

Air Quality and Greenhouse Gases

R-C1 – Air Quality and Greenhouse Gases Technical Memorandum

APPENDIX R-C

Air Quality and Greenhouse Gases

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APPENDIX R-C: AIR QUALITY

1.0 Emissions Inventory

This section of Appendix R-C presents the overall data, assumptions, and methodology for preparing the criteria pollutant emissions inventory in support of the air quality impacts assessment for the proposed San Diego International Airport (SDIA) Airport Development Plan (ADP). The emissions inventories were prepared for the existing/baseline year (2018) and future years (2024, 2026, 2030, 2035) for Alternative 1 (No Project), the proposed project, and Alternative 4 using the best available data at the time of the analysis. Emissions were also calculated for the year 2050 as a long-term analysis year that coincides with the planning horizon year in the *San Diego Forward: The Regional Plan / 2015-2050*. The year 2050 emissions inventory is subject to additional uncertainty as compared to the less distant future analyses due to the influences of technological advancements in transportation, as well as the influence of evolving political and economic climates.

The emissions inventories were prepared for volatile organic compounds (VOC), nitrogen oxides (NO_x), particulate matter less than 10 micrometers in diameter (PM₁₀), particulate matter less than 2.5 micrometers in diameter (PM_{2.5}), carbon monoxide (CO), and sulfur oxides (SO_x). The operational and construction air dispersion analysis was prepared for VOC, nitrogen dioxide (NO₂), PM₁₀, PM_{2.5}, CO, sulfur dioxide (SO₂). Dispersion analysis was not performed to evaluate levels of O₃. The complexity of O₃ formation and the health implications of O₃ warrants evaluation on a regional basis using a regional model and cannot be meaningfully addressed on a project-specific level.

As stated above, the air quality analysis was performed for the existing/baseline condition (2018) and future years with Alternative 1 (No Project), the proposed project, and Alternative 4. The emissions estimates for Alternatives 2 and 3 (presented in Chapter 5 - Alternatives Analysis) were estimated/derived as follows:

- Alternative 2 – With Alternative 2, there would be no demolition of, replacement of, or additions to the existing T1 and T2, but there would be development of a new terminal east of T1. As such, Alternative 2 would involve much less construction than the proposed project. For the purpose of preparing emission estimates for Alternative 2, it was assumed that development would occur within the same timeframe as Phase 1a of the proposed project. The construction intensity of Alternative 2 would be approximately 59 percent of that associated with the proposed project in the same phase (i.e., 5,644,500 square feet of demolition/construction under Alternative 2 compared to 9,634,800 square feet for the proposed project in Phase 1a). There would be no demolition or construction associated with Alternative 2 in Phases 1b, 2a, and 2b. With respect to emissions associated with airport operation, emissions and concentrations with Alternative 2 would be essentially the same as those of the proposed project. This is because the future aircraft and passenger activity levels, and key improvements such as the provision of additional gates and development of the new on-airport access road, would be comparable under both scenarios.
- Alternative 3 - Alternative 3 would provide the same nature and amount of development as the proposed project but would be phased differently. Based on the comparative differences in construction intensity, as defined by the combination of demolition and construction, the total demolition/construction associated with Alternative 3 compared to the proposed project would be approximately:

- Phase 1a (2022/2024) - 23 percent of emissions estimated for the proposed project;
- Phase 1b (2026) - 209 percent of emissions estimated for the proposed project;
- Phase 2a (2030) - 209 percent of emissions estimated for the proposed project; and
- Phase 2b (2035) - 100 percent of emission estimated for the proposed project.

The air pollutant emissions and concentrations associated with operations under Alternative 3 would also be comparable to those of the proposed project. This is because the future aircraft and passenger activity levels, and key improvements such as the provision of additional gates and development of the new on-airport access road, would be the same under both scenarios, and those type of improvements have similar implications relative to operations-related air quality impacts; however, the phasing of those improvements would result in slight differences in the early phases of the project.

The following sections of this Appendix provide a detailed discussion of the methodologies used to prepare the air quality analysis and, by emission source, presents the computer model/calculation input data and assumptions.

1.1 Aircraft

The aircraft-related emission inventories were prepared using the Federal Aviation Administration’s (FAA’s) Aviation Environmental Design Tool (AEDT) version 2d, by factoring total aircraft operational activity against a database of aircraft/engine-specific emission factors based on engine manufacturer, model, and aircraft operational mode within the landing/takeoff (LTO) cycle. For the purposes of emissions inventory, an LTO cycle consists of the following operational modes:

- *Approach*: The airborne segment of an aircraft’s arrival extending from the start of the flight profile (or the mixing height) to touchdown on the runway;
- *Taxi In*: The landing ground roll segment (from touchdown to the runway exit) of an arriving aircraft, including reverse thrust, and the taxiing from the runway exit to a gate;
- *Startup*: Aircraft main engine startup (for VOC only) occurs at the gate and is considered in AEDT for ICAO certified engines only;
- *Taxi Out*: The taxiing from the gate to a runway end;
- *Takeoff*: The portion from the start of the ground roll on the runway, through wheels off, and the airborne portion of the ascent up to cutback during which the aircraft operates at maximum thrust; and
- *Climb Out*: The portion from engine cutback to the end of the flight profile or the mixing height. The “mixing height” is defined as the vertical extent in the atmosphere over which pollutants no longer mix downward to ground level.

AEDT’s calculation of emissions within the LTO relies on aircraft fleet, operations, and time within each mode of the LTO cycle.

1.1.1 Fleet and Operations

AEDT requires definition of an aircraft fleet (i.e., the types of aircraft using the airport and their assigned engines) and a level of operations (i.e., either arrivals/departures or LTOs) assigned to each member of the aircraft fleet. AEDT can accept varying levels of detail depending on the extent to which aircraft operational parameters at a given airport are available or known.

For this analysis, aircraft activity (i.e., aircraft arrival and departure operations), mode data (i.e., taxi and delay times) as well as airframe engine assignments were based on results from airport and airspace simulation models (SIMMOD), gate schedules, the SDIA ADP forecast, and AEDT defaults. The aircraft fleet/operational level data used in the air quality analysis are consistent with those used to assess noise impacts with the proposed project and alternatives. **Tables C-1** through **C-6** contain the listing of annual aircraft operations (by category, aircraft, engine, operation type, and stage length) for existing/baseline conditions (2018) and future conditions (2024, 2026, 2030, 2035, and 2050) with the No Project Alternative, the proposed project, and the evaluated alternatives. Notably, future year operational levels do not change (increase of operations or fleet mix) between project alternatives in each of the evaluated years, as projected aircraft activity levels would be constant across the proposed project and alternatives.

Table C-1 Annual Aircraft Operations for 2018 Existing/Baseline Condition

| Aircraft Group | Type of Aircraft | Airframe | Number of Operations | Op Type | Engine | AEDT Equip ID | Stage Length |
|-------------------|------------------|------------------------------|----------------------|---------|-----------------------------|---------------|--------------|
| Passenger | Narrowbody | Bombardier CS-100 | 365 | A | PW1524G | 5301 | 1 |
| Passenger | Narrowbody | Airbus A319-100 Series | 1,095 | A | V2524-A5 | 4850 | 1 |
| Passenger | Narrowbody | Airbus A320-200 Series | 6,570 | A | V2527-A5 | 1019 | 1 |
| Passenger | Narrowbody | Airbus A320-NEO | 1,095 | A | LEAP-1A26/26E1 | 5314 | 1 |
| Passenger | Narrowbody | Airbus A321-100 Series | 7,300 | A | CFM56-5B3/P | 1031 | 1 |
| Passenger | Narrowbody | Airbus A321-NEO | 4,015 | A | PW1133G-JM | 5315 | 1 |
| Passenger | Narrowbody | Boeing 717-200 Series | 730 | A | BR700-715A1-30 | 83 | 1 |
| Passenger | Narrowbody | Boeing 737-800 MAX | 365 | A | LEAP-1A35A/AA/33B2/32/30 | 4129 | 1 |
| Passenger | Narrowbody | Boeing 737-700 with winglets | 29,565 | A | CFM56-7B27/3 | 4131 | 1 |
| Passenger | Narrowbody | Boeing 737-800 Series | 18,615 | A | CFM56-7B26/3 | 2497 | 1 |
| Passenger | Narrowbody | Boeing 737-900-ER | 9,125 | A | CFM56-7B26E | 4356 | 1 |
| Passenger | Narrowbody | Boeing 757-200 Series | 2,190 | A | PW2037 | 385 | 1 |
| Passenger | Widebody | Airbus A330-200 Series | 365 | A | Trent 772 | 1094 | 1 |
| Passenger | Regional Jet | Bombardier CRJ-200 | 730 | A | CF34-3B | 1250 | 1 |
| Passenger | Regional Jet | Bombardier CRJ-700 | 730 | A | CF34-8C5B1 | 2546 | 1 |
| Passenger | Regional Jet | Embraer ERJ175 | 13,140 | A | CF34-8E5 | 1771 | 1 |
| Passenger | Narrowbody | Airbus A321-100 Series | 365 | A | CFM56-5B3/P | 1031 | 1 |
| Passenger | Narrowbody | Boeing 737-700 with winglets | 730 | A | CFM56-7B27/3 | 4131 | 1 |
| Passenger | Narrowbody | Boeing 737-800 Series | 365 | A | CFM56-7B26/3 | 2497 | 1 |
| Passenger | Narrowbody | Boeing 737-900-ER | 365 | A | CFM56-7B26E | 4356 | 1 |
| Passenger | Widebody | Boeing 777-200-ER | 365 | A | Trent 895 | 4213 | 1 |
| Passenger | Widebody | B787-8R | 365 | A | Trent 1000 Pkg B T1000-A/01 | 3996 | 1 |
| Passenger | Regional Jet | Bombardier CRJ-900 | 730 | A | CF34-8C5B1 | 2426 | 1 |
| Other Air Carrier | Narrowbody | Airbus A319-100 Series | 730 | A | V2524-A5 | 4850 | 1 |
| Other Air Carrier | Narrowbody | Boeing 737-300 Series | 1,095 | A | CFM563 | 150 | 1 |
| Other Air Carrier | Narrowbody | Boeing 737-700 with winglets | 365 | A | CFM56-7B27/3 | 4131 | 1 |
| Other Air Carrier | Narrowbody | Boeing 757-200 Series | 730 | A | PW2037 | 385 | 1 |

Table C-1 Annual Aircraft Operations for 2018 Existing/Baseline Condition

| Aircraft Group | Type of Aircraft | Airframe | Number of Operations | Op Type | Engine | AEDT Equip ID | Stage Length |
|-------------------|--------------------------------------|--|----------------------|---------|------------------------|---------------|--------------|
| Other Air Carrier | Regional Jet | Bombardier CRJ-700 | 365 | A | CF34-8C5B1 | 2546 | 1 |
| Other Air Carrier | Regional Jet | Embraer ERJ190 | 365 | A | CF34-10E5A1 | 2563 | 1 |
| Cargo | Narrowbody | Boeing 757-200 Series | 365 | A | PW2037 | 385 | 1 |
| Cargo | Widebody | Boeing 767-200 Series | 1,825 | A | JT9D-7R4D,-7R4D1 | 437 | 1 |
| Cargo | Turboprop | Raytheon Beech 99 | 730 | A | PT6A-27 | 1495 | 1 |
| Cargo | Turboprop | Fairchild SA-226-TC Metro II | 365 | A | TPE331-11U-601G | 3125 | 1 |
| General Aviation | Business Jet multi-engine heavy | Cessna 560 Citation XLS | 704 | A | BIZMEDIUMJET_F | 3634 | 1 |
| General Aviation | Business Jet multi-engine heavy | Gulfstream G400 | 704 | A | TAY611-8C | 1916 | 1 |
| General Aviation | Business Jet multi-engine heavy | Bombardier Challenger 300 | 939 | A | HTF7350 (AS907-2-1A) | 4856 | 1 |
| General Aviation | Business Jet multi-engine heavy | Bombardier Challenger 350 | 469 | A | HTF7350 (AS907-2-1A) | 5345 | 1 |
| General Aviation | Business Jet multi-engine heavy | Bombardier Challenger 600 | 469 | A | CF34-3B | 1237 | 1 |
| General Aviation | Business Jet multi-engine light plus | Cessna 525B CitationJet | 365 | A | BIZLIGHTJET_F | 3986 | 1 |
| General Aviation | Business Jet multi-engine light plus | CX 750 Citation X+ | 365 | A | AE3007C2 | 4249 | 1 |
| General Aviation | Business Jet multi-engine light plus | Embraer 500 | 365 | A | BIZLIGHTJET_F | 3988 | 1 |
| General Aviation | Business Jet multi-engine light plus | Dassault Falcon 2000 | 365 | A | PW308C Build Spec 1289 | 4804 | 1 |
| General Aviation | Business Jet multi-engine light plus | Raytheon Hawker 800 | 365 | A | TFE731-2/2A | 3105 | 1 |
| General Aviation | Single engine | Cessna 172 Skyhawk | 243 | A | TSIO-360C | 3247 | 1 |
| General Aviation | Single engine | Pilatus PC-12 | 487 | A | PT6A-67B | 1489 | 1 |
| Military | Multi-engine turboprop | Raytheon Super King Air 200 | 365 | A | PT6A-61 | 3034 | 1 |
| Helicopter | | Robinson R44 Raven / Lycoming O-540-F1B5 | 182 | A | TIO-540-J2B2 | 3161 | 1 |
| Passenger | Narrowbody | Airbus A319-100 Series | 365 | D | V2524-A5 | 4850 | 1 |
| Passenger | Narrowbody | Airbus A319-100 Series | 365 | D | V2524-A5 | 4850 | 2 |

