDT1	Aggregate	Aggregate	Electricity	0.461499
TMPO	2022	LDT1	Aggregate	Aggregate	Plug-in Hyl	0.398876
TMPO	2022	LDT2	Aggregate	Aggregate	Gasoline	8887.647
TMPO	2022	LDT2	Aggregate	Aggregate	Diesel	43.78084
TMPO	2022	LDT2	Aggregate	Aggregate	Electricity	11.8579
TMPO	2022	LDT2	Aggregate	Aggregate	Plug-in Hyl	23.82591
TMPO	2022	LHD1	Aggregate	Aggregate	Gasoline	1033.001
TMPO	2022	LHD1	Aggregate	Aggregate	Diesel	905.9778
TMPO	2022	LHD2	Aggregate	Aggregate	Gasoline	100.8931
TMPO	2022	LHD2	Aggregate	Aggregate	Diesel	321.4707
TMPO	2022	MCY	Aggregate	Aggregate	Gasoline	1079.965
TMPO	2022	MDV	Aggregate	Aggregate	Gasoline	5432.99
TMPO	2022	MDV	Aggregate	Aggregate	Diesel	155.664
TMPO	2022	MDV	Aggregate	Aggregate	Electricity	9.746988
TMPO	2022	MDV	Aggregate	Aggregate	Plug-in Hyl	15.82898
TMPO	2022	MH	Aggregate	Aggregate	Gasoline	178.7388
TMPO	2022	MH	Aggregate	Aggregate	Diesel	84.38007
TMPO	2022	Motor Coach	Aggregate	Aggregate	Diesel	7.69267
TMPO	2022	OBUS	Aggregate	Aggregate	Gasoline	20.24219
TMPO	2022	PTO	Aggregate	Aggregate	Diesel	0
TMPO	2022	SBUS	Aggregate	Aggregate	Gasoline	0.974177
TMPO	2022	SBUS	Aggregate	Aggregate	Diesel	31.37957
TMPO	2022	T6 instate heavy	Aggregate	Aggregate	Diesel	12.20633
TMPO	2022	T6 instate small	Aggregate	Aggregate	Diesel	97.52709
TMPO	2022	T6 Public	Aggregate	Aggregate	Diesel	80.6366
TMPO	2022	T6 Utility	Aggregate	Aggregate	Diesel	4.412323

TMPO	2022	T6TS	Aggregate	Aggregate	Gasoline	55.77579
TMPO	2022	T7 CAIRP	Aggregate	Aggregate	Diesel	34.82494
TMPO	2022	T7 NNOOS	Aggregate	Aggregate	Diesel	31.22748
TMPO	2022	T7 NOOS	Aggregate	Aggregate	Diesel	13.01467
TMPO	2022	T7 Public	Aggregate	Aggregate	Diesel	83.08752
TMPO	2022	T7 Public	Aggregate	Aggregate	Natural Ga	0.13233
TMPO	2022	T7 Single	Aggregate	Aggregate	Diesel	5.516354
TMPO	2022	T7 Single	Aggregate	Aggregate	Natural Ga	0.236734
TMPO	2022	T7 SWCV	Aggregate	Aggregate	Diesel	3.094231
TMPO	2022	T7 Tractor	Aggregate	Aggregate	Diesel	4.803922
TMPO	2022	T7 Tractor	Aggregate	Aggregate	Natural Ga	0.006719
TMPO	2022	T7 Utility	Aggregate	Aggregate	Diesel	2.134261
TMPO	2022	T7IS	Aggregate	Aggregate	Gasoline	0.029758
						29168.96

Region	Calendar Year	Vehicle Category	Model Yea	Speed	Fuel	Populatior
TMPO	2050	All Other Buses	Aggregate	Aggregate	Diesel	35.95918
TMPO	2050	All Other Buses	Aggregate	Aggregate	Natural Ga	0.641324
TMPO	2050	LDA	Aggregate	Aggregate	Gasoline	12948.54
TMPO	2050	LDA	Aggregate	Aggregate	Diesel	8.400091
TMPO	2050	LDA	Aggregate	Aggregate	Electricity	1806.882
TMPO	2050	LDA	Aggregate	Aggregate	Plug-in Hyl	613.5867
TMPO	2050	LDT1	Aggregate	Aggregate	Gasoline	854.6141
TMPO	2050	LDT1	Aggregate	Aggregate	Diesel	0.009091
TMPO	2050	LDT1	Aggregate	Aggregate	Electricity	24.27303
TMPO	2050	LDT1	Aggregate	Aggregate	Plug-in Hyl	18.53611
TMPO	2050	LDT2	Aggregate	Aggregate	Gasoline	7717.101
TMPO	2050	LDT2	Aggregate	Aggregate	Diesel	30.47079
TMPO	2050	LDT2	Aggregate	Aggregate	Electricity	290.9478
TMPO	2050	LDT2	Aggregate	Aggregate	Plug-in Hyl	199.7153
TMPO	2050	LHD1	Aggregate	Aggregate	Gasoline	332.1009
TMPO	2050	LHD1	Aggregate	Aggregate	Diesel	175.4944
TMPO	2050	LHD1	Aggregate	Aggregate	Electricity	350.011
TMPO	2050	LHD2	Aggregate	Aggregate	Gasoline	27.14664
TMPO	2050	LHD2	Aggregate	Aggregate	Diesel	104.1103
TMPO	2050	LHD2	Aggregate	Aggregate	Electricity	75.9267
TMPO	2050	MCY	Aggregate	Aggregate	Gasoline	731.3346
TMPO	2050	MDV	Aggregate	Aggregate	Gasoline	4233.763
TMPO	2050	MDV	Aggregate	Aggregate	Diesel	57.35674
TMPO	2050	MDV	Aggregate	Aggregate	Electricity	258.3154
TMPO	2050	MDV	Aggregate	Aggregate	Plug-in Hyl	122.203
TMPO	2050	MH	Aggregate	Aggregate	Gasoline	32.78507
TMPO	2050	MH	Aggregate	Aggregate	Diesel	28.99445
TMPO	2050	Motor Coach	Aggregate	Aggregate	Diesel	10.14296

TMPO	2050	OBUS	Aggregate	Aggregate	Gasoline	4.361748
TMPO	2050	OBUS	Aggregate	Aggregate	Electricity	2.484455
TMPO	2050	PTO	Aggregate	Aggregate	Diesel	0
TMPO	2050	PTO	Aggregate	Aggregate	Electricity	0
TMPO	2050	SBUS	Aggregate	Aggregate	Gasoline	1.674594
TMPO	2050	SBUS	Aggregate	Aggregate	Diesel	16.36472
TMPO	2050	SBUS	Aggregate	Aggregate	Electricity	15.79149
TMPO	2050	T6 instate heavy	Aggregate	Aggregate	Diesel	15.25173
TMPO	2050	T6 instate heavy	Aggregate	Aggregate	Electricity	11.44836
TMPO	2050	T6 instate small	Aggregate	Aggregate	Diesel	88.88806
TMPO	2050	T6 instate small	Aggregate	Aggregate	Electricity	113.751
TMPO	2050	T6 Public	Aggregate	Aggregate	Diesel	50.62193
TMPO	2050	T6 Public	Aggregate	Aggregate	Electricity	42.88596
TMPO	2050	T6 Utility	Aggregate	Aggregate	Diesel	2.002667
TMPO	2050	T6 Utility	Aggregate	Aggregate	Electricity	3.052559
TMPO	2050	T6TS	Aggregate	Aggregate	Gasoline	30.25363
TMPO	2050	T6TS	Aggregate	Aggregate	Electricity	23.47655
TMPO	2050	T7 CAIRP	Aggregate	Aggregate	Diesel	53.08248
TMPO	2050	T7 CAIRP	Aggregate	Aggregate	Electricity	14.79219
TMPO	2050	T7 NNOOS	Aggregate	Aggregate	Diesel	58.71428
TMPO	2050	T7 NOOS	Aggregate	Aggregate	Diesel	25.32362
TMPO	2050	T7 Public	Aggregate	Aggregate	Diesel	58.12932
TMPO	2050	T7 Public	Aggregate	Aggregate	Electricity	43.79245
TMPO	2050	T7 Public	Aggregate	Aggregate	Natural Ga	0.195178
TMPO	2050	T7 Single	Aggregate	Aggregate	Diesel	2.610239
TMPO	2050	T7 Single	Aggregate	Aggregate	Electricity	0.344039
TMPO	2050	T7 Single	Aggregate	Aggregate	Natural Ga	0.109244
TMPO	2050	T7 SWCV	Aggregate	Aggregate	Diesel	1.747943
TMPO	2050	T7 SWCV	Aggregate	Aggregate	Electricity	1.572166
TMPO	2050	T7 Tractor	Aggregate	Aggregate	Diesel	10.19185
TMPO	2050	T7 Tractor	Aggregate	Aggregate	Electricity	1.997358
TMPO	2050	T7 Tractor	Aggregate	Aggregate	Natural Ga	0.013356
TMPO	2050	T7 Utility	Aggregate	Aggregate	Diesel	1.465495
TMPO	2050	T7 Utility	Aggregate	Aggregate	Electricity	1.205716
TMPO	2050	T7IS	Aggregate	Aggregate	Gasoline	0.039477
TMPO	2050	T7IS	Aggregate	Aggregate	Electricity	0.033889
						31787.03

/ITW, g/trip for STREX, HOTSOAK and RUNLOSS, g/vehicle/day for IDLEX and DIURN. PHEV

Fleet Mix (Population)	Total VMT	Fleet Mix (VMT)	CVMT	EVMT	Trips
0.088%	1310.563	0.131%	1310.563	0	228.169
0.002%	28.31673	0.003%	28.31673	0	5.682635
26.129%	273124	27.283%	273124	0	34359.25
0.136%	1214.007	0.121%	1214.007	0	167.4757
0.909%	12158.58	1.215%	0	12158.58	1338.431
0.485%	6628.687	0.662%	3396.461	3232.227	584.5403
7.882%	68555.96	6.848%	68555.96	0	9672.275
0.000%	1.500106	0.000%	1.500106	0	0.295393
0.002%	19.41396	0.002%	0	19.41396	2.255246
0.001%	19.97804	0.002%	9.659784	10.31826	1.649352
30.470%	327350.3	32.700%	327350.3	0	40407.25
0.150%	1789.332	0.179%	1789.332	0	206.8757
0.041%	439.9013	0.044%	0	439.9013	60.81952
0.082%	1160.494	0.116%	584.1189	576.3748	98.52015
3.541%	32390.75	3.236%	32390.75	0	15390.17
3.106%	31151.24	3.112%	31151.24	0	11396.06
0.346%	3320.361	0.332%	3320.361	0	1503.158
1.102%	12310.53	1.230%	12310.53	0	4043.696
3.702%	5345.502	0.534%	5345.502	0	2159.931
18.626%	176384.9	17.620%	176384.9	0	23980.22
0.534%	6452.787	0.645%	6452.787	0	736.0646
0.033%	366.9768	0.037%	0	366.9768	50.22461
0.054%	803.5019	0.080%	416.0575	387.4443	65.45281
0.613%	1431.058	0.143%	1431.058	0	17.88103
0.289%	802.5126	0.080%	802.5126	0	8.438007
0.026%	1100.333	0.110%	1100.333	0	176.7776
0.069%	991.1412	0.099%	991.1412	0	405.0058
0.000%	62.81602	0.006%	62.81602	0	0
0.003%	50.61691	0.005%	50.61691	0	3.89671
0.108%	664.3923	0.066%	664.3923	0	454.3762
0.042%	584.9419	0.058%	584.9419	0	148.2453
0.334%	3758.58	0.375%	3758.58	0	1158.63
0.276%	3287.402	0.328%	3287.402	0	413.6658
0.015%	185.4157	0.019%	185.4157	0	56.47774

0.191%	2360.983	0.236%	2360.983	0	1115.962
0.119%	7180.399	0.717%	7180.399	0	800.2772
0.107%	8489.446	0.848%	8489.446	0	717.6075
0.045%	3084.065	0.308%	3084.065	0	299.0772
0.285%	3673.516	0.367%	3673.516	0	426.239
0.000%	7.909706	0.001%	7.909706	0	0.678853
0.019%	302.3722	0.030%	302.3722	0	51.96406
0.001%	13.98185	0.001%	13.98185	0	2.230032
0.011%	200.0565	0.020%	200.0565	0	14.23346
0.016%	396.6073	0.040%	396.6073	0	69.80099
0.000%	0.526761	0.000%	0.526761	0	0.097633
0.007%	100.8238	0.010%	100.8238	0	27.31855
0.000%	2.003298	0.000%	2.003298	0	0.595396
					152827.9