Table C-1 Annual Aircraft Operations for 2018 Existing/Baseline Condition

| Aircraft Group | Type of Aircraft | Airframe | Number of Operations | Op Type | Engine | AEDT Equip ID | Stage Length |
|----------------|------------------|------------------------------|----------------------|---------|--------------------------|---------------|--------------|
| Passenger | Narrowbody | Airbus A319-100 Series | 365 | D | V2524-A5 | 4850 | 3 |
| Passenger | Narrowbody | Airbus A320-200 Series | 1,825 | D | V2527-A5 | 1019 | 1 |
| Passenger | Narrowbody | Airbus A320-200 Series | 1,460 | D | V2527-A5 | 1019 | 2 |
| Passenger | Narrowbody | Airbus A320-200 Series | 1,095 | D | V2527-A5 | 1019 | 3 |
| Passenger | Narrowbody | Airbus A320-200 Series | 2,190 | D | V2527-A5 | 1019 | 4 |
| Passenger | Narrowbody | Airbus A320-NEO | 730 | D | LEAP-1A26/26E1 | 5314 | 1 |
| Passenger | Narrowbody | Airbus A320-NEO | 365 | D | LEAP-1A26/26E1 | 5314 | 4 |
| Passenger | Narrowbody | Airbus A321-100 Series | 730 | D | CFM56-5B3/P | 1031 | 1 |
| Passenger | Narrowbody | Airbus A321-100 Series | 730 | D | CFM56-5B3/P | 1031 | 2 |
| Passenger | Narrowbody | Airbus A321-100 Series | 1,460 | D | CFM56-5B3/P | 1031 | 3 |
| Passenger | Narrowbody | Airbus A321-100 Series | 4,380 | D | CFM56-5B3/P | 1031 | 4 |
| Passenger | Narrowbody | Airbus A321-NEO | 730 | D | PW1133G-JM | 5315 | 1 |
| Passenger | Narrowbody | Airbus A321-NEO | 3,285 | D | PW1133G-JM | 5315 | 3 |
| Passenger | Narrowbody | Boeing 717-200 Series | 365 | D | BR700-715A1-30 | 83 | 1 |
| Passenger | Narrowbody | Boeing 717-200 Series | 730 | D | BR700-715A1-30 | 83 | 2 |
| Passenger | Narrowbody | Boeing 737-800 MAX | 365 | D | LEAP-1A35A/AA/33B2/32/30 | 4129 | 2 |
| Passenger | Narrowbody | Boeing 737-700 with winglets | 19,345 | D | CFM56-7B27/3 | 4131 | 1 |
| Passenger | Narrowbody | Boeing 737-700 with winglets | 5,110 | D | CFM56-7B27/3 | 4131 | 2 |
| Passenger | Narrowbody | Boeing 737-700 with winglets | 3,285 | D | CFM56-7B27/3 | 4131 | 3 |
| Passenger | Narrowbody | Boeing 737-700 with winglets | 1,825 | D | CFM56-7B27/3 | 4131 | 4 |
| Passenger | Narrowbody | Boeing 737-800 Series | 5,110 | D | CFM56-7B26/3 | 2497 | 1 |
| Passenger | Narrowbody | Boeing 737-800 Series | 2,190 | D | CFM56-7B26/3 | 2497 | 2 |
| Passenger | Narrowbody | Boeing 737-800 Series | 4,745 | D | CFM56-7B26/3 | 2497 | 3 |
| Passenger | Narrowbody | Boeing 737-800 Series | 6,205 | D | CFM56-7B26/3 | 2497 | 4 |
| Passenger | Narrowbody | Boeing 737-900-ER | 2,190 | D | CFM56-7B26E | 4356 | 1 |
| Passenger | Narrowbody | Boeing 737-900-ER | 3,285 | D | CFM56-7B26E | 4356 | 2 |
| Passenger | Narrowbody | Boeing 737-900-ER | 2,920 | D | CFM56-7B26E | 4356 | 3 |
| Passenger | Narrowbody | Boeing 737-900-ER | 1,095 | D | CFM56-7B26E | 4356 | 4 |

Table C-1 Annual Aircraft Operations for 2018 Existing/Baseline Condition

| Aircraft Group | Type of Aircraft | Airframe | Number of Operations | Op Type | Engine | AEDT Equip ID | Stage Length |
|-------------------|---------------------------------|------------------------------|----------------------|---------|-----------------------------|---------------|--------------|
| Passenger | Narrowbody | Boeing 757-200 Series | 365 | D | PW2037 | 385 | 1 |
| Passenger | Narrowbody | Boeing 757-200 Series | 1,825 | D | PW2037 | 385 | 4 |
| Passenger | Widebody | Airbus A330-200 Series | 365 | D | Trent 772 | 1094 | 4 |
| Passenger | Regional Jet | Bombardier CRJ-200 | 730 | D | CF34-3B | 1250 | 1 |
| Passenger | Regional Jet | Bombardier CRJ-700 | 730 | D | CF34-8C5B1 | 2546 | 1 |
| Passenger | Regional Jet | Embraer ERJ175 | 9,125 | D | CF34-8E5 | 1771 | 1 |
| Passenger | Regional Jet | Embraer ERJ175 | 1,825 | D | CF34-8E5 | 1771 | 2 |
| Passenger | Regional Jet | Embraer ERJ175 | 2,190 | D | CF34-8E5 | 1771 | 3 |
| Passenger | Narrowbody | Airbus A321-100 Series | 365 | D | CFM56-5B3/P | 1031 | 4 |
| Passenger | Narrowbody | Boeing 737-700 with winglets | 365 | D | CFM56-7B27/3 | 4131 | 2 |
| Passenger | Narrowbody | Boeing 737-700 with winglets | 365 | D | CFM56-7B27/3 | 4131 | 3 |
| Passenger | Narrowbody | Boeing 737-800 Series | 730 | D | CFM56-7B26/3 | 2497 | 2 |
| Passenger | Widebody | Boeing 777-200-ER | 365 | D | Trent 895 | 4213 | 7 |
| Passenger | Widebody | B787-8R | 365 | D | Trent 1000 Pkg B T1000-A/01 | 3996 | 7 |
| Passenger | Regional Jet | Bombardier CRJ-900 | 730 | D | CF34-8C5B1 | 2426 | 3 |
| Other Air Carrier | Narrowbody | Airbus A319-100 Series | 730 | D | V2524-A5 | 4850 | 4 |
| Other Air Carrier | Narrowbody | Boeing 737-300 Series | 365 | D | CFM563 | 150 | 1 |
| Other Air Carrier | Narrowbody | Boeing 737-300 Series | 365 | D | CFM563 | 150 | 2 |
| Other Air Carrier | Narrowbody | Boeing 737-300 Series | 365 | D | CFM563 | 150 | 3 |
| Other Air Carrier | Narrowbody | Boeing 737-700 with winglets | 365 | D | CFM56-7B27/3 | 4131 | 7 |
| Other Air Carrier | Narrowbody | Boeing 757-200 Series | 365 | D | PW2037 | 385 | 3 |
| Other Air Carrier | Narrowbody | Boeing 757-200 Series | 365 | D | PW2037 | 385 | 7 |
| Other Air Carrier | Regional Jet | Bombardier CRJ-700 | 365 | D | CF34-8C5B1 | 2546 | 1 |
| Other Air Carrier | Regional Jet | Embraer ERJ190 | 365 | D | CF34-10E5A1 | 2563 | 1 |
| Other Air Taxi | Business Jet multi-engine heavy | Gulfstream V-SP | 365 | D | BR700-710A1-10 | 2432 | 1 |
| Cargo | Narrowbody | Boeing 757-200 Series | 365 | D | PW2037 | 385 | 5 |
| Cargo | Widebody | Boeing 767-200 Series | 1,095 | D | JT9D-7R4D,-7R4D1 | 437 | 3 |
| Cargo | Widebody | Boeing 767-200 Series | 730 | D | JT9D-7R4D,-7R4D1 | 437 | 4 |

Table C-1 Annual Aircraft Operations for 2018 Existing/Baseline Condition

| Aircraft Group | Type of Aircraft | Airframe | Number of Operations | Op Type | Engine | AEDT Equip ID | Stage Length |
|------------------|--------------------------------------|--|----------------------|---------|------------------------|---------------|--------------|
| Cargo | Turboprop | Raytheon Beech 99 | 730 | D | PT6A-27 | 1495 | 1 |
| Cargo | Turboprop | Fairchild SA-226-TC Metro II | 365 | D | TPE331-11U-601G | 3125 | 1 |
| General Aviation | Business Jet multi-engine heavy | Cessna 560 Citation XLS | 704 | D | BIZMEDIUMJET_F | 3634 | 1 |
| General Aviation | Business Jet multi-engine heavy | Gulfstream G400 | 704 | D | TAY611-8C | 1916 | 1 |
| General Aviation | Business Jet multi-engine heavy | Bombardier Challenger 300 | 939 | D | HTF7350 (AS907-2-1A) | 4856 | 1 |
| General Aviation | Business Jet multi-engine heavy | Bombardier Challenger 350 | 469 | D | HTF7350 (AS907-2-1A) | 5345 | 1 |
| General Aviation | Business Jet multi-engine heavy | Bombardier Challenger 600 | 469 | D | CF34-3B | 1237 | 1 |
| General Aviation | Business Jet multi-engine light plus | Cessna 525B CitationJet | 365 | D | BIZLIGHTJET_F | 3986 | 1 |
| General Aviation | Business Jet multi-engine light plus | CX 750 Citation X+ | 219 | D | AE3007C2 | 4249 | 1 |
| General Aviation | Business Jet multi-engine light plus | CX 750 Citation X+ | 146 | D | AE3007C2 | 4249 | 7 |
| General Aviation | Business Jet multi-engine light plus | Embraer 500 | 365 | D | BIZLIGHTJET_F | 3988 | 1 |
| General Aviation | Business Jet multi-engine light plus | Dassault Falcon 2000 | 365 | D | PW308C Build Spec 1289 | 4804 | 1 |
| General Aviation | Business Jet multi-engine light plus | Raytheon Hawker 800 | 365 | D | TFE731-2/2A | 3105 | 1 |
| General Aviation | Single engine | Cessna 172 Skyhawk | 122 | D | TSIO-360C | 3247 | 1 |
| General Aviation | Single engine | Pilatus PC-12 | 243 | D | PT6A-67B | 1489 | 1 |
| General Aviation | Multi-engine turboprop | Raytheon Super King Air 200 | 365 | D | PT6A-61 | 3034 | 1 |
| Military | Multi-engine turboprop | Raytheon Super King Air 200 | 365 | D | PT6A-61 | 3034 | 1 |
| Helicopter | | Robinson R44 Raven / Lycoming O-540-F1B5 | 183 | D | TIO-540-J2B2 | 3161 | 1 |
| Total | | | 225,570 | | | | |

Table C-2 Annual Aircraft Operations for 2024

| Aircraft Group | Type of Aircraft | Airframe | Number of Operations | Op Type | Engine | AEDT Equip ID | Stage Length |
|----------------|------------------|------------------------------|----------------------|---------|-----------------------------|---------------|--------------|
| Passenger | Narrowbody | Bombardier CS-100 | 730 | A | PW1524G | 5301 | 1 |
| Passenger | Narrowbody | Bombardier CS-100 | 730 | A | PW1524G | 5301 | 1 |
| Passenger | Narrowbody | Airbus A319-100 Series | 1,825 | A | V2524-A5 | 4850 | 1 |
| Passenger | Narrowbody | Airbus A320-200 Series | 8,760 | A | V2527-A5 | 1019 | 1 |
| Passenger | Narrowbody | Airbus A320-NEO | 1,825 | A | LEAP-1A26/26E1 | 5314 | 1 |
| Passenger | Narrowbody | Airbus A321-100 Series | 9,490 | A | CFM56-5B3/P | 1031 | 1 |
| Passenger | Narrowbody | Airbus A321-NEO | 5,475 | A | PW1133G-JM | 5315 | 1 |
| Passenger | Narrowbody | Boeing 717-200 Series | 730 | A | BR700-715A1-30 | 83 | 1 |
| Passenger | Narrowbody | Boeing 737-800 MAX | 730 | A | LEAP-1A35A/AA/33B2/32/30 | 4129 | 1 |
| Passenger | Narrowbody | Boeing 737-700 with winglets | 32,850 | A | CFM56-7B27/3 | 4131 | 1 |
| Passenger | Narrowbody | Boeing 737-800 Series | 22,265 | A | CFM56-7B26/3 | 2497 | 1 |
| Passenger | Narrowbody | Boeing 737-900-ER | 10,220 | A | CFM56-7B26E | 4356 | 1 |
| Passenger | Narrowbody | Boeing 757-200 Series | 2,555 | A | PW2037 | 385 | 1 |
| Passenger | Widebody | Airbus A330-200 Series | 365 | A | Trent 772 | 1094 | 1 |
| Passenger | Regional Jet | Bombardier CRJ-700 | 365 | A | CF34-8C5B1 | 2546 | 1 |
| Passenger | Regional Jet | Embraer ERJ175 | 11,315 | A | CF34-8E5 | 1771 | 1 |
| Passenger | Narrowbody | Airbus A320-200 Series | 365 | A | V2527-A5 | 1019 | 1 |
| Passenger | Narrowbody | Airbus A321-100 Series | 365 | A | CFM56-5B3/P | 1031 | 1 |
| Passenger | Narrowbody | Boeing 737-700 with winglets | 730 | A | CFM56-7B27/3 | 4131 | 1 |
| Passenger | Narrowbody | Boeing 737-800 Series | 1,095 | A | CFM56-7B26/3 | 2497 | 1 |
| Passenger | Narrowbody | Boeing 737-900-ER | 1,095 | A | CFM56-7B26E | 4356 | 1 |
| Passenger | Widebody | Airbus A340-300 Series | 365 | A | CFM56-5C4 | 1142 | 1 |
| Passenger | Widebody | Boeing 777-200 ER | 365 | A | Trent 895 | 4213 | 1 |
| Passenger | Widebody | B787-8R | 730 | A | Trent 1000 Pkg B T1000-A/01 | 3996 | 1 |
| Passenger | Widebody | Boeing 787-900 Dreamliner | 365 | A | Trent 1000-A | 4860 | 1 |
| Passenger | Regional Jet | Bombardier CRJ-900 | 1,095 | A | CF34-8C5B1 | 2426 | 1 |
| Passenger | Regional Jet | Embraer ERJ175 | 365 | A | CF34-8E5 | 1771 | 1 |