Fleet Mix (Population)	Total VMT	**Fleet Mix (VMT)**	CVMT	EVMT	Trips
0.113%	1570.648	0.126%	1570.648	0	320.0367
0.002%	26.15651	0.002%	26.15651	0	5.707787
40.735%	513702.5	41.365%	513702.5	0	59464.45
0.026%	307.9809	0.025%	307.9809	0	36.94615
5.684%	75401.98	6.072%	0	75401.98	8342.969
1.930%	24552.11	1.977%	10008.9	14543.21	2537.181
2.689%	31298.94	2.520%	31298.94	0	3747.966
0.000%	0.368506	0.000%	0.368506	0	0.041605
0.076%	1034.368	0.083%	0	1034.368	112.4773
0.058%	773.0211	0.062%	314.5104	458.5107	76.64681
24.278%	293638.8	23.645%	293638.8	0	34434.68
0.096%	1137.247	0.092%	1137.247	0	134.882
0.915%	8500.494	0.684%	0	8500.494	1345.694
0.628%	8070.009	0.650%	3288.847	4781.163	825.8228
1.045%	11664.19	0.939%	11664.19	0	4947.808
0.552%	6267.222	0.505%	6267.222	0	2207.499
1.101%	15822.68	1.274%	0	15822.68	4943.985
0.085%	1033.359	0.083%	1033.359	0	404.4444
0.328%	3319.257	0.267%	3319.257	0	1309.576
0.239%	3424.894	0.276%	0	3424.894	1004.521
2.301%	3848.078	0.310%	3848.078	0	1462.669
13.319%	159891	12.875%	159891	0	18895.29
0.180%	1855.027	0.149%	1855.027	0	241.5021
0.813%	7507.22	0.605%	0	7507.22	1192.23
0.384%	4859.968	0.391%	1980.025	2879.944	505.3095
0.103%	384.4743	0.031%	384.4743	0	3.279818
0.091%	264.0361	0.021%	264.0361	0	2.899445
0.032%	1277.72	0.103%	1277.72	0	233.0851

0.014%	154.1246	0.012%	154.1246	0	87.26986
0.008%	186.9463	0.015%	0	186.9463	49.70897
0.000%	126.0331	0.010%	126.0331	0	0
0.000%	3.885844	0.000%	0	3.885844	0
0.005%	87.03605	0.007%	87.03605	0	6.698377
0.051%	331.2966	0.027%	331.2966	0	236.9611
0.050%	422.0135	0.034%	0	422.0135	210.717
0.048%	659.1416	0.053%	659.1416	0	183.6461
0.036%	583.3612	0.047%	0	583.3612	137.1907
0.280%	3290.179	0.265%	3290.179	0	1059.254
0.358%	4509.094	0.363%	0	4509.094	1356.101
0.159%	1993.001	0.160%	1993.001	0	259.6905
0.135%	1841.887	0.148%	0	1841.887	220.005
0.006%	83.19568	0.007%	83.19568	0	25.63414
0.010%	129.3242	0.010%	0	129.3242	39.07276
0.095%	1372.046	0.110%	1372.046	0	605.3147
0.074%	1578.296	0.127%	0	1578.296	469.7187
0.167%	10978.18	0.884%	10978.18	0	1219.835
0.047%	3168.328	0.255%	0	3168.328	339.9245
0.185%	16725.53	1.347%	16725.53	0	1349.254
0.080%	6076.089	0.489%	6076.089	0	581.9368
0.183%	2354.487	0.190%	2354.487	0	298.2034
0.138%	1994.05	0.161%	0	1994.05	224.6553
0.001%	7.988059	0.001%	7.988059	0	1.001264
0.008%	609.5578	0.049%	609.5578	0	24.58845
0.001%	19.56989	0.002%	0	19.56989	3.240844
0.000%	25.17027	0.002%	25.17027	0	1.029075
0.005%	113.2493	0.009%	113.2493	0	8.040538
0.005%	101.4603	0.008%	0	101.4603	7.231962
0.032%	659.8369	0.053%	659.8369	0	148.0876
0.006%	140.0719	0.011%	0	140.0719	29.02161
0.000%	0.933974	0.000%	0.933974	0	0.194063
0.005%	60.36135	0.005%	60.36135	0	18.75834
0.004%	55.20333	0.004%	0	55.20333	15.43316
0.000%	4.527298	0.000%	4.527298	0	0.789852
0.000%	5.050021	0.000%	0	5.050021	0.678049
					157958.5

calculated based on total VMT.

Fleet Mix (Trips)	CO2_RUNI	CO2_IDLEX	CO2_STRE	CH4_RUNI	CH4_IDLEX	CH4_STRE	N2O_RUNI	N2O_IDLEX
0.149%	1144.456	634.6835	0	0.009149	0.005038	0	0.18031	0.099995
0.004%	1089.317	1274.442	0	0.766394	4.353933	0	0.222064	0.259803
22.482%	275.8957	0	80.38047	0.005383	0	0.133031	0.009066	0
0.110%	231.4157	0	0	0.002096	0	0	0.03646	0
0.876%	0	0	0	0	0	0	0	0
0.382%	145.9806	0	67.06683	0.000452	0	0.054917	0.000708	0
6.329%	327.683	0	105.1258	0.01044	0	0.215973	0.016553	0
0.000%	381.5848	0	0	0.012353	0	0	0.060119	0
0.001%	0	0	0	0	0	0	0	0
0.001%	137.7621	0	73.79255	0.000426	0	0.055025	0.000669	0
26.440%	349.1704	0	100.9655	0.004285	0	0.146744	0.010111	0
0.135%	305.1535	0	0	0.000631	0	0	0.048077	0
0.040%	0	0	0	0	0	0	0	0
0.064%	143.387	0	80.2772	0.000444	0	0.055158	0.000698	0
10.070%	972.7847	123.6509	26.39699	0.026513	0.115649	0.046998	0.025481	0.002758
7.457%	632.1102	138.743	0	0.012787	0.005098	0	0.099589	0.021859
0.984%	1063.779	142.1188	27.39635	0.022448	0.116972	0.044701	0.018758	0.002905
2.646%	785.0177	218.7521	0	0.009081	0.005098	0	0.12368	0.034464
1.413%	188.072	0	69.26687	0.218911	0	0.339061	0.049922	0
15.691%	423.8168	0	124.7681	0.007053	0	0.208996	0.014507	0
0.482%	387.6006	0	0	0.000595	0	0	0.061067	0
0.033%	0	0	0	0	0	0	0	0
0.043%	147.5012	0	100.6652	0.000461	0	0.055605	0.00073	0
0.012%	1961.354	0	35.10144	0.040653	0	0.045007	0.044704	0
0.006%	1080.996	0	0	0.006439	0	0	0.170311	0
0.116%	1774.843	10766.52	0	0.001121	0.185688	0	0.279627	1.696269
0.265%	1828.63	386.1022	35.35011	0.020118	0.18853	0.047587	0.036662	0.004864
0.000%	2168.446	0	0	0.002057	0	0	0.341639	0
0.003%	805.0748	2565.322	71.33536	0.012938	2.453168	0.099487	0.030545	0.085714
0.297%	1144.347	2252.218	0	0.00397	0.008395	0	0.180292	0.354838
0.097%	1145.909	2233.88	0	0.000577	0.013404	0	0.180538	0.351949
0.758%	1149.335	2321.017	0	0.004837	0.021087	0	0.181078	0.365677
0.271%	1249.664	3507.031	0	0.003671	0.016837	0	0.196885	0.552534
0.037%	1127.415	1708.083	0	0.000711	0.006567	0	0.177625	0.269109

0.730%	1866.733	552.2372	54.42202	0.042196	0.227229	0.063321	0.056362	0.005486
0.524%	1574.493	25474.92	0	0.001007	0.48453	0	0.248062	4.013584
0.470%	1584.533	30930.63	0	0.000786	0.601465	0	0.249644	4.873134
0.196%	1575.314	31580.82	0	0.001061	0.601369	0	0.248191	4.975571
0.279%	1898.136	3226.731	0	0.005361	0.05544	0	0.299052	0.508373
0.000%	1584.686	6361.917	0	1.691745	16.89879	0	0.323049	1.296918
0.034%	1605.398	4801.768	0	0.00121	0.09301	0	0.252931	0.756521
0.001%	1404.158	9383.304	0	1.053047	36.68693	0	0.286247	1.912848
0.009%	4289.593	3651.58	0	0.000243	0.062695	0	0.675827	0.575308
0.046%	1575.153	8868.407	0	0.001561	0.160439	0	0.248166	1.397221
0.000%	1347.083	17395.99	0	0.997423	66.18855	0	0.274612	3.546286
0.018%	1749.547	1650.095	0	0.001468	0.02955	0	0.275642	0.259973
0.000%	2387.152	0	56.17127	0.246645	0	0.000347	0.197525	0

Fleet Mix (Trips)	CO2_RUNI	CO2_IDLEX	CO2_STRE	CH4_RUNI	CH4_IDLEX	CH4_STRE	N2O_RUNI	N2O_IDLEX
0.203%	1019.423	528.9338	0	0.000892	0.002334	0	0.160611	0.083334
0.004%	915.3127	1174.661	0	0.853259	3.45026	0	0.186592	0.239462
37.646%	208.0211	0	54.24397	0.000873	0	0.040002	0.003566	0
0.023%	166.0301	0	0	0.000207	0	0	0.026158	0
5.282%	0	0	0	0	0	0	0	0
1.606%	116.1168	0	56.33077	0.000344	0	0.052213	0.000518	0
2.373%	241.1096	0	64.07409	0.000916	0	0.04418	0.003654	0
0.000%	306.8926	0	0	0.000555	0	0	0.048351	0
0.071%	0	0	0	0	0	0	0	0
0.049%	115.9126	0	64.48255	0.000345	0	0.052376	0.000521	0
21.800%	251.1331	0	67.72525	0.001156	0	0.053787	0.003792	0
0.085%	229.2731	0	0	0.000558	0	0	0.036122	0
0.852%	0	0	0	0	0	0	0	0
0.523%	116.0948	0	67.81778	0.000344	0	0.052207	0.000519	0
3.132%	751.9342	108.486	24.5981	0.00116	0.08541	0.022108	0.001873	0.002397
1.398%	603.1661	117.5329	0	0.004145	0.005098	0	0.095029	0.018517
3.130%	0	0	0	0	0	0	0	0
0.256%	837.6853	123.2595	24.09861	0.00102	0.072423	0.018462	0.002207	0.002133
0.829%	716.7792	196.2612	0	0.005478	0.005098	0	0.112929	0.030921
0.636%	0	0	0	0	0	0	0	0
0.926%	175.9753	0	43.01992	0.117765	0	0.162598	0.03733	0
11.962%	304.2349	0	81.84279	0.00116	0	0.05391	0.003797	0
0.153%	301.78	0	0	0.000223	0	0	0.047546	0
0.755%	0	0	0	0	0	0	0	0
0.320%	116.0637	0	82.24572	0.000344	0	0.051938	0.00052	0
0.002%	1947.42	0	30.04101	0.002743	0	0.036856	0.018867	0
0.002%	1089.586	0	0	0.004271	0	0	0.171665	0
0.148%	1523.088	8276.016	0	0.000489	0.185553	0	0.239963	1.30389

0.055%	1550.054	351.2025	27.69127	0.001656	0.192818	0.031028	0.015579	0.00471
0.031%	0	0	0	0	0	0	0	0
0.000%	2184.103	0	0	0.002272	0	0	0.344106	0
0.000%	0	0	0	0	0	0	0	0
0.004%	696.8625	2255.508	57.27904	0.001745	2.502656	0.092236	0.008137	0.062705
0.150%	1022.054	1809.1	0	0.000287	0.007742	0	0.161025	0.285025
0.133%	0	0	0	0	0	0	0	0
0.116%	1017.956	1890.583	0	0.000307	0.008217	0	0.160379	0.297862
0.087%	0	0	0	0	0	0	0	0
0.671%	1007.164	1844.845	0	0.00025	0.008232	0	0.158679	0.290656
0.859%	0	0	0	0	0	0	0	0
0.164%	1067.357	2710.1	0	0.000438	0.012015	0	0.168162	0.426977
0.139%	0	0	0	0	0	0	0	0
0.016%	1014.17	1401.665	0	0.000234	0.006297	0	0.159783	0.220833
0.025%	0	0	0	0	0	0	0	0
0.383%	1539.655	463.6961	38.10913	0.002777	0.264516	0.041687	0.007868	0.00526
0.297%	0	0	0	0	0	0	0	0
0.772%	1277.075	20060.01	0	0.000531	0.484643	0	0.201204	3.160463
0.215%	0	0	0	0	0	0	0	0
0.854%	1222.634	23870.19	0	0.000516	0.601507	0	0.192626	3.760758
0.368%	1222.341	23864.26	0	0.000533	0.601507	0	0.19258	3.759824
0.189%	1583.445	2493.446	0	0.000862	0.055821	0	0.249472	0.392843
0.142%	0	0	0	0	0	0	0	0
0.001%	1451.062	5827.823	0	1.691745	16.89879	0	0.295808	1.18804
0.016%	1612.684	4872.05	0	0.001356	0.08649	0	0.254079	0.767593
0.002%	0	0	0	0	0	0	0	0
0.001%	1411.837	9359.925	0	1.0526	36.33155	0	0.287812	1.908082
0.005%	3058.625	2677.286	0	0.0011	0.062367	0	0.481888	0.421807
0.005%	0	0	0	0	0	0	0	0
0.094%	1263.526	6625.117	0	0.00047	0.160538	0	0.199069	1.04379
0.018%	0	0	0	0	0	0	0	0
0.000%	1071.652	15909.71	0	1.020981	48.48601	0	0.218463	3.243298
0.012%	1530.918	1321.682	0	0.000514	0.029514	0	0.241197	0.208232
0.010%	0	0	0	0	0	0	0	0
0.001%	1800.86	0	42.83373	0.096514	0	0.000838	0.115754	0
0.000%	0	0	0	0	0	0	0	0