Table C-2 Annual Aircraft Operations for 2024

| Aircraft Group | Type of Aircraft | Airframe | Number of Operations | Op Type | Engine | AEDT Equip ID | Stage Length |
|-------------------|--------------------------------------|---|----------------------|---------|------------------------|---------------|--------------|
| Other Air Carrier | Regional Jet | Bombardier CRJ-700 | 365 | A | CF34-8C5B1 | 2546 | 1 |
| Cargo | Narrowbody | Boeing 757-200 Series | 365 | A | PW2037 | 385 | 1 |
| Cargo | Widebody | Boeing 767-200 Series | 1,825 | A | JT9D-7R4D,-7R4D1 | 437 | 1 |
| Cargo | Turboprop | Raytheon Beech 99 | 730 | A | PT6A-27 | 1495 | 1 |
| Cargo | Turboprop | Fairchild SA-226-TC Metro II | 730 | A | TPE331-11U-601G | 3125 | 1 |
| General Aviation | Business Jet multi-engine heavy | Cessna 560 Citation XLS | 438 | A | BIZMEDIUMJET_F | 3634 | 1 |
| General Aviation | Business Jet multi-engine heavy | Gulfstream G400 | 657 | A | TAY611-8C | 1916 | 1 |
| General Aviation | Business Jet multi-engine heavy | Bombardier Challenger 300 | 876 | A | HTF7350 (AS907-2-1A) | 4856 | 1 |
| General Aviation | Business Jet multi-engine heavy | Bombardier Challenger 350 | 438 | A | HTF7350 (AS907-2-1A) | 5345 | 1 |
| General Aviation | Business Jet multi-engine heavy | Bombardier Challenger 600 | 438 | A | CF34-3B | 1237 | 1 |
| General Aviation | Business Jet multi-engine heavy | Gulfstream V-SP | 438 | A | BR700-710A1-10 | 2432 | 1 |
| General Aviation | Business Jet multi-engine light plus | Cessna 525B CitationJet | 365 | A | BIZLIGHTJET_F | 3986 | 1 |
| General Aviation | Business Jet multi-engine light plus | CX 750 Citation X+ | 365 | A | AE3007C2 | 4249 | 1 |
| General Aviation | Business Jet multi-engine light plus | Dassault Falcon 2000 | 365 | A | PW308C Build Spec 1289 | 4804 | 1 |
| General Aviation | Business Jet multi-engine light plus | Raytheon Hawker 800 | 365 | A | TFE731-2/2A | 3105 | 1 |
| General Aviation | Single engine | Cessna 172 Skyhawk | 243 | A | TSIO-360C | 3247 | 1 |
| General Aviation | Single engine | Pilatus PC-12 | 487 | A | PT6A-67B | 1489 | 1 |
| Military | Multi-engine turboprop | Raytheon Super King Air 200 | 365 | A | PT6A-61 | 3034 | 1 |
| Helicopter | | Robinson R44 Raven/Lycoming O-540-F1B5 | 182 | A | TIO-540-J2B2 | 3161 | 1 |
| Passenger | Narrowbody | Bombardier CS-100 | 365 | D | PW1524G | 5301 | 1 |
| Passenger | Narrowbody | Bombardier CS-100 | 365 | D | PW1524G | 5301 | 2 |

Table C-2 Annual Aircraft Operations for 2024

| Aircraft Group | Type of Aircraft | Airframe | Number of Operations | Op Type | Engine | AEDT Equip ID | Stage Length |
|----------------|------------------|------------------------------|----------------------|---------|--------------------------|---------------|--------------|
| Passenger | Narrowbody | Bombardier CS-100 | 730 | D | PW1524G | 5301 | 3 |
| Passenger | Narrowbody | Airbus A319-100 Series | 730 | D | V2524-A5 | 4850 | 1 |
| Passenger | Narrowbody | Airbus A319-100 Series | 730 | D | V2524-A5 | 4850 | 2 |
| Passenger | Narrowbody | Airbus A319-100 Series | 365 | D | V2524-A5 | 4850 | 3 |
| Passenger | Narrowbody | Airbus A320-200 Series | 1,825 | D | V2527-A5 | 1019 | 1 |
| Passenger | Narrowbody | Airbus A320-200 Series | 2,555 | D | V2527-A5 | 1019 | 2 |
| Passenger | Narrowbody | Airbus A320-200 Series | 2,190 | D | V2527-A5 | 1019 | 3 |
| Passenger | Narrowbody | Airbus A320-200 Series | 2,190 | D | V2527-A5 | 1019 | 4 |
| Passenger | Narrowbody | Airbus A320-NEO | 730 | D | LEAP-1A26/26E1 | 5314 | 1 |
| Passenger | Narrowbody | Airbus A320-NEO | 365 | D | LEAP-1A26/26E1 | 5314 | 3 |
| Passenger | Narrowbody | Airbus A320-NEO | 730 | D | LEAP-1A26/26E1 | 5314 | 4 |
| Passenger | Narrowbody | Airbus A321-100 Series | 730 | D | CFM56-5B3/P | 1031 | 1 |
| Passenger | Narrowbody | Airbus A321-100 Series | 730 | D | CFM56-5B3/P | 1031 | 2 |
| Passenger | Narrowbody | Airbus A321-100 Series | 1,825 | D | CFM56-5B3/P | 1031 | 3 |
| Passenger | Narrowbody | Airbus A321-100 Series | 6,205 | D | CFM56-5B3/P | 1031 | 4 |
| Passenger | Narrowbody | Airbus A321-NEO | 1,095 | D | PW1133G-JM | 5315 | 1 |
| Passenger | Narrowbody | Airbus A321-NEO | 3,650 | D | PW1133G-JM | 5315 | 3 |
| Passenger | Narrowbody | Airbus A321-NEO | 730 | D | PW1133G-JM | 5315 | 4 |
| Passenger | Narrowbody | Boeing 717-200 Series | 730 | D | BR700-715A1-30 | 83 | 2 |
| Passenger | Narrowbody | Boeing 737-800 MAX | 365 | D | LEAP-1A35A/AA/33B2/32/30 | 4129 | 2 |
| Passenger | Narrowbody | Boeing 737-800 MAX | 365 | D | LEAP-1A35A/AA/33B2/32/30 | 4129 | 3 |
| Passenger | Narrowbody | Boeing 737-700 with winglets | 21,535 | D | CFM56-7B27/3 | 4131 | 1 |
| Passenger | Narrowbody | Boeing 737-700 with winglets | 5,475 | D | CFM56-7B27/3 | 4131 | 2 |
| Passenger | Narrowbody | Boeing 737-700 with winglets | 3,650 | D | CFM56-7B27/3 | 4131 | 3 |
| Passenger | Narrowbody | Boeing 737-700 with winglets | 2,190 | D | CFM56-7B27/3 | 4131 | 4 |
| Passenger | Narrowbody | Boeing 737-800 Series | 5,475 | D | CFM56-7B26/3 | 2497 | 1 |
| Passenger | Narrowbody | Boeing 737-800 Series | 2,555 | D | CFM56-7B26/3 | 2497 | 2 |

Table C-2 Annual Aircraft Operations for 2024

| Aircraft Group | Type of Aircraft | Airframe | Number of Operations | Op Type | Engine | AEDT Equip ID | Stage Length |
|----------------|---------------------------------|------------------------------|----------------------|---------|-----------------------------|---------------|--------------|
| Passenger | Narrowbody | Boeing 737-800 Series | 5,110 | D | CFM56-7B26/3 | 2497 | 3 |
| Passenger | Narrowbody | Boeing 737-800 Series | 8,760 | D | CFM56-7B26/3 | 2497 | 4 |
| Passenger | Narrowbody | Boeing 737-900-ER | 2,190 | D | CFM56-7B26E | 4356 | 1 |
| Passenger | Narrowbody | Boeing 737-900-ER | 3,285 | D | CFM56-7B26E | 4356 | 2 |
| Passenger | Narrowbody | Boeing 737-900-ER | 3,650 | D | CFM56-7B26E | 4356 | 3 |
| Passenger | Narrowbody | Boeing 737-900-ER | 1,460 | D | CFM56-7B26E | 4356 | 4 |
| Passenger | Narrowbody | Boeing 757-200 Series | 365 | D | PW2037 | 385 | 1 |
| Passenger | Narrowbody | Boeing 757-200 Series | 2,190 | D | PW2037 | 385 | 4 |
| Passenger | Widebody | Airbus A330-200 Series | 365 | D | Trent 772 | 1094 | 4 |
| Passenger | Regional Jet | Bombardier CRJ-700 | 365 | D | CF34-8C5B1 | 2546 | 1 |
| Passenger | Regional Jet | Embraer ERJ175 | 7,300 | D | CF34-8E5 | 1771 | 1 |
| Passenger | Regional Jet | Embraer ERJ175 | 1,825 | D | CF34-8E5 | 1771 | 2 |
| Passenger | Regional Jet | Embraer ERJ175 | 2,190 | D | CF34-8E5 | 1771 | 3 |
| Passenger | Narrowbody | Airbus A320-200 Series | 365 | D | V2527-A5 | 1019 | 2 |
| Passenger | Narrowbody | Airbus A321-100 Series | 365 | D | CFM56-5B3/P | 1031 | 4 |
| Passenger | Narrowbody | Boeing 737-700 with winglets | 365 | D | CFM56-7B27/3 | 4131 | 2 |
| Passenger | Narrowbody | Boeing 737-700 with winglets | 365 | D | CFM56-7B27/3 | 4131 | 3 |
| Passenger | Narrowbody | Boeing 737-800 Series | 730 | D | CFM56-7B26/3 | 2497 | 2 |
| Passenger | Narrowbody | Boeing 737-800 Series | 730 | D | CFM56-7B26/3 | 2497 | 3 |
| Passenger | Narrowbody | Boeing 737-900-ER | 730 | D | CFM56-7B26E | 4356 | 2 |
| Passenger | Widebody | Airbus A340-300 Series | 365 | D | CFM56-5C4 | 1142 | 7 |
| Passenger | Widebody | Boeing 777-200 ER | 365 | D | Trent 895 | 4213 | 7 |
| Passenger | Widebody | B787-8R | 730 | D | Trent 1000 Pkg B T1000-A/01 | 3996 | 7 |
| Passenger | Widebody | Boeing 787-900 Dreamliner | 365 | D | Trent 1000-A | 4860 | 7 |
| Passenger | Regional Jet | Bombardier CRJ-900 | 1,095 | D | CF34-8C5B1 | 2426 | 3 |
| Passenger | Regional Jet | Embraer ERJ175 | 365 | D | CF34-8E5 | 1771 | 3 |
| Other Air Taxi | Business Jet multi-engine heavy | Gulfstream V-SP | 365 | D | BR700-710A1-10 | 2432 | 1 |