N2O_STRE	VMT per Day	CO_2 RUNEX Emissions (MT/day)	CH_4 RUNEX Emissions (MT/day)	N_2O RUNEX Emissions (MT/day)
0	1,839.39	2.11E+00	1.68E-05	3.32E-04
0	39.74	4.33E-02	3.05E-05	8.83E-06
0.042199	383,332.53	1.06E+02	2.06E-03	3.48E-03
0	1,703.87	3.94E-01	3.57E-06	6.21E-05
0	17,064.71	0.00E+00	0.00E+00	0.00E+00
0.022867	9,303.43	1.36E+00	4.20E-06	6.58E-06
0.053034	96,219.04	3.15E+01	1.00E-03	1.59E-03
0	2.11	8.03E-04	2.60E-08	1.27E-07
0	27.25	0.00E+00	0.00E+00	0.00E+00
0.022921	28.04	3.86E-03	1.20E-08	1.88E-08
0.050924	459,439.78	1.60E+02	1.97E-03	4.65E-03
0	2,511.35	7.66E-01	1.58E-06	1.21E-04
0	617.41	0.00E+00	0.00E+00	0.00E+00
0.02299	1,628.77	2.34E-01	7.24E-07	1.14E-06
0.052579	45,460.77	4.42E+01	1.21E-03	1.16E-03
0	43,721.10	2.76E+01	5.59E-04	4.35E-03
0.051345	4,660.16	4.96E+00	1.05E-04	8.74E-05
0	17,277.96	1.36E+01	1.57E-04	2.14E-03
0.012551	7,502.47	1.41E+00	1.64E-03	3.75E-04
0.06164	247,558.14	1.05E+02	1.75E-03	3.59E-03
0	9,056.56	3.51E+00	5.39E-06	5.53E-04
0	515.06	0.00E+00	0.00E+00	0.00E+00
0.02334	1,127.72	1.66E-01	5.20E-07	8.23E-07
0.038252	2,008.51	3.94E+00	8.17E-05	8.98E-05
0	1,126.34	1.22E+00	7.25E-06	1.92E-04
0	1,544.33	2.74E+00	1.73E-06	4.32E-04
0.031573	1,391.08	2.54E+00	2.80E-05	5.10E-05
0	88.16	1.91E-01	1.81E-07	3.01E-05
0.066981	71.04	5.72E-02	9.19E-07	2.17E-06
0	932.48	1.07E+00	3.70E-06	1.68E-04
0	820.97	9.41E-01	4.73E-07	1.48E-04
0	5,275.21	6.06E+00	2.55E-05	9.55E-04
0	4,613.91	5.77E+00	1.69E-05	9.08E-04
0	260.23	2.93E-01	1.85E-07	4.62E-05

0.032237	3,313.66	6.19E+00	1.40E-04	1.87E-04
0	10,077.77	1.59E+01	1.01E-05	2.50E-03
0	11,915.03	1.89E+01	9.37E-06	2.97E-03
0	4,328.52	6.82E+00	4.59E-06	1.07E-03
0	5,155.82	9.79E+00	2.76E-05	1.54E-03
0	11.10	1.76E-02	1.88E-05	3.59E-06
0	424.38	6.81E-01	5.13E-07	1.07E-04
0	19.62	2.76E-02	2.07E-05	5.62E-06
0	280.78	1.20E+00	6.83E-08	1.90E-04
0	556.64	8.77E-01	8.69E-07	1.38E-04
0	0.74	9.96E-04	7.37E-07	2.03E-07
0	141.51	2.48E-01	2.08E-07	3.90E-05
0.015785	2.81	6.71E-03	6.93E-07	5.55E-07
N2O_STRE	**VMT per Day**	**CO_2 RUNEX Emissions (MT/day)**	**CH_4 RUNEX Emissions (MT/day)**	**N_2O RUNEX Emissions (MT/day)**
0	1,741.27	1.78E+00	1.55E-06	2.80E-04
0	29.00	2.65E-02	2.47E-05	5.41E-06
0.029112	569,508.03	1.18E+02	4.97E-04	2.03E-03
0	341.44	5.67E-02	7.06E-08	8.93E-06
0	83,593.19	0.00E+00	0.00E+00	0.00E+00
0.020732	27,219.30	3.16E+00	9.36E-06	1.41E-05
0.030414	34,699.07	8.37E+00	3.18E-05	1.27E-04
0	0.41	1.25E-04	2.27E-10	1.98E-08
0	1,146.73	0.00E+00	0.00E+00	0.00E+00
0.02094	857.00	9.93E-02	2.95E-07	4.47E-07
0.03464	325,537.91	8.18E+01	3.76E-04	1.23E-03
0	1,260.79	2.89E-01	7.03E-07	4.55E-05
0	9,423.93	0.00E+00	0.00E+00	0.00E+00
0.020769	8,946.69	1.04E+00	3.08E-06	4.65E-06
0.044188	12,931.32	9.72E+00	1.50E-05	2.42E-05
0	6,948.05	4.19E+00	2.88E-05	6.60E-04
0	17,541.56	0.00E+00	0.00E+00	0.00E+00
0.037429	1,145.62	9.60E-01	1.17E-06	2.53E-06
0	3,679.84	2.64E+00	2.02E-05	4.16E-04
0	3,796.95	0.00E+00	0.00E+00	0.00E+00
0.004639	4,266.11	7.51E-01	5.02E-04	1.59E-04
0.035174	177,260.59	5.39E+01	2.06E-04	6.73E-04
0	2,056.55	6.21E-01	4.59E-07	9.78E-05
0	8,322.76	0.00E+00	0.00E+00	0.00E+00
0.020573	5,387.93	6.25E-01	1.86E-06	2.80E-06
0.046649	426.24	8.30E-01	1.17E-06	8.04E-06
0	292.72	3.19E-01	1.25E-06	5.02E-05
0	1,416.52	2.16E+00	6.93E-07	3.40E-04

0.025763	170.87	2.65E-01	2.83E-07	2.66E-06
0	207.26	0.00E+00	0.00E+00	0.00E+00
0	139.72	3.05E-01	3.17E-07	4.81E-05
0	4.31	0.00E+00	0.00E+00	0.00E+00
0.045756	96.49	6.72E-02	1.68E-07	7.85E-07
0	367.29	3.75E-01	1.05E-07	5.91E-05
0	467.86	0.00E+00	0.00E+00	0.00E+00
0	730.75	7.44E-01	2.25E-07	1.17E-04
0	646.73	0.00E+00	0.00E+00	0.00E+00
0	3,647.60	3.67E+00	9.13E-07	5.79E-04
0	4,998.93	0.00E+00	0.00E+00	0.00E+00
0	2,209.51	2.36E+00	9.68E-07	3.72E-04
0	2,041.98	0.00E+00	0.00E+00	0.00E+00
0	92.23	9.35E-02	2.16E-08	1.47E-05
0	143.37	0.00E+00	0.00E+00	0.00E+00
0.037346	1,521.10	2.34E+00	4.22E-06	1.20E-05
0	1,749.75	0.00E+00	0.00E+00	0.00E+00
0	12,170.78	1.55E+01	6.46E-06	2.45E-03
0	3,512.52	0.00E+00	0.00E+00	0.00E+00
0	18,542.49	2.27E+01	9.57E-06	3.57E-03
0	6,736.16	8.23E+00	3.59E-06	1.30E-03
0	2,610.26	4.13E+00	2.25E-06	6.51E-04
0	2,210.67	0.00E+00	0.00E+00	0.00E+00
0	8.86	1.29E-02	1.50E-05	2.62E-06
0	675.78	1.09E+00	9.16E-07	1.72E-04
0	21.70	0.00E+00	0.00E+00	0.00E+00
0	27.90	3.94E-02	2.94E-05	8.03E-06
0	125.55	3.84E-01	1.38E-07	6.05E-05
0	112.48	0.00E+00	0.00E+00	0.00E+00
0	731.52	9.24E-01	3.44E-07	1.46E-04
0	155.29	0.00E+00	0.00E+00	0.00E+00
0	1.04	1.11E-03	1.06E-06	2.26E-07
0	66.92	1.02E-01	3.44E-08	1.61E-05
0	61.20	0.00E+00	0.00E+00	0.00E+00
0.078672	5.02	9.04E-03	4.84E-07	5.81E-07
0	5.60	0.00E+00	0.00E+00	0.00E+00

Vehicle Trips per Day	Vehicles per Day	CO_2 STREX Emissions (MT/day)	CO_2 IDLEX Emissions (MT/day)	CH_4 STREX Emissions (MT/day)	CH_4 IDLEX Emissions (MT/day)
228.17	25.64	0.00E+00	1.63E-02	0.00E+00	1.29E-07
5.68	0.64	0.00E+00	8.14E-04	0.00E+00	2.78E-06
34,359.25	7,621.44	2.76E+00	0.00E+00	4.57E-03	0.00E+00
167.48	39.70	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1,338.43	265.28	0.00E+00	0.00E+00	0.00E+00	0.00E+00
584.54	141.36	3.92E-02	0.00E+00	3.21E-05	0.00E+00
9,672.27	2,299.22	1.02E+00	0.00E+00	2.09E-03	0.00E+00
0.30	0.10	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2.26	0.46	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1.65	0.40	1.22E-04	0.00E+00	9.08E-08	0.00E+00
40,407.25	8,887.65	4.08E+00	0.00E+00	5.93E-03	0.00E+00
206.88	43.78	0.00E+00	0.00E+00	0.00E+00	0.00E+00
60.82	11.86	0.00E+00	0.00E+00	0.00E+00	0.00E+00
98.52	23.83	7.91E-03	0.00E+00	5.43E-06	0.00E+00
15,390.17	1,033.00	4.06E-01	1.28E-01	7.23E-04	1.19E-04
11,396.06	905.98	0.00E+00	1.26E-01	0.00E+00	4.62E-06
1,503.16	100.89	4.12E-02	1.43E-02	6.72E-05	1.18E-05
4,043.70	321.47	0.00E+00	7.03E-02	0.00E+00	1.64E-06
2,159.93	1,079.97	1.50E-01	0.00E+00	7.32E-04	0.00E+00
23,980.22	5,432.99	2.99E+00	0.00E+00	5.01E-03	0.00E+00
736.06	155.66	0.00E+00	0.00E+00	0.00E+00	0.00E+00
50.22	9.75	0.00E+00	0.00E+00	0.00E+00	0.00E+00
65.45	15.83	6.59E-03	0.00E+00	3.64E-06	0.00E+00
17.88	178.74	6.28E-04	0.00E+00	8.05E-07	0.00E+00
8.44	84.38	0.00E+00	0.00E+00	0.00E+00	0.00E+00
176.78	7.69	0.00E+00	8.28E-02	0.00E+00	1.43E-06
405.01	20.24	1.43E-02	7.82E-03	1.93E-05	3.82E-06
-	-	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3.90	0.97	2.78E-04	2.50E-03	3.88E-07	2.39E-06
454.38	31.38	0.00E+00	7.07E-02	0.00E+00	2.63E-07
148.25	12.21	0.00E+00	2.73E-02	0.00E+00	1.64E-07
1,158.63	97.53	0.00E+00	2.26E-01	0.00E+00	2.06E-06
413.67	80.64	0.00E+00	2.83E-01	0.00E+00	1.36E-06
56.48	4.41	0.00E+00	7.54E-03	0.00E+00	2.90E-08

1,115.96	55.78	6.07E-02	3.08E-02	7.07E-05	1.27E-05
800.28	34.82	0.00E+00	8.87E-01	0.00E+00	1.69E-05
717.61	31.23	0.00E+00	9.66E-01	0.00E+00	1.88E-05
299.08	13.01	0.00E+00	4.11E-01	0.00E+00	7.83E-06
426.24	83.09	0.00E+00	2.68E-01	0.00E+00	4.61E-06
0.68	0.13	0.00E+00	8.42E-04	0.00E+00	2.24E-06
51.96	5.52	0.00E+00	2.65E-02	0.00E+00	5.13E-07
2.23	0.24	0.00E+00	2.22E-03	0.00E+00	8.69E-06
14.23	3.09	0.00E+00	1.13E-02	0.00E+00	1.94E-07
69.80	4.80	0.00E+00	4.26E-02	0.00E+00	7.71E-07
0.10	0.01	0.00E+00	1.17E-04	0.00E+00	4.45E-07
27.32	2.13	0.00E+00	3.52E-03	0.00E+00	6.31E-08
0.60	0.03	3.34E-05	0.00E+00	2.07E-10	0.00E+00

Vehicle Trips per Day	Vehicles per Day	CO_2 STREX Emissions (MT/day)	CO_2 IDLEX Emissions (MT/day)	CH_4 STREX Emissions (MT/day)	CH_4 IDLEX Emissions (MT/day)
320.04	35.96	0.00E+00	1.90E-02	0.00E+00	8.39E-08
5.71	0.64	0.00E+00	7.53E-04	0.00E+00	2.21E-06
59,464.45	12,948.54	3.23E+00	0.00E+00	2.38E-03	0.00E+00
36.95	8.40	0.00E+00	0.00E+00	0.00E+00	0.00E+00
8,342.97	1,806.88	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2,537.18	613.59	1.43E-01	0.00E+00	1.32E-04	0.00E+00
3,747.97	854.61	2.40E-01	0.00E+00	1.66E-04	0.00E+00
0.04	0.01	0.00E+00	0.00E+00	0.00E+00	0.00E+00
112.48	24.27	0.00E+00	0.00E+00	0.00E+00	0.00E+00
76.65	18.54	4.94E-03	0.00E+00	4.01E-06	0.00E+00
34,434.68	7,717.10	2.33E+00	0.00E+00	1.85E-03	0.00E+00
134.88	30.47	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1,345.69	290.95	0.00E+00	0.00E+00	0.00E+00	0.00E+00
825.82	199.72	5.60E-02	0.00E+00	4.31E-05	0.00E+00
4,947.81	332.10	1.22E-01	3.60E-02	1.09E-04	2.84E-05
2,207.50	175.49	0.00E+00	2.06E-02	0.00E+00	8.95E-07
4,943.99	350.01	0.00E+00	0.00E+00	0.00E+00	0.00E+00
404.44	27.15	9.75E-03	3.35E-03	7.47E-06	1.97E-06
1,309.58	104.11	0.00E+00	2.04E-02	0.00E+00	5.31E-07
1,004.52	75.93	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1,462.67	731.33	6.29E-02	0.00E+00	2.38E-04	0.00E+00
18,895.29	4,233.76	1.55E+00	0.00E+00	1.02E-03	0.00E+00
241.50	57.36	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1,192.23	258.32	0.00E+00	0.00E+00	0.00E+00	0.00E+00
505.31	122.20	4.16E-02	0.00E+00	2.62E-05	0.00E+00
3.28	32.79	9.85E-05	0.00E+00	1.21E-07	0.00E+00
2.90	28.99	0.00E+00	0.00E+00	0.00E+00	0.00E+00
233.09	10.14	0.00E+00	8.39E-02	0.00E+00	1.88E-06