Table C-2 Annual Aircraft Operations for 2024

| Aircraft Group | Type of Aircraft | Airframe | Number of Operations | Op Type | Engine | AEDT Equip ID | Stage Length |
|------------------|--------------------------------------|---|----------------------|---------|------------------------|---------------|--------------|
| Cargo | Narrowbody | Boeing 757-200 Series | 365 | D | PW2037 | 385 | 4 |
| Cargo | Widebody | Boeing 767-200 Series | 1,095 | D | JT9D-7R4D,-7R4D1 | 437 | 3 |
| Cargo | Widebody | Boeing 767-200 Series | 730 | D | JT9D-7R4D,-7R4D1 | 437 | 4 |
| Cargo | Turboprop | Raytheon Beech 99 | 730 | D | PT6A-27 | 1495 | 1 |
| Cargo | Turboprop | Fairchild SA-226-TC Metro II | 730 | D | TPE331-11U-601G | 3125 | 1 |
| General Aviation | Business Jet multi-engine heavy | Cessna 560 Citation XLS | 438 | D | BIZMEDIUMJET_F | 3634 | 1 |
| General Aviation | Business Jet multi-engine heavy | Gulfstream G400 | 657 | D | TAY611-8C | 1916 | 1 |
| General Aviation | Business Jet multi-engine heavy | Bombardier Challenger 300 | 876 | D | HTF7350 (AS907-2-1A) | 4856 | 1 |
| General Aviation | Business Jet multi-engine heavy | Bombardier Challenger 350 | 438 | D | HTF7350 (AS907-2-1A) | 5345 | 1 |
| General Aviation | Business Jet multi-engine heavy | Bombardier Challenger 600 | 438 | D | CF34-3B | 1237 | 1 |
| General Aviation | Business Jet multi-engine heavy | Gulfstream V-SP | 438 | D | BR700-710A1-10 | 2432 | 1 |
| General Aviation | Business Jet multi-engine light plus | Cessna 525B CitationJet | 365 | D | BIZLIGHTJET_F | 3986 | 1 |
| General Aviation | Business Jet multi-engine light plus | CX 750 Citation X+ | 274 | D | AE3007C2 | 4249 | 1 |
| General Aviation | Business Jet multi-engine light plus | CX 750 Citation X+ | 91 | D | AE3007C2 | 4249 | 7 |
| General Aviation | Business Jet multi-engine light plus | Dassault Falcon 2000 | 365 | D | PW308C Build Spec 1289 | 4804 | 1 |
| General Aviation | Business Jet multi-engine light plus | Raytheon Hawker 800 | 365 | D | TFE731-2/2A | 3105 | 1 |
| General Aviation | Single engine | Cessna 172 Skyhawk | 122 | D | TSIO-360C | 3247 | 1 |
| General Aviation | Single engine | Pilatus PC-12 | 243 | D | PT6A-67B | 1489 | 1 |
| Military | Multi-engine turboprop | Raytheon Super King Air 200 | 365 | D | PT6A-61 | 3034 | 1 |
| Helicopter | | Robinson R44 Raven/Lycoming O-540-F1B5 | 183 | D | TIO-540-J2B2 | 3161 | 1 |
| Total | | | 254,040 | | | | |

Table C-3 Annual Operations for 2026

| Aircraft Group | Type of Aircraft | Airframe | Number of Operations | Op Type | Engine | AEDT Equip ID | Stage Length |
|----------------|------------------|------------------------------|----------------------|---------|-----------------------------|---------------|--------------|
| Passenger | Narrowbody | Bombardier CS-100 | 1,095 | A | PW1524G | 5301 | 1 |
| Passenger | Narrowbody | Bombardier CS-100 | 730 | A | PW1524G | 5301 | 1 |
| Passenger | Narrowbody | Airbus A319-100 Series | 1,825 | A | V2524-A5 | 4850 | 1 |
| Passenger | Narrowbody | Airbus A320-200 Series | 12,045 | A | V2527-A5 | 1019 | 1 |
| Passenger | Narrowbody | Airbus A320-NEO | 2,190 | A | LEAP-1A26/26E1 | 5314 | 1 |
| Passenger | Narrowbody | Airbus A321-100 Series | 12,775 | A | CFM56-5B3/P | 1031 | 1 |
| Passenger | Narrowbody | Airbus A321-NEO | 5,840 | A | PW1133G-JM | 5315 | 1 |
| Passenger | Narrowbody | Boeing 717-200 Series | 365 | A | BR700-715A1-30 | 83 | 1 |
| Passenger | Narrowbody | Boeing 737-800 MAX | 730 | A | LEAP-1A35A/AA/33B2/32/30 | 4129 | 1 |
| Passenger | Narrowbody | Boeing 737-700 with winglets | 33,215 | A | CFM56-7B27/3 | 4131 | 1 |
| Passenger | Narrowbody | Boeing 737-800 Series | 20,805 | A | CFM56-7B26/3 | 2497 | 1 |
| Passenger | Narrowbody | Boeing 737-900-ER | 12,775 | A | CFM56-7B26E | 4356 | 1 |
| Passenger | Narrowbody | Boeing 757-200 Series | 1,460 | A | PW2037 | 385 | 1 |
| Passenger | Widebody | Airbus A330-200 Series | 365 | A | Trent 772 | 1094 | 1 |
| Passenger | Regional Jet | Embraer ERJ175 | 6,205 | A | CF34-8E5 | 1771 | 1 |
| Passenger | Narrowbody | Airbus A320-200 Series | 365 | A | V2527-A5 | 1019 | 1 |
| Passenger | Narrowbody | Airbus A321-100 Series | 365 | A | CFM56-5B3/P | 1031 | 1 |
| Passenger | Narrowbody | Boeing 737-700 with winglets | 1,095 | A | CFM56-7B27/3 | 4131 | 1 |
| Passenger | Narrowbody | Boeing 737-800 Series | 1,095 | A | CFM56-7B26/3 | 2497 | 1 |
| Passenger | Narrowbody | Boeing 737-900-ER | 1,095 | A | CFM56-7B26E | 4356 | 1 |
| Passenger | Widebody | Airbus A340-300 Series | 365 | A | CFM56-5C4 | 1142 | 1 |
| Passenger | Widebody | Boeing 777-200 ER | 365 | A | Trent 895 | 4213 | 1 |
| Passenger | Widebody | B787-8R | 730 | A | Trent 1000 Pkg B T1000-A/01 | 3996 | 1 |
| Passenger | Widebody | Boeing 787-900 Dreamliner | 365 | A | Trent 1000-A | 4860 | 1 |
| Passenger | Regional Jet | Bombardier CRJ-900 | 365 | A | CF34-8C5B1 | 2426 | 1 |
| Passenger | Regional Jet | Embraer ERJ175 | 1,095 | A | CF34-8E5 | 1771 | 1 |

Table C-3 Annual Operations for 2026

| Aircraft Group | Type of Aircraft | Airframe | Number of Operations | Op Type | Engine | AEDT Equip ID | Stage Length |
|-------------------|--------------------------------------|---|----------------------|---------|------------------------|---------------|--------------|
| Other Air Carrier | Regional Jet | Bombardier CRJ-700 | 365 | A | CF34-8C5B1 | 2546 | 1 |
| Other Air Taxi | Business Jet multi-engine heavy | Gulfstream V-SP | 365 | A | BR700-710A1-10 | 2432 | 1 |
| Cargo | Narrowbody | Boeing 757-200 Series | 365 | A | PW2037 | 385 | 1 |
| Cargo | Widebody | Boeing 767-200 Series | 1,825 | A | JT9D-7R4D,-7R4D1 | 437 | 1 |
| Cargo | Turboprop | Raytheon Beech 99 | 730 | A | PT6A-27 | 1495 | 1 |
| Cargo | Turboprop | Fairchild SA-226-TC Metro II | 730 | A | TPE331-11U-601G | 3125 | 1 |
| General Aviation | Business Jet multi-engine heavy | Cessna 560 Citation XLS | 449 | A | BIZMEDIUMJET_F | 3634 | 1 |
| General Aviation | Business Jet multi-engine heavy | Gulfstream G400 | 674 | A | TAY611-8C | 1916 | 1 |
| General Aviation | Business Jet multi-engine heavy | Bombardier Challenger 300 | 449 | A | HTF7350 (AS907-2-1A) | 4856 | 1 |
| General Aviation | Business Jet multi-engine heavy | Bombardier Challenger 350 | 449 | A | HTF7350 (AS907-2-1A) | 5345 | 1 |
| General Aviation | Business Jet multi-engine heavy | Bombardier Challenger 600 | 449 | A | CF34-3B | 1237 | 1 |
| General Aviation | Business Jet multi-engine heavy | Gulfstream V-SP | 449 | A | BR700-710A1-10 | 2432 | 1 |
| General Aviation | Business Jet multi-engine light plus | Cessna 525B CitationJet | 365 | A | BIZLIGHTJET_F | 3986 | 1 |
| General Aviation | Business Jet multi-engine light plus | CX 750 Citation X+ | 365 | A | AE3007C2 | 4249 | 1 |
| General Aviation | Business Jet multi-engine light plus | Dassault Falcon 2000 | 365 | A | PW308C Build Spec 1289 | 4804 | 1 |
| General Aviation | Business Jet multi-engine light plus | Raytheon Hawker 800 | 365 | A | TFE731-2/2A | 3105 | 1 |
| General Aviation | Single engine | Pilatus PC-12 | 365 | A | PT6A-67B | 1489 | 1 |
| Military | Multi-engine turboprop | Raytheon Super King Air 200 | 365 | A | PT6A-61 | 3034 | 1 |
| Helicopter | | Robinson R44 Raven/Lycoming O-540-F1B5 | 182 | A | TIO-540-J2B2 | 3161 | 1 |
| Passenger | Narrowbody | Bombardier CS-100 | 365 | D | PW1524G | 5301 | 1 |
| Passenger | Narrowbody | Bombardier CS-100 | 730 | D | PW1524G | 5301 | 2 |

Table C-3 Annual Operations for 2026

| Aircraft Group | Type of Aircraft | Airframe | Number of Operations | Op Type | Engine | AEDT Equip ID | Stage Length |
|----------------|------------------|------------------------------|----------------------|---------|--------------------------|---------------|--------------|
| Passenger | Narrowbody | Bombardier CS-100 | 730 | D | PW1524G | 5301 | 3 |
| Passenger | Narrowbody | Airbus A319-100 Series | 730 | D | V2524-A5 | 4850 | 1 |
| Passenger | Narrowbody | Airbus A319-100 Series | 730 | D | V2524-A5 | 4850 | 2 |
| Passenger | Narrowbody | Airbus A319-100 Series | 365 | D | V2524-A5 | 4850 | 3 |
| Passenger | Narrowbody | Airbus A320-200 Series | 2,920 | D | V2527-A5 | 1019 | 1 |
| Passenger | Narrowbody | Airbus A320-200 Series | 3,285 | D | V2527-A5 | 1019 | 2 |
| Passenger | Narrowbody | Airbus A320-200 Series | 3,285 | D | V2527-A5 | 1019 | 3 |
| Passenger | Narrowbody | Airbus A320-200 Series | 2,555 | D | V2527-A5 | 1019 | 4 |
| Passenger | Narrowbody | Airbus A320-NEO | 1,095 | D | LEAP-1A26/26E1 | 5314 | 1 |
| Passenger | Narrowbody | Airbus A320-NEO | 365 | D | LEAP-1A26/26E1 | 5314 | 3 |
| Passenger | Narrowbody | Airbus A320-NEO | 730 | D | LEAP-1A26/26E1 | 5314 | 4 |
| Passenger | Narrowbody | Airbus A321-100 Series | 1,460 | D | CFM56-5B3/P | 1031 | 1 |
| Passenger | Narrowbody | Airbus A321-100 Series | 730 | D | CFM56-5B3/P | 1031 | 2 |
| Passenger | Narrowbody | Airbus A321-100 Series | 3,285 | D | CFM56-5B3/P | 1031 | 3 |
| Passenger | Narrowbody | Airbus A321-100 Series | 7,300 | D | CFM56-5B3/P | 1031 | 4 |
| Passenger | Narrowbody | Airbus A321-NEO | 1,460 | D | PW1133G-JM | 5315 | 1 |
| Passenger | Narrowbody | Airbus A321-NEO | 3,650 | D | PW1133G-JM | 5315 | 3 |
| Passenger | Narrowbody | Airbus A321-NEO | 730 | D | PW1133G-JM | 5315 | 4 |
| Passenger | Narrowbody | Boeing 717-200 Series | 365 | D | BR700-715A1-30 | 83 | 2 |
| Passenger | Narrowbody | Boeing 737-800 MAX | 365 | D | LEAP-1A35A/AA/33B2/32/30 | 4129 | 2 |
| Passenger | Narrowbody | Boeing 737-800 MAX | 365 | D | LEAP-1A35A/AA/33B2/32/30 | 4129 | 3 |
| Passenger | Narrowbody | Boeing 737-700 with winglets | 21,902 | D | CFM56-7B27/3 | 4131 | 1 |
| Passenger | Narrowbody | Boeing 737-700 with winglets | 5,475 | D | CFM56-7B27/3 | 4131 | 2 |
| Passenger | Narrowbody | Boeing 737-700 with winglets | 3,650 | D | CFM56-7B27/3 | 4131 | 3 |
| Passenger | Narrowbody | Boeing 737-700 with winglets | 2,190 | D | CFM56-7B27/3 | 4131 | 4 |
| Passenger | Narrowbody | Boeing 737-800 Series | 5,475 | D | CFM56-7B26/3 | 2497 | 1 |
| Passenger | Narrowbody | Boeing 737-800 Series | 2,555 | D | CFM56-7B26/3 | 2497 | 2 |