87.27	4.36	2.42E-03	1.53E-03	2.71E-06	8.41E-07
49.71	2.48	0.00E+00	0.00E+00	0.00E+00	0.00E+00
-	-	0.00E+00	0.00E+00	0.00E+00	0.00E+00
-	-	0.00E+00	0.00E+00	0.00E+00	0.00E+00
6.70	1.67	3.84E-04	3.78E-03	6.18E-07	4.19E-06
236.96	16.36	0.00E+00	2.96E-02	0.00E+00	1.27E-07
210.72	15.79	0.00E+00	0.00E+00	0.00E+00	0.00E+00
183.65	15.25	0.00E+00	2.88E-02	0.00E+00	1.25E-07
137.19	11.45	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1,059.25	88.89	0.00E+00	1.64E-01	0.00E+00	7.32E-07
1,356.10	113.75	0.00E+00	0.00E+00	0.00E+00	0.00E+00
259.69	50.62	0.00E+00	1.37E-01	0.00E+00	6.08E-07
220.00	42.89	0.00E+00	0.00E+00	0.00E+00	0.00E+00
25.63	2.00	0.00E+00	2.81E-03	0.00E+00	1.26E-08
39.07	3.05	0.00E+00	0.00E+00	0.00E+00	0.00E+00
605.31	30.25	2.31E-02	1.40E-02	2.52E-05	8.00E-06
469.72	23.48	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1,219.84	53.08	0.00E+00	1.06E+00	0.00E+00	2.57E-05
339.92	14.79	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1,349.25	58.71	0.00E+00	1.40E+00	0.00E+00	3.53E-05
581.94	25.32	0.00E+00	6.04E-01	0.00E+00	1.52E-05
298.20	58.13	0.00E+00	1.45E-01	0.00E+00	3.24E-06
224.66	43.79	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1.00	0.20	0.00E+00	1.14E-03	0.00E+00	3.30E-06
24.59	2.61	0.00E+00	1.27E-02	0.00E+00	2.26E-07
3.24	0.34	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1.03	0.11	0.00E+00	1.02E-03	0.00E+00	3.97E-06
8.04	1.75	0.00E+00	4.68E-03	0.00E+00	1.09E-07
7.23	1.57	0.00E+00	0.00E+00	0.00E+00	0.00E+00
148.09	10.19	0.00E+00	6.75E-02	0.00E+00	1.64E-06
29.02	2.00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.19	0.01	0.00E+00	2.12E-04	0.00E+00	6.48E-07
18.76	1.47	0.00E+00	1.94E-03	0.00E+00	4.33E-08
15.43	1.21	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.79	0.04	3.38E-05	0.00E+00	6.62E-10	0.00E+00
0.68	0.03	0.00E+00	0.00E+00	0.00E+00	0.00E+00

N_2O STREX Emissions (MT/day)	N_2O IDLEX Emissions (MT/day)
0.00E+00	2.56E-06
0.00E+00	1.66E-07
1.45E-03	0.00E+00
0.00E+00	0.00E+00
0.00E+00	0.00E+00
1.34E-05	0.00E+00
5.13E-04	0.00E+00
0.00E+00	0.00E+00
0.00E+00	0.00E+00
3.78E-08	0.00E+00
2.06E-03	0.00E+00
0.00E+00	0.00E+00
0.00E+00	0.00E+00
2.26E-06	0.00E+00
8.09E-04	2.85E-06
0.00E+00	1.98E-05
7.72E-05	2.93E-07
0.00E+00	1.11E-05
2.71E-05	0.00E+00
1.48E-03	0.00E+00
0.00E+00	0.00E+00
0.00E+00	0.00E+00
1.53E-06	0.00E+00
6.84E-07	0.00E+00
0.00E+00	0.00E+00
0.00E+00	1.30E-05
1.28E-05	9.85E-08
0.00E+00	0.00E+00
2.61E-07	8.35E-08
0.00E+00	1.11E-05
0.00E+00	4.30E-06
0.00E+00	3.57E-05
0.00E+00	4.46E-05
0.00E+00	1.19E-06

3.60E-05	3.06E-07
0.00E+00	1.40E-04
0.00E+00	1.52E-04
0.00E+00	6.48E-05
0.00E+00	4.22E-05
0.00E+00	1.72E-07
0.00E+00	4.17E-06
0.00E+00	4.53E-07
0.00E+00	1.78E-06
0.00E+00	6.71E-06
0.00E+00	2.38E-08
0.00E+00	5.55E-07
9.40E-09	0.00E+00

N_2O STREX Emissions (MT/day)	N_2O IDLEX Emissions (MT/day)
0.00E+00	3.00E-06
0.00E+00	1.54E-07
1.73E-03	0.00E+00
0.00E+00	0.00E+00
0.00E+00	0.00E+00
5.26E-05	0.00E+00
1.14E-04	0.00E+00
0.00E+00	0.00E+00
0.00E+00	0.00E+00
1.60E-06	0.00E+00
1.19E-03	0.00E+00
0.00E+00	0.00E+00
0.00E+00	0.00E+00
1.72E-05	0.00E+00
2.19E-04	7.96E-07
0.00E+00	3.25E-06
0.00E+00	0.00E+00
1.51E-05	5.79E-08
0.00E+00	3.22E-06
0.00E+00	0.00E+00
6.79E-06	0.00E+00
6.65E-04	0.00E+00
0.00E+00	0.00E+00
0.00E+00	0.00E+00
1.04E-05	0.00E+00
1.53E-07	0.00E+00
0.00E+00	0.00E+00
0.00E+00	1.32E-05