Table C-3 Annual Operations for 2026

| Aircraft Group | Type of Aircraft | Airframe | Number of Operations | Op Type | Engine | AEDT Equip ID | Stage Length |
|----------------|---------------------------------|------------------------------|----------------------|---------|-----------------------------|---------------|--------------|
| Passenger | Narrowbody | Boeing 737-800 Series | 4,380 | D | CFM56-7B26/3 | 2497 | 3 |
| Passenger | Narrowbody | Boeing 737-800 Series | 8,030 | D | CFM56-7B26/3 | 2497 | 4 |
| Passenger | Narrowbody | Boeing 737-900-ER | 2,555 | D | CFM56-7B26E | 4356 | 1 |
| Passenger | Narrowbody | Boeing 737-900-ER | 3,285 | D | CFM56-7B26E | 4356 | 2 |
| Passenger | Narrowbody | Boeing 737-900-ER | 4,015 | D | CFM56-7B26E | 4356 | 3 |
| Passenger | Narrowbody | Boeing 737-900-ER | 3,285 | D | CFM56-7B26E | 4356 | 4 |
| Passenger | Narrowbody | Boeing 757-200 Series | 1,460 | D | PW2037 | 385 | 4 |
| Passenger | Widebody | Airbus A330-200 Series | 365 | D | Trent 772 | 1094 | 4 |
| Passenger | Regional Jet | Embraer ERJ175 | 4,015 | D | CF34-8E5 | 1771 | 1 |
| Passenger | Regional Jet | Embraer ERJ175 | 1,095 | D | CF34-8E5 | 1771 | 2 |
| Passenger | Regional Jet | Embraer ERJ175 | 1,095 | D | CF34-8E5 | 1771 | 3 |
| Passenger | Narrowbody | Airbus A320-200 Series | 365 | D | V2527-A5 | 1019 | 2 |
| Passenger | Narrowbody | Airbus A321-100 Series | 365 | D | CFM56-5B3/P | 1031 | 4 |
| Passenger | Narrowbody | Boeing 737-700 with winglets | 365 | D | CFM56-7B27/3 | 4131 | 2 |
| Passenger | Narrowbody | Boeing 737-700 with winglets | 365 | D | CFM56-7B27/3 | 4131 | 3 |
| Passenger | Narrowbody | Boeing 737-700 with winglets | 365 | D | CFM56-7B27/3 | 4131 | 4 |
| Passenger | Narrowbody | Boeing 737-800 Series | 730 | D | CFM56-7B26/3 | 2497 | 2 |
| Passenger | Narrowbody | Boeing 737-800 Series | 730 | D | CFM56-7B26/3 | 2497 | 3 |
| Passenger | Narrowbody | Boeing 737-900-ER | 730 | D | CFM56-7B26E | 4356 | 2 |
| Passenger | Widebody | Airbus A340-300 Series | 365 | D | CFM56-5C4 | 1142 | 7 |
| Passenger | Widebody | Boeing 777-200 ER | 365 | D | Trent 895 | 4213 | 7 |
| Passenger | Widebody | B787-8R | 730 | D | Trent 1000 Pkg B T1000-A/01 | 3996 | 7 |
| Passenger | Widebody | Boeing 787-900 Dreamliner | 365 | D | Trent 1000-A | 4860 | 7 |
| Passenger | Regional Jet | Bombardier CRJ-900 | 365 | D | CF34-8C5B1 | 2426 | 3 |
| Passenger | Regional Jet | Embraer ERJ175 | 1,095 | D | CF34-8E5 | 1771 | 3 |
| Other Air Taxi | Business Jet multi-engine heavy | Gulfstream V-SP | 365 | D | BR700-710A1-10 | 2432 | 1 |
| Cargo | Narrowbody | Boeing 757-200 Series | 365 | D | PW2037 | 385 | 4 |

Table C-3 Annual Operations for 2026

| Aircraft Group | Type of Aircraft | Airframe | Number of Operations | Op Type | Engine | AEDT Equip ID | Stage Length |
|------------------|--------------------------------------|---|----------------------|---------|------------------------|---------------|--------------|
| Cargo | Widebody | Boeing 767-200 Series | 1,095 | D | JT9D-7R4D,-7R4D1 | 437 | 3 |
| Cargo | Widebody | Boeing 767-200 Series | 730 | D | JT9D-7R4D,-7R4D1 | 437 | 4 |
| Cargo | Turboprop | Raytheon Beech 99 | 730 | D | PT6A-27 | 1495 | 1 |
| Cargo | Turboprop | Fairchild SA-226-TC Metro II | 730 | D | TPE331-11U-601G | 3125 | 1 |
| General Aviation | Business Jet multi-engine heavy | Cessna 560 Citation XLS | 449 | D | BIZMEDIUMJET_F | 3634 | 1 |
| General Aviation | Business Jet multi-engine heavy | Gulfstream G400 | 674 | D | TAY611-8C | 1916 | 1 |
| General Aviation | Business Jet multi-engine heavy | Bombardier Challenger 300 | 449 | D | HTF7350 (AS907-2-1A) | 4856 | 1 |
| General Aviation | Business Jet multi-engine heavy | Bombardier Challenger 350 | 449 | D | HTF7350 (AS907-2-1A) | 5345 | 1 |
| General Aviation | Business Jet multi-engine heavy | Bombardier Challenger 600 | 449 | D | CF34-3B | 1237 | 1 |
| General Aviation | Business Jet multi-engine heavy | Gulfstream V-SP | 449 | D | BR700-710A1-10 | 2432 | 1 |
| General Aviation | Business Jet multi-engine light plus | Cessna 525B CitationJet | 365 | D | BIZLIGHTJET_F | 3986 | 1 |
| General Aviation | Business Jet multi-engine light plus | CX 750 Citation X+ | 274 | D | AE3007C2 | 4249 | 1 |
| General Aviation | Business Jet multi-engine light plus | CX 750 Citation X+ | 91 | D | AE3007C2 | 4249 | 7 |
| General Aviation | Business Jet multi-engine light plus | Dassault Falcon 2000 | 365 | D | PW308C Build Spec 1289 | 4804 | 1 |
| General Aviation | Business Jet multi-engine light plus | Raytheon Hawker 800 | 365 | D | TFE731-2/2A | 3105 | 1 |
| General Aviation | Single engine | Pilatus PC-12 | 365 | D | PT6A-67B | 1489 | 1 |
| General Aviation | Multi-engine turboprop | Raytheon Super King Air 200 | 365 | D | PT6A-61 | 3034 | 1 |
| Military | Multi-engine turboprop | Raytheon Super King Air 200 | 365 | D | PT6A-61 | 3034 | 1 |
| Helicopter | | Robinson R44 Raven/Lycoming O-540-F1B5 | 183 | D | TIO-540-J2B2 | 3161 | 1 |
| Total | | | 258,785 | | | | |

Table C-4 Annual Operations for 2030

| Aircraft Group | Type of Aircraft | Airframe | Number of Operations | Op Type | Engine | AEDT Equip ID | Stage Length |
|----------------|---------------------|------------------------------|----------------------|---------|-----------------------------|---------------|--------------|
| Passenger | Narrowbody | Bombardier CS-100 | 3,285 | A | PW1524G | 5301 | 1 |
| Passenger | Narrowbody | Bombardier CS-100 | 1,095 | A | PW1524G | 5301 | 1 |
| Passenger | Narrowbody | Airbus A320-200 Series | 7,665 | A | V2527-A5 | 1019 | 1 |
| Passenger | Narrowbody | Airbus A320-NEO | 2,190 | A | LEAP-1A26/26E1 | 5314 | 1 |
| Passenger | Narrowbody | Airbus A321-100 Series | 15,695 | A | CFM56-5B3/P | 1031 | 1 |
| Passenger | Narrowbody | Airbus A321-NEO | 9,490 | A | PW1133G-JM | 5315 | 1 |
| Passenger | Narrowbody | Boeing 737-700 MAX | 3,650 | A | LEAP-1A35A/AA/33B2/32/30 | 4128 | 1 |
| Passenger | Narrowbody | Boeing 737-800 MAX | 2,190 | A | LEAP-1A35A/AA/33B2/32/30 | 4129 | 1 |
| Passenger | Narrowbody | Boeing 737-700 with winglets | 21,900 | A | CFM56-7B27/3 | 4131 | 1 |
| Passenger | Narrowbody | Boeing 737-800 Series | 25,185 | A | CFM56-7B26/3 | 2497 | 1 |
| Passenger | Narrowbody | Boeing 737-900-ER | 21,900 | A | CFM56-7B26E | 4356 | 1 |
| Passenger | Narrowbody | Boeing 757-200 Series | 730 | A | PW2037 | 385 | 1 |
| Passenger | Widebody | Airbus A330-200 Series | 365 | A | Trent 772 | 1094 | 1 |
| Passenger | Regional Jet | Embraer ERJ175 | 1,460 | A | CF34-8E5 | 1771 | 1 |
| Passenger | Narrowbody | Airbus A320-200 Series | 365 | A | V2527-A5 | 1019 | 1 |
| Passenger | Narrowbody | Airbus A321-100 Series | 365 | A | CFM56-5B3/P | 1031 | 1 |
| Passenger | Narrowbody | Boeing 737-800 MAX | 365 | A | LEAP-1A35A/AA/33B2/32/30 | 4129 | 1 |
| Passenger | Narrowbody | Boeing 737-700 with winglets | 365 | A | CFM56-7B27/3 | 4131 | 1 |
| Passenger | Narrowbody | Boeing 737-800 Series | 1,825 | A | CFM56-7B26/3 | 2497 | 1 |
| Passenger | Narrowbody | Boeing 737-900-ER | 1,460 | A | CFM56-7B26E | 4356 | 1 |
| Passenger | Widebody | Airbus A340-300 Series | 365 | A | CFM56-5C4 | 1142 | 1 |
| Passenger | Widebody | Boeing 777-200 ER | 365 | A | Trent 895 | 4213 | 1 |
| Passenger | Widebody | B787-8R | 730 | A | Trent 1000 Pkg B T1000-A/01 | 3996 | 1 |
| Passenger | Widebody | Boeing 787-900 Dreamliner | 730 | A | Trent 1000-A | 4860 | 1 |
| Passenger | Regional Jet | Bombardier CRJ-900 | 365 | A | CF34-8C5B1 | 2426 | 1 |
| Passenger | Regional Jet | Embraer ERJ175 | 1,095 | A | CF34-8E5 | 1771 | 1 |
| Other Air Taxi | Business Jet multi- | Gulfstream V-SP | 365 | A | BR700-710A1-10 | 2432 | 1 |

Table C-4 Annual Operations for 2030

| Aircraft Group | Type of Aircraft | Airframe | Number of Operations | Op Type | Engine | AEDT Equip ID | Stage Length |
|------------------|--------------------------------------|--|----------------------|---------|------------------------|---------------|--------------|
| | engine heavy | | | | | | |
| Cargo | Narrowbody | Boeing 757-200 Series | 365 | A | PW2037 | 385 | 1 |
| Cargo | Widebody | Boeing 767-200 Series | 1,825 | A | JT9D-7R4D,-7R4D1 | 437 | 1 |
| Cargo | Turboprop | Raytheon Beech 99 | 1,095 | A | PT6A-27 | 1495 | 1 |
| Cargo | Turboprop | Fairchild SA-226-TC Metro II | 730 | A | TPE331-11U-601G | 3125 | 1 |
| General Aviation | Business Jet multi-engine heavy | Cessna 560 Citation XLS | 449 | A | BIZMEDIUMJET_F | 3634 | 1 |
| General Aviation | Business Jet multi-engine heavy | Gulfstream G400 | 674 | A | TAY611-8C | 1916 | 1 |
| General Aviation | Business Jet multi-engine heavy | Bombardier Challenger 300 | 449 | A | HTF7350 (AS907-2-1A) | 4856 | 1 |
| General Aviation | Business Jet multi-engine heavy | Bombardier Challenger 350 | 449 | A | HTF7350 (AS907-2-1A) | 5345 | 1 |
| General Aviation | Business Jet multi-engine heavy | Bombardier Challenger 600 | 449 | A | CF34-3B | 1237 | 1 |
| General Aviation | Business Jet multi-engine heavy | Gulfstream V-SP | 449 | A | BR700-710A1-10 | 2432 | 1 |
| General Aviation | Business Jet multi-engine light plus | Cessna 525B CitationJet | 365 | A | BIZLIGHTJET_F | 3986 | 1 |
| General Aviation | Business Jet multi-engine light plus | CX 750 Citation X+ | 365 | A | AE3007C2 | 4249 | 1 |
| General Aviation | Business Jet multi-engine light plus | Dassault Falcon 2000 | 365 | A | PW308C Build Spec 1289 | 4804 | 1 |
| General Aviation | Business Jet multi-engine light plus | Raytheon Hawker 800 | 365 | A | TFE731-2/2A | 3105 | 1 |
| Military | Multi-engine turboprop | Raytheon Super King Air 200 | 365 | A | PT6A-61 | 3034 | 1 |
| Helicopter | | Robinson R44 Raven/Lycoming O-540-F1B5 | 182 | A | TIO-540-J2B2 | 3161 | 1 |
| Passenger | Narrowbody | Bombardier CS-100 | 1,825 | D | PW1524G | 5301 | 1 |
| Passenger | Narrowbody | Bombardier CS-100 | 1,460 | D | PW1524G | 5301 | 2 |
| Passenger | Narrowbody | Bombardier CS-100 | 365 | D | PW1524G | 5301 | 2 |
| Passenger | Narrowbody | Bombardier CS-100 | 730 | D | PW1524G | 5301 | 3 |

Table C-4 Annual Operations for 2030

| Aircraft Group | Type of Aircraft | Airframe | Number of Operations | Op Type | Engine | AEDT Equip ID | Stage Length |
|----------------|------------------|------------------------------|----------------------|---------|--------------------------|---------------|--------------|
| Passenger | Narrowbody | Airbus A320-200 Series | 2,555 | D | V2527-A5 | 1019 | 1 |
| Passenger | Narrowbody | Airbus A320-200 Series | 1,825 | D | V2527-A5 | 1019 | 2 |
| Passenger | Narrowbody | Airbus A320-200 Series | 1,825 | D | V2527-A5 | 1019 | 3 |
| Passenger | Narrowbody | Airbus A320-200 Series | 1,460 | D | V2527-A5 | 1019 | 4 |
| Passenger | Narrowbody | Airbus A320-NEO | 1,095 | D | LEAP-1A26/26E1 | 5314 | 1 |
| Passenger | Narrowbody | Airbus A320-NEO | 365 | D | LEAP-1A26/26E1 | 5314 | 3 |
| Passenger | Narrowbody | Airbus A320-NEO | 730 | D | LEAP-1A26/26E1 | 5314 | 4 |
| Passenger | Narrowbody | Airbus A321-100 Series | 1,460 | D | CFM56-5B3/P | 1031 | 1 |
| Passenger | Narrowbody | Airbus A321-100 Series | 1,825 | D | CFM56-5B3/P | 1031 | 2 |
| Passenger | Narrowbody | Airbus A321-100 Series | 4,015 | D | CFM56-5B3/P | 1031 | 3 |
| Passenger | Narrowbody | Airbus A321-100 Series | 8,395 | D | CFM56-5B3/P | 1031 | 4 |
| Passenger | Narrowbody | Airbus A321-NEO | 2,920 | D | PW1133G-JM | 5315 | 1 |
| Passenger | Narrowbody | Airbus A321-NEO | 730 | D | PW1133G-JM | 5315 | 2 |
| Passenger | Narrowbody | Airbus A321-NEO | 4,745 | D | PW1133G-JM | 5315 | 3 |
| Passenger | Narrowbody | Airbus A321-NEO | 730 | D | PW1133G-JM | 5315 | 4 |
| Passenger | Narrowbody | Boeing 737-700 MAX | 2,920 | D | LEAP-1A35A/AA/33B2/32/30 | 4128 | 1 |
| Passenger | Narrowbody | Boeing 737-700 MAX | 730 | D | LEAP-1A35A/AA/33B2/32/30 | 4128 | 4 |
| Passenger | Narrowbody | Boeing 737-800 MAX | 1,460 | D | LEAP-1A35A/AA/33B2/32/30 | 4129 | 1 |
| Passenger | Narrowbody | Boeing 737-800 MAX | 365 | D | LEAP-1A35A/AA/33B2/32/30 | 4129 | 2 |
| Passenger | Narrowbody | Boeing 737-800 MAX | 365 | D | LEAP-1A35A/AA/33B2/32/30 | 4129 | 3 |
| Passenger | Narrowbody | Boeing 737-700 with winglets | 14,237 | D | CFM56-7B27/3 | 4131 | 1 |
| Passenger | Narrowbody | Boeing 737-700 with winglets | 4,015 | D | CFM56-7B27/3 | 4131 | 2 |
| Passenger | Narrowbody | Boeing 737-700 with winglets | 2,190 | D | CFM56-7B27/3 | 4131 | 3 |
| Passenger | Narrowbody | Boeing 737-700 with winglets | 1,095 | D | CFM56-7B27/3 | 4131 | 4 |
| Passenger | Narrowbody | Boeing 737-800 Series | 8,030 | D | CFM56-7B26/3 | 2497 | 1 |
| Passenger | Narrowbody | Boeing 737-800 Series | 3,650 | D | CFM56-7B26/3 | 2497 | 2 |
| Passenger | Narrowbody | Boeing 737-800 Series | 6,935 | D | CFM56-7B26/3 | 2497 | 3 |

Table C-4 Annual Operations for 2030

| Aircraft Group | Type of Aircraft | Airframe | Number of Operations | Op Type | Engine | AEDT Equip ID | Stage Length |
|----------------|---------------------------------|------------------------------|----------------------|---------|-----------------------------|---------------|--------------|
| Passenger | Narrowbody | Boeing 737-800 Series | 6,935 | D | CFM56-7B26/3 | 2497 | 4 |
| Passenger | Narrowbody | Boeing 737-900-ER | 5,110 | D | CFM56-7B26E | 4356 | 1 |
| Passenger | Narrowbody | Boeing 737-900-ER | 4,380 | D | CFM56-7B26E | 4356 | 2 |
| Passenger | Narrowbody | Boeing 737-900-ER | 5,475 | D | CFM56-7B26E | 4356 | 3 |
| Passenger | Narrowbody | Boeing 737-900-ER | 7,300 | D | CFM56-7B26E | 4356 | 4 |
| Passenger | Narrowbody | Boeing 757-200 Series | 730 | D | PW2037 | 385 | 4 |
| Passenger | Widebody | Airbus A330-200 Series | 365 | D | Trent 772 | 1094 | 4 |
| Passenger | Regional Jet | Embraer ERJ175 | 1,095 | D | CF34-8E5 | 1771 | 1 |
| Passenger | Regional Jet | Embraer ERJ175 | 365 | D | CF34-8E5 | 1771 | 2 |
| Passenger | Narrowbody | Airbus A320-200 Series | 365 | D | V2527-A5 | 1019 | 2 |
| Passenger | Narrowbody | Airbus A321-100 Series | 365 | D | CFM56-5B3/P | 1031 | 4 |
| Passenger | Narrowbody | Boeing 737-800 MAX | 365 | D | LEAP-1A35A/AA/33B2/32/30 | 4129 | 3 |
| Passenger | Narrowbody | Boeing 737-700 with winglets | 365 | D | CFM56-7B27/3 | 4131 | 2 |
| Passenger | Narrowbody | Boeing 737-700 with winglets | 365 | D | CFM56-7B27/3 | 4131 | 4 |
| Passenger | Narrowbody | Boeing 737-800 Series | 365 | D | CFM56-7B26/3 | 2497 | 2 |
| Passenger | Narrowbody | Boeing 737-800 Series | 730 | D | CFM56-7B26/3 | 2497 | 3 |
| Passenger | Narrowbody | Boeing 737-800 Series | 365 | D | CFM56-7B26/3 | 2497 | 4 |
| Passenger | Narrowbody | Boeing 737-900-ER | 1,095 | D | CFM56-7B26E | 4356 | 2 |
| Passenger | Narrowbody | Boeing 737-900-ER | 365 | D | CFM56-7B26E | 4356 | 3 |
| Passenger | Widebody | Airbus A340-300 Series | 365 | D | CFM56-5C4 | 1142 | 7 |
| Passenger | Widebody | Boeing 777-200 ER | 365 | D | Trent 895 | 4213 | 7 |
| Passenger | Widebody | B787-8R | 730 | D | Trent 1000 Pkg B T1000-A/01 | 3996 | 7 |
| Passenger | Widebody | Boeing 787-900 Dreamliner | 365 | D | Trent 1000-A | 4860 | 7 |
| Passenger | Widebody | Boeing 787-900 Dreamliner | 365 | D | Trent 1000-A | 4860 | 9 |
| Passenger | Regional Jet | Bombardier CRJ-900 | 365 | D | CF34-8C5B1 | 2426 | 3 |
| Passenger | Regional Jet | Embraer ERJ175 | 1,095 | D | CF34-8E5 | 1771 | 3 |
| Other Air Taxi | Business Jet multi-engine heavy | Gulfstream V-SP | 365 | D | BR700-710A1-10 | 2432 | 1 |

Table C-4 Annual Operations for 2030

| Aircraft Group | Type of Aircraft | Airframe | Number of Operations | Op Type | Engine | AEDT Equip ID | Stage Length |
|------------------|--------------------------------------|--|----------------------|---------|------------------------|---------------|--------------|
| Cargo | Narrowbody | Boeing 757-200 Series | 365 | D | PW2037 | 385 | 4 |
| Cargo | Widebody | Boeing 767-200 Series | 1,095 | D | JT9D-7R4D,-7R4D1 | 437 | 3 |
| Cargo | Widebody | Boeing 767-200 Series | 730 | D | JT9D-7R4D,-7R4D1 | 437 | 4 |
| Cargo | Turboprop | Raytheon Beech 99 | 1,095 | D | PT6A-27 | 1495 | 1 |
| Cargo | Turboprop | Fairchild SA-226-TC Metro II | 730 | D | TPE331-11U-601G | 3125 | 1 |
| General Aviation | Business Jet multi-engine heavy | Cessna 560 Citation XLS | 449 | D | BIZMEDIUMJET_F | 3634 | 1 |
| General Aviation | Business Jet multi-engine heavy | Gulfstream G400 | 674 | D | TAY611-8C | 1916 | 1 |
| General Aviation | Business Jet multi-engine heavy | Bombardier Challenger 300 | 449 | D | HTF7350 (AS907-2-1A) | 4856 | 1 |
| General Aviation | Business Jet multi-engine heavy | Bombardier Challenger 350 | 449 | D | HTF7350 (AS907-2-1A) | 5345 | 1 |
| General Aviation | Business Jet multi-engine heavy | Bombardier Challenger 600 | 449 | D | CF34-3B | 1237 | 1 |
| General Aviation | Business Jet multi-engine heavy | Gulfstream V-SP | 449 | D | BR700-710A1-10 | 2432 | 1 |
| General Aviation | Business Jet multi-engine light plus | Cessna 525B CitationJet | 365 | D | BIZLIGHTJET_F | 3986 | 1 |
| General Aviation | Business Jet multi-engine light plus | CX 750 Citation X+ | 274 | D | AE3007C2 | 4249 | 1 |
| General Aviation | Business Jet multi-engine light plus | CX 750 Citation X+ | 91 | D | AE3007C2 | 4249 | 7 |
| General Aviation | Business Jet multi-engine light plus | Dassault Falcon 2000 | 365 | D | PW308C Build Spec 1289 | 4804 | 1 |
| General Aviation | Business Jet multi-engine light plus | Raytheon Hawker 800 | 365 | D | TFE731-2/2A | 3105 | 1 |
| General Aviation | Multi-engine turboprop | Raytheon Super King Air 200 | 365 | D | PT6A-61 | 3034 | 1 |
| Military | Multi-engine turboprop | Raytheon Super King Air 200 | 365 | D | PT6A-61 | 3034 | 1 |
| Helicopter | | Robinson R44 Raven/Lycoming O-540-F1B5 | 183 | D | TIO-540-J2B2 | 3161 | 1 |
| Total | | | 269,370 | | | | |

Table C-5 Annual Operations for 2035

| Aircraft Group | Type of Aircraft | Airframe | Number of Operations | Op Type | Engine | AEDT Equip ID | Stage Length |
|-------------------|------------------|------------------------------|----------------------|---------|-----------------------------|---------------|--------------|
| Passenger | Narrowbody | Bombardier CS-100 | 730 | A | PW1524G | 5301 | 1 |
| Passenger | Narrowbody | Bombardier CS-100 | 3,650 | A | PW1524G | 5301 | 1 |
| Passenger | Narrowbody | Airbus A320-200 Series | 5,110 | A | V2527-A5 | 1019 | 1 |
| Passenger | Narrowbody | Airbus A320-NEO | 2,190 | A | LEAP-1A26/26E1 | 5314 | 1 |
| Passenger | Narrowbody | Airbus A321-100 Series | 16,060 | A | CFM56-5B3/P | 1031 | 1 |
| Passenger | Narrowbody | Airbus A321-NEO | 14,965 | A | PW1133G-JM | 5315 | 1 |
| Passenger | Narrowbody | Boeing 737-700 MAX | 6,205 | A | LEAP-1A35A/AA/33B2/32/30 | 4128 | 1 |
| Passenger | Narrowbody | Boeing 737-800 MAX | 3,285 | A | LEAP-1A35A/AA/33B2/32/30 | 4129 | 1 |
| Passenger | Narrowbody | Boeing 737-700 with winglets | 3,650 | A | CFM56-7B27/3 | 4131 | 1 |
| Passenger | Narrowbody | Boeing 737-800 Series | 38,690 | A | CFM56-7B26/3 | 2497 | 1 |
| Passenger | Narrowbody | Boeing 737-900-ER | 22,630 | A | CFM56-7B26E | 4356 | 1 |
| Passenger | Widebody | Airbus A330-200 Series | 365 | A | Trent 772 | 1094 | 1 |
| Passenger | Widebody | B787-8R | 3,285 | A | Trent 1000 Pkg B T1000-A/01 | 3996 | 1 |
| Passenger | Regional Jet | Embraer ERJ175 | 1,460 | A | CF34-8E5 | 1771 | 1 |
| Passenger | Narrowbody | Airbus A320-200 Series | 365 | A | V2527-A5 | 1019 | 1 |
| Passenger | Narrowbody | Airbus A321-100 Series | 365 | A | CFM56-5B3/P | 1031 | 1 |
| Passenger | Narrowbody | Boeing 737-700 MAX | 365 | A | LEAP-1A35A/AA/33B2/32/30 | 4128 | 1 |
| Passenger | Narrowbody | Boeing 737-800 MAX | 365 | A | LEAP-1A35A/AA/33B2/32/30 | 4129 | 1 |
| Passenger | Narrowbody | Boeing 737-700 with winglets | 365 | A | CFM56-7B27/3 | 4131 | 1 |
| Passenger | Narrowbody | Boeing 737-800 Series | 1,460 | A | CFM56-7B26/3 | 2497 | 1 |
| Passenger | Narrowbody | Boeing 737-900-ER | 1,825 | A | CFM56-7B26E | 4356 | 1 |
| Passenger | Widebody | Airbus A340-300 Series | 365 | A | CFM56-5C4 | 1142 | 1 |
| Passenger | Widebody | Boeing 777-200 ER | 365 | A | Trent 895 | 4213 | 1 |
| Passenger | Widebody | B787-8R | 730 | A | Trent 1000 Pkg B T1000-A/01 | 3996 | 1 |
| Passenger | Widebody | Boeing 787-900 Dreamliner | 730 | A | Trent 1000-A | 4860 | 1 |
| Passenger | Regional Jet | Embraer ERJ175 | 1,825 | A | CF34-8E5 | 1771 | 1 |
| Other Air Carrier | Narrowbody | Airbus A319-100 Series | 365 | A | V2524-A5 | 4850 | 1 |
| Other Air Carrier | Regional Jet | Bombardier CRJ-700 | 365 | A | CF34-8C5B1 | 2546 | 1 |