2.25E-06	2.05E-08
0.00E+00	0.00E+00
0.00E+00	0.00E+00
0.00E+00	0.00E+00
3.06E-07	1.05E-07
0.00E+00	4.66E-06
0.00E+00	0.00E+00
0.00E+00	4.54E-06
0.00E+00	0.00E+00
0.00E+00	2.58E-05
0.00E+00	0.00E+00
0.00E+00	2.16E-05
0.00E+00	0.00E+00
0.00E+00	4.42E-07
0.00E+00	0.00E+00
2.26E-05	1.59E-07
0.00E+00	0.00E+00
0.00E+00	1.68E-04
0.00E+00	0.00E+00
0.00E+00	2.21E-04
0.00E+00	9.52E-05
0.00E+00	2.28E-05
0.00E+00	0.00E+00
0.00E+00	2.32E-07
0.00E+00	2.00E-06
0.00E+00	0.00E+00
0.00E+00	2.08E-07
0.00E+00	7.37E-07
0.00E+00	0.00E+00
0.00E+00	1.06E-05
0.00E+00	0.00E+00
0.00E+00	4.33E-08
0.00E+00	3.05E-07
0.00E+00	0.00E+00
6.21E-08	0.00E+00
0.00E+00	0.00E+00

Group	Area	GAI	Sub-Area	Cal. Year	Season
1	TMPO		All Sub-Areas	2005	Annual
1	TMPO		All Sub-Areas	2005	Annual
1	TMPO		All Sub-Areas	2005	Annual
1	TMPO		All Sub-Areas	2005	Annual
1	TMPO		All Sub-Areas	2005	Annual
1	TMPO		All Sub-Areas	2005	Annual
1	TMPO		All Sub-Areas	2005	Annual
1	TMPO		All Sub-Areas	2005	Annual
1	TMPO		All Sub-Areas	2005	Annual
1	TMPO		All Sub-Areas	2035	Annual
1	TMPO		All Sub-Areas	2035	Annual
1	TMPO		All Sub-Areas	2035	Annual
1	TMPO		All Sub-Areas	2035	Annual
1	TMPO		All Sub-Areas	2035	Annual
1	TMPO		All Sub-Areas	2035	Annual
1	TMPO		All Sub-Areas	2035	Annual
1	TMPO		All Sub-Areas	2035	Annual
1	TMPO		All Sub-Areas	2035	Annual
1	TMPO		All Sub-Areas	2050	Annual
1	TMPO		All Sub-Areas	2050	Annual
1	TMPO		All Sub-Areas	2050	Annual
1	TMPO		All Sub-Areas	2050	Annual
1	TMPO		All Sub-Areas	2050	Annual
1	TMPO		All Sub-Areas	2050	Annual
1	TMPO		All Sub-Areas	2050	Annual
1	TMPO		All Sub-Areas	2050	Annual
1	TMPO		All Sub-Areas	2050	Annual

Title	Veh_Tech	EMFAC2007 Category	Population
b-Areas-2005-/	All Vehicles	All Vehicles	23,638.3
b-Areas-2005-/	LDA - DSL	LDA - DSL	73.5
b-Areas-2005-/	LDA - GAS	LDA - GAS	9,101.6
b-Areas-2005-/	LDT1 - DSL	LDT1 - DSL	15.9
b-Areas-2005-/	LDT1 - GAS	LDT1 - GAS	3,183.8
b-Areas-2005-/	LDT2 - DSL	LDT2 - DSL	0.6357
b-Areas-2005-/	LDT2 - GAS	LDT2 - GAS	5,604.9
b-Areas-2005-/	MDV - DSL	MDV - DSL	13.7
b-Areas-2005-/	MDV - GAS	MDV - GAS	5,644.2
b-Areas-2035-/	All Vehicles	All Vehicles	19,229.6
b-Areas-2035-/	LDA - DSL	LDA - DSL	131.9
b-Areas-2035-/	LDA - GAS	LDA - GAS	11,274.9
b-Areas-2035-/	LDT1 - DSL	LDT1 - DSL	0.8497
b-Areas-2035-/	LDT1 - GAS	LDT1 - GAS	662.0
b-Areas-2035-/	LDT2 - DSL	LDT2 - DSL	9.00
b-Areas-2035-/	LDT2 - GAS	LDT2 - GAS	4,282.7
b-Areas-2035-/	MDV - DSL	MDV - DSL	58.0
b-Areas-2035-/	MDV - GAS	MDV - GAS	2,810.3
b-Areas-2050-/	All Vehicles	All Vehicles	20,034.3
b-Areas-2050-/	LDA - DSL	LDA - DSL	145.6
b-Areas-2050-/	LDA - GAS	LDA - GAS	12,367.2
b-Areas-2050-/	LDT1 - DSL	LDT1 - DSL	0.4222
b-Areas-2050-/	LDT1 - GAS	LDT1 - GAS	626.6
b-Areas-2050-/	LDT2 - DSL	LDT2 - DSL	9.66
b-Areas-2050-/	LDT2 - GAS	LDT2 - GAS	4,371.4
b-Areas-2050-/	MDV - DSL	MDV - DSL	68.5
b-Areas-2050-/	MDV - GAS	MDV - GAS	2,444.9

41,338
40,664

VMT	Trips	CO2_RUNEX	CO2_IDLEX	CO2_STREX
788,988.6	146,544.1	393.3	0	15.3
1,606.1	426.2	0.6400		
305,401.9	56,051.6	118.4		4.74
315.5	91.1	0.1497		
84,494.0	18,994.6	37.6		1.89
23.7	4.07	0.0127		
199,992.7	35,223.4	107.1		3.89
236.7	79.4	0.1654		
196,918.0	35,673.7	129.2		4.83
761,540.0	118,259.0	346.8	0	11.3
5,663.8	831.1	2.17		
481,411.1	70,840.5	188.1		5.78
19.6	4.49	0.0088		
25,019.0	3,950.9	11.4		0.3738
365.7	56.2	0.1903		
166,546.1	26,178.0	88.7		2.91
2,105.2	361.7	1.41		
80,409.4	16,036.2	54.9		2.26
786,725.0	124,694.3	356.8	0	11.8
5,934.9	913.7	2.28		
504,087.9	77,592.9	197.0		6.34
14.4	2.44	0.0064		
25,290.9	3,895.3	11.5		0.3715
376.3	59.9	0.1958		
170,622.9	27,116.3	90.9		3.02
2,243.2	416.4	1.50		
78,154.5	14,697.4	53.5		2.10

	Per Capita			
	19.03	393.3		19.77
	17.06	346.8		17.62
	-10.34%			-12.22%
+0.15%	-10.49%		+0.15%	-12.37%

CO2_TOTEX	Fuel_GAS	Fuel_DSL
408.6	44.4	0.0871
0.6400		0.0576
123.1	13.5	
0.1497		0.0135
39.5	4.48	
0.0127		0.0011
111.0	12.0	
0.1654		0.0149
134.0	14.5	
358.2	37.9	0.3399
2.17		0.1954
193.9	20.7	
0.0088		0.0008
11.7	1.26	
0.1903		0.0171
91.6	9.79	
1.41		0.1266
57.2	6.12	
368.6	38.9	0.3579
2.28		0.2048
203.3	21.7	
0.0064		0.0006
11.9	1.27	
0.1958		0.0176
93.9	10.0	
1.50		0.1349
55.6	5.93	

408.6
358.2