Table C-5 Annual Operations for 2035

| Aircraft Group | Type of Aircraft | Airframe | Number of Operations | Op Type | Engine | AEDT Equip ID | Stage Length |
|------------------|--------------------------------------|--|----------------------|---------|----------------------|---------------|--------------|
| Other Air Taxi | Business Jet multi-engine heavy | Gulfstream V-SP | 365 | A | BR700-710A1-10 | 2432 | 1 |
| Cargo | Narrowbody | Boeing 757-200 Series | 365 | A | PW2037 | 385 | 1 |
| Cargo | Widebody | Boeing 767-200 Series | 2,190 | A | JT9D-7R4D,-7R4D1 | 437 | 1 |
| Cargo | Turboprop | Raytheon Beech 99 | 1,095 | A | PT6A-27 | 1495 | 1 |
| Cargo | Turboprop | Fairchild SA-226-TC Metro II | 730 | A | TPE331-11U-601G | 3125 | 1 |
| General Aviation | Business Jet multi-engine heavy | Cessna 560 Citation XLS | 449 | A | BIZMEDIUMJET_F | 3634 | 1 |
| General Aviation | Business Jet multi-engine heavy | Gulfstream G400 | 674 | A | TAY611-8C | 1916 | 1 |
| General Aviation | Business Jet multi-engine heavy | Bombardier Challenger 300 | 449 | A | HTF7350 (AS907-2-1A) | 4856 | 1 |
| General Aviation | Business Jet multi-engine heavy | Bombardier Challenger 350 | 449 | A | HTF7350 (AS907-2-1A) | 5345 | 1 |
| General Aviation | Business Jet multi-engine heavy | Bombardier Challenger 600 | 449 | A | CF34-3B | 1237 | 1 |
| General Aviation | Business Jet multi-engine heavy | Gulfstream V-SP | 449 | A | BR700-710A1-10 | 2432 | 1 |
| General Aviation | Business Jet multi-engine light plus | Cessna 525B CitationJet | 365 | A | BIZLIGHTJET_F | 3986 | 1 |
| General Aviation | Business Jet multi-engine light plus | CX 750 Citation X+ | 365 | A | AE3007C2 | 4249 | 1 |
| General Aviation | Business Jet multi-engine light plus | Raytheon Hawker 800 | 365 | A | TFE731-2/2A | 3105 | 1 |
| Military | Multi-engine turboprop | Raytheon Super King Air 200 | 365 | A | PT6A-61 | 3034 | 1 |
| Helicopter | | Robinson R44 Raven/Lycoming O-540-F1B5 | 182 | A | TIO-540-J2B2 | 3161 | 1 |
| Passenger | Narrowbody | Bombardier CS-100 | 730 | D | PW1524G | 5301 | 1 |
| Passenger | Narrowbody | Bombardier CS-100 | 1,460 | D | PW1524G | 5301 | 1 |
| Passenger | Narrowbody | Bombardier CS-100 | 1,460 | D | PW1524G | 5301 | 2 |
| Passenger | Narrowbody | Bombardier CS-100 | 730 | D | PW1524G | 5301 | 3 |
| Passenger | Narrowbody | Airbus A320-200 Series | 1,460 | D | V2527-A5 | 1019 | 1 |
| Passenger | Narrowbody | Airbus A320-200 Series | 2,190 | D | V2527-A5 | 1019 | 2 |

Table C-5 Annual Operations for 2035

| Aircraft Group | Type of Aircraft | Airframe | Number of Operations | Op Type | Engine | AEDT Equip ID | Stage Length |
|----------------|------------------|------------------------------|----------------------|---------|--------------------------|---------------|--------------|
| Passenger | Narrowbody | Airbus A320-200 Series | 730 | D | V2527-A5 | 1019 | 3 |
| Passenger | Narrowbody | Airbus A320-200 Series | 730 | D | V2527-A5 | 1019 | 4 |
| Passenger | Narrowbody | Airbus A320-NEO | 1,095 | D | LEAP-1A26/26E1 | 5314 | 1 |
| Passenger | Narrowbody | Airbus A320-NEO | 365 | D | LEAP-1A26/26E1 | 5314 | 3 |
| Passenger | Narrowbody | Airbus A320-NEO | 730 | D | LEAP-1A26/26E1 | 5314 | 4 |
| Passenger | Narrowbody | Airbus A321-100 Series | 1,460 | D | CFM56-5B3/P | 1031 | 1 |
| Passenger | Narrowbody | Airbus A321-100 Series | 1,825 | D | CFM56-5B3/P | 1031 | 2 |
| Passenger | Narrowbody | Airbus A321-100 Series | 4,015 | D | CFM56-5B3/P | 1031 | 3 |
| Passenger | Narrowbody | Airbus A321-100 Series | 8,395 | D | CFM56-5B3/P | 1031 | 4 |
| Passenger | Narrowbody | Airbus A321-NEO | 4,745 | D | PW1133G-JM | 5315 | 1 |
| Passenger | Narrowbody | Airbus A321-NEO | 2,920 | D | PW1133G-JM | 5315 | 2 |
| Passenger | Narrowbody | Airbus A321-NEO | 5,840 | D | PW1133G-JM | 5315 | 3 |
| Passenger | Narrowbody | Airbus A321-NEO | 1,095 | D | PW1133G-JM | 5315 | 4 |
| Passenger | Narrowbody | Boeing 737-700 MAX | 4,745 | D | LEAP-1A35A/AA/33B2/32/30 | 4128 | 1 |
| Passenger | Narrowbody | Boeing 737-700 MAX | 730 | D | LEAP-1A35A/AA/33B2/32/30 | 4128 | 2 |
| Passenger | Narrowbody | Boeing 737-700 MAX | 730 | D | LEAP-1A35A/AA/33B2/32/30 | 4128 | 4 |
| Passenger | Narrowbody | Boeing 737-800 MAX | 1,460 | D | LEAP-1A35A/AA/33B2/32/30 | 4129 | 1 |
| Passenger | Narrowbody | Boeing 737-800 MAX | 1,460 | D | LEAP-1A35A/AA/33B2/32/30 | 4129 | 2 |
| Passenger | Narrowbody | Boeing 737-800 MAX | 365 | D | LEAP-1A35A/AA/33B2/32/30 | 4129 | 3 |
| Passenger | Narrowbody | Boeing 737-700 with winglets | 2,555 | D | CFM56-7B27/3 | 4131 | 1 |
| Passenger | Narrowbody | Boeing 737-700 with winglets | 365 | D | CFM56-7B27/3 | 4131 | 2 |
| Passenger | Narrowbody | Boeing 737-700 with winglets | 365 | D | CFM56-7B27/3 | 4131 | 3 |
| Passenger | Narrowbody | Boeing 737-700 with winglets | 365 | D | CFM56-7B27/3 | 4131 | 4 |
| Passenger | Narrowbody | Boeing 737-800 Series | 18,252 | D | CFM56-7B26/3 | 2497 | 1 |
| Passenger | Narrowbody | Boeing 737-800 Series | 5,110 | D | CFM56-7B26/3 | 2497 | 2 |
| Passenger | Narrowbody | Boeing 737-800 Series | 8,760 | D | CFM56-7B26/3 | 2497 | 3 |
| Passenger | Narrowbody | Boeing 737-800 Series | 6,935 | D | CFM56-7B26/3 | 2497 | 4 |
| Passenger | Narrowbody | Boeing 737-900-ER | 5,110 | D | CFM56-7B26E | 4356 | 1 |

Table C-5 Annual Operations for 2035

| Aircraft Group | Type of Aircraft | Airframe | Number of Operations | Op Type | Engine | AEDT Equip ID | Stage Length |
|-------------------|---------------------------------|------------------------------|----------------------|---------|-----------------------------|---------------|--------------|
| Passenger | Narrowbody | Boeing 737-900-ER | 4,015 | D | CFM56-7B26E | 4356 | 2 |
| Passenger | Narrowbody | Boeing 737-900-ER | 5,110 | D | CFM56-7B26E | 4356 | 3 |
| Passenger | Narrowbody | Boeing 737-900-ER | 8,395 | D | CFM56-7B26E | 4356 | 4 |
| Passenger | Widebody | Airbus A330-200 Series | 365 | D | Trent 772 | 1094 | 4 |
| Passenger | Widebody | B787-8R | 730 | D | Trent 1000 Pkg B T1000-A/01 | 3996 | 3 |
| Passenger | Widebody | B787-8R | 2,920 | D | Trent 1000 Pkg B T1000-A/01 | 3996 | 4 |
| Passenger | Regional Jet | Embraer ERJ175 | 365 | D | CF34-8E5 | 1771 | 1 |
| Passenger | Regional Jet | Embraer ERJ175 | 730 | D | CF34-8E5 | 1771 | 2 |
| Passenger | Regional Jet | Embraer ERJ175 | 365 | D | CF34-8E5 | 1771 | 3 |
| Passenger | Narrowbody | Airbus A320-200 Series | 365 | D | V2527-A5 | 1019 | 2 |
| Passenger | Narrowbody | Airbus A321-100 Series | 365 | D | CFM56-5B3/P | 1031 | 4 |
| Passenger | Narrowbody | Boeing 737-700 MAX | 365 | D | LEAP-1A35A/AA/33B2/32/30 | 4128 | 2 |
| Passenger | Narrowbody | Boeing 737-800 MAX | 365 | D | LEAP-1A35A/AA/33B2/32/30 | 4129 | 3 |
| Passenger | Narrowbody | Boeing 737-700 with winglets | 365 | D | CFM56-7B27/3 | 4131 | 4 |
| Passenger | Narrowbody | Boeing 737-800 Series | 365 | D | CFM56-7B26/3 | 2497 | 2 |
| Passenger | Narrowbody | Boeing 737-800 Series | 730 | D | CFM56-7B26/3 | 2497 | 3 |
| Passenger | Narrowbody | Boeing 737-800 Series | 365 | D | CFM56-7B26/3 | 2497 | 4 |
| Passenger | Narrowbody | Boeing 737-900-ER | 1,460 | D | CFM56-7B26E | 4356 | 2 |
| Passenger | Narrowbody | Boeing 737-900-ER | 365 | D | CFM56-7B26E | 4356 | 3 |
| Passenger | Widebody | Airbus A340-300 Series | 365 | D | CFM56-5C4 | 1142 | 7 |
| Passenger | Widebody | Boeing 777-200 ER | 365 | D | Trent 895 | 4213 | 7 |
| Passenger | Widebody | B787-8R | 730 | D | Trent 1000 Pkg B T1000-A/01 | 3996 | 7 |
| Passenger | Widebody | Boeing 787-900 Dreamliner | 365 | D | Trent 1000-A | 4860 | 7 |
| Passenger | Widebody | Boeing 787-900 Dreamliner | 365 | D | Trent 1000-A | 4860 | 9 |
| Passenger | Regional Jet | Embraer ERJ175 | 1,825 | D | CF34-8E5 | 1771 | 3 |
| Other Air Carrier | Narrowbody | Airbus A319-100 Series | 365 | D | V2524-A5 | 4850 | 1 |
| Other Air Taxi | Business Jet multi-engine heavy | Gulfstream V-SP | 365 | D | BR700-710A1-10 | 2432 | 1 |

Table C-5 Annual Operations for 2035

| Aircraft Group | Type of Aircraft | Airframe | Number of Operations | Op Type | Engine | AEDT Equip ID | Stage Length |
|------------------|--------------------------------------|--|----------------------|---------|----------------------|---------------|--------------|
| Cargo | Narrowbody | Boeing 757-200 Series | 365 | D | PW2037 | 385 | 4 |
| Cargo | Widebody | Boeing 767-200 Series | 1,460 | D | JT9D-7R4D,-7R4D1 | 437 | 3 |
| Cargo | Widebody | Boeing 767-200 Series | 730 | D | JT9D-7R4D,-7R4D1 | 437 | 4 |
| Cargo | Turboprop | Raytheon Beech 99 | 1,095 | D | PT6A-27 | 1495 | 1 |
| Cargo | Turboprop | Fairchild SA-226-TC Metro II | 730 | D | TPE331-11U-601G | 3125 | 1 |
| General Aviation | Business Jet multi-engine heavy | Cessna 560 Citation XLS | 449 | D | BIZMEDIUMJET_F | 3634 | 1 |
| General Aviation | Business Jet multi-engine heavy | Gulfstream G400 | 674 | D | TAY611-8C | 1916 | 1 |
| General Aviation | Business Jet multi-engine heavy | Bombardier Challenger 300 | 449 | D | HTF7350 (AS907-2-1A) | 4856 | 1 |
| General Aviation | Business Jet multi-engine heavy | Bombardier Challenger 350 | 449 | D | HTF7350 (AS907-2-1A) | 5345 | 1 |
| General Aviation | Business Jet multi-engine heavy | Bombardier Challenger 600 | 449 | D | CF34-3B | 1237 | 1 |
| General Aviation | Business Jet multi-engine heavy | Gulfstream V-SP | 449 | D | BR700-710A1-10 | 2432 | 1 |
| General Aviation | Business Jet multi-engine light plus | Cessna 525B CitationJet | 365 | D | BIZLIGHTJET_F | 3986 | 1 |
| General Aviation | Business Jet multi-engine light plus | CX 750 Citation X+ | 243 | D | AE3007C2 | 4249 | 1 |
| General Aviation | Business Jet multi-engine light plus | CX 750 Citation X+ | 122 | D | AE3007C2 | 4249 | 7 |
| General Aviation | Business Jet multi-engine light plus | Raytheon Hawker 800 | 365 | D | TFE731-2/2A | 3105 | 1 |
| General Aviation | Multi-engine turboprop | Raytheon Super King Air 200 | 365 | D | PT6A-61 | 3034 | 1 |
| Military | Multi-engine turboprop | Raytheon Super King Air 200 | 365 | D | PT6A-61 | 3034 | 1 |
| Helicopter | | Robinson R44 Raven/Lycoming O-540-F1B5 | 183 | D | TIO-540-J2B2 | 3161 | 1 |
| Total | | | 282,875 | | | | |

Table C-6 Annual Operations for 2050

| Aircraft Group | Type of Aircraft | Airframe | Number of Operations | Op Type | Engine | AEDT Equip ID | Stage Length |
|----------------|------------------|------------------------------|----------------------|---------|-----------------------------|---------------|--------------|
| Passenger | Narrowbody | Bombardier CS-100 | 730 | A | PW1524G | 5301 | 1 |
| Passenger | Narrowbody | Bombardier CS-100 | 3,285 | A | PW1524G | 5301 | 1 |
| Passenger | Narrowbody | Airbus A320-200 Series | 5,110 | A | V2527-A5 | 1019 | 1 |
| Passenger | Narrowbody | Airbus A320-NEO | 2,190 | A | LEAP-1A26/26E1 | 5314 | 1 |
| Passenger | Narrowbody | Airbus A321-100 Series | 15,695 | A | CFM56-5B3/P | 1031 | 1 |
| Passenger | Narrowbody | Airbus A321-NEO | 14,965 | A | PW1133G-JM | 5315 | 1 |
| Passenger | Narrowbody | Boeing 737-700 MAX | 7,665 | A | LEAP-1A35A/AA/33B2/32/30 | 4128 | 1 |
| Passenger | Narrowbody | Boeing 737-800 MAX | 3,650 | A | LEAP-1A35A/AA/33B2/32/30 | 4129 | 1 |
| Passenger | Narrowbody | Boeing 737-700 with winglets | 3,285 | A | CFM56-7B27/3 | 4131 | 1 |
| Passenger | Narrowbody | Boeing 737-800 Series | 39,418 | A | CFM56-7B26/3 | 2497 | 1 |
| Passenger | Narrowbody | Boeing 737-900-ER | 22,995 | A | CFM56-7B26E | 4356 | 1 |
| Passenger | Widebody | Airbus A330-200 Series | 365 | A | Trent 772 | 1094 | 1 |
| Passenger | Widebody | B787-8R | 3,285 | A | Trent 1000 Pkg B T1000-A/01 | 3996 | 1 |
| Passenger | Regional Jet | Embraer ERJ175 | 2,555 | A | CF34-8E5 | 1771 | 1 |
| Passenger | Narrowbody | Airbus A320-200 Series | 365 | A | V2527-A5 | 1019 | 1 |
| Passenger | Narrowbody | Airbus A321-100 Series | 365 | A | CFM56-5B3/P | 1031 | 1 |
| Passenger | Narrowbody | Boeing 737-700 MAX | 365 | A | LEAP-1A35A/AA/33B2/32/30 | 4128 | 1 |
| Passenger | Narrowbody | Boeing 737-800 MAX | 365 | A | LEAP-1A35A/AA/33B2/32/30 | 4129 | 1 |
| Passenger | Narrowbody | Boeing 737-700 with winglets | 365 | A | CFM56-7B27/3 | 4131 | 1 |
| Passenger | Narrowbody | Boeing 737-800 Series | 1,460 | A | CFM56-7B26/3 | 2497 | 1 |
| Passenger | Narrowbody | Boeing 737-900-ER | 2,190 | A | CFM56-7B26E | 4356 | 1 |
| Passenger | Widebody | Airbus A330-300 Series | 365 | A | Trent 772 | 1095 | 1 |
| Passenger | Widebody | Airbus A340-300 Series | 730 | A | CFM56-5C4 | 1142 | 1 |
| Passenger | Widebody | Boeing 777-200 ER | 365 | A | Trent 895 | 4213 | 1 |
| Passenger | Widebody | B787-8R | 730 | A | Trent 1000 Pkg B T1000-A/01 | 3996 | 1 |
| Passenger | Widebody | Boeing 787-900 Dreamliner | 1,095 | A | Trent 1000-A | 4860 | 1 |
| Passenger | Regional Jet | Embraer ERJ175 | 1,825 | A | CF34-8E5 | 1771 | 1 |

Table C-6 Annual Operations for 2050

| Aircraft Group | Type of Aircraft | Airframe | Number of Operations | Op Type | Engine | AEDT Equip ID | Stage Length |
|-------------------|--------------------------------------|--|----------------------|---------|----------------------|---------------|--------------|
| Other Air Carrier | Regional Jet | Bombardier CRJ-700 | 365 | A | CF34-8C5B1 | 2546 | 1 |
| Other Air Taxi | Business Jet multi-engine heavy | Gulfstream V-SP | 365 | A | BR700-710A1-10 | 2432 | 1 |
| Cargo | Narrowbody | Boeing 757-200 Series | 365 | A | PW2037 | 385 | 1 |
| Cargo | Widebody | Boeing 767-200 Series | 2,555 | A | JT9D-7R4D,-7R4D1 | 437 | 1 |
| Cargo | Turboprop | Raytheon Beech 99 | 1,825 | A | PT6A-27 | 1495 | 1 |
| Cargo | Turboprop | Fairchild SA-226-TC Metro II | 730 | A | TPE331-11U-601G | 3125 | 1 |
| General Aviation | Business Jet multi-engine heavy | Cessna 560 Citation XLS | 487 | A | BIZMEDIUMJET_F | 3634 | 1 |
| General Aviation | Business Jet multi-engine heavy | Gulfstream G400 | 243 | A | TAY611-8C | 1916 | 1 |
| General Aviation | Business Jet multi-engine heavy | Bombardier Challenger 300 | 487 | A | HTF7350 (AS907-2-1A) | 4856 | 1 |
| General Aviation | Business Jet multi-engine heavy | Bombardier Challenger 350 | 487 | A | HTF7350 (AS907-2-1A) | 5345 | 1 |
| General Aviation | Business Jet multi-engine heavy | Bombardier Challenger 600 | 487 | A | CF34-3B | 1237 | 1 |
| General Aviation | Business Jet multi-engine light plus | Cessna 525B CitationJet | 122 | A | BIZLIGHTJET_F | 3986 | 1 |
| General Aviation | Business Jet multi-engine light plus | CX 750 Citation X+ | 243 | A | AE3007C2 | 4249 | 1 |
| Military | Multi-engine turboprop | Raytheon Super King Air 200 | 365 | A | PT6A-61 | 3034 | 1 |
| Helicopter | | Robinson R44 Raven/Lycoming O-540-F1B5 | 182 | A | TIO-540-J2B2 | 3161 | 1 |
| Passenger | Narrowbody | Bombardier CS-100 | 730 | D | PW1524G | 5301 | 1 |
| Passenger | Narrowbody | Bombardier CS-100 | 1,095 | D | PW1524G | 5301 | 1 |
| Passenger | Narrowbody | Bombardier CS-100 | 1,460 | D | PW1524G | 5301 | 2 |
| Passenger | Narrowbody | Bombardier CS-100 | 730 | D | PW1524G | 5301 | 3 |
| Passenger | Narrowbody | Airbus A320-200 Series | 1,460 | D | V2527-A5 | 1019 | 1 |
| Passenger | Narrowbody | Airbus A320-200 Series | 2,190 | D | V2527-A5 | 1019 | 2 |
| Passenger | Narrowbody | Airbus A320-200 Series | 730 | D | V2527-A5 | 1019 | 3 |

Table C-6 Annual Operations for 2050

| Aircraft Group | Type of Aircraft | Airframe | Number of Operations | Op Type | Engine | AEDT Equip ID | Stage Length |
|----------------|------------------|------------------------------|----------------------|---------|--------------------------|---------------|--------------|
| Passenger | Narrowbody | Airbus A320-200 Series | 730 | D | V2527-A5 | 1019 | 4 |
| Passenger | Narrowbody | Airbus A320-NEO | 1,095 | D | LEAP-1A26/26E1 | 5314 | 1 |
| Passenger | Narrowbody | Airbus A320-NEO | 365 | D | LEAP-1A26/26E1 | 5314 | 3 |
| Passenger | Narrowbody | Airbus A320-NEO | 730 | D | LEAP-1A26/26E1 | 5314 | 4 |
| Passenger | Narrowbody | Airbus A321-100 Series | 1,460 | D | CFM56-5B3/P | 1031 | 1 |
| Passenger | Narrowbody | Airbus A321-100 Series | 1,825 | D | CFM56-5B3/P | 1031 | 2 |
| Passenger | Narrowbody | Airbus A321-100 Series | 4,015 | D | CFM56-5B3/P | 1031 | 3 |
| Passenger | Narrowbody | Airbus A321-100 Series | 8,030 | D | CFM56-5B3/P | 1031 | 4 |
| Passenger | Narrowbody | Airbus A321-NEO | 4,745 | D | PW1133G-JM | 5315 | 1 |
| Passenger | Narrowbody | Airbus A321-NEO | 2,920 | D | PW1133G-JM | 5315 | 2 |
| Passenger | Narrowbody | Airbus A321-NEO | 5,840 | D | PW1133G-JM | 5315 | 3 |
| Passenger | Narrowbody | Airbus A321-NEO | 1,095 | D | PW1133G-JM | 5315 | 4 |
| Passenger | Narrowbody | Boeing 737-700 MAX | 5,110 | D | LEAP-1A35A/AA/33B2/32/30 | 4128 | 1 |
| Passenger | Narrowbody | Boeing 737-700 MAX | 730 | D | LEAP-1A35A/AA/33B2/32/30 | 4128 | 2 |
| Passenger | Narrowbody | Boeing 737-700 MAX | 730 | D | LEAP-1A35A/AA/33B2/32/30 | 4128 | 3 |
| Passenger | Narrowbody | Boeing 737-700 MAX | 1,095 | D | LEAP-1A35A/AA/33B2/32/30 | 4128 | 4 |
| Passenger | Narrowbody | Boeing 737-800 MAX | 1,460 | D | LEAP-1A35A/AA/33B2/32/30 | 4129 | 1 |
| Passenger | Narrowbody | Boeing 737-800 MAX | 1,460 | D | LEAP-1A35A/AA/33B2/32/30 | 4129 | 2 |
| Passenger | Narrowbody | Boeing 737-800 MAX | 730 | D | LEAP-1A35A/AA/33B2/32/30 | 4129 | 3 |
| Passenger | Narrowbody | Boeing 737-700 with winglets | 2,190 | D | CFM56-7B27/3 | 4131 | 1 |
| Passenger | Narrowbody | Boeing 737-700 with winglets | 365 | D | CFM56-7B27/3 | 4131 | 2 |
| Passenger | Narrowbody | Boeing 737-700 with winglets | 365 | D | CFM56-7B27/3 | 4131 | 3 |
| Passenger | Narrowbody | Boeing 737-700 with winglets | 365 | D | CFM56-7B27/3 | 4131 | 4 |
| Passenger | Narrowbody | Boeing 737-800 Series | 18,615 | D | CFM56-7B26/3 | 2497 | 1 |
| Passenger | Narrowbody | Boeing 737-800 Series | 5,110 | D | CFM56-7B26/3 | 2497 | 2 |
| Passenger | Narrowbody | Boeing 737-800 Series | 8,760 | D | CFM56-7B26/3 | 2497 | 3 |
| Passenger | Narrowbody | Boeing 737-800 Series | 7,300 | D | CFM56-7B26/3 | 2497 | 4 |

Table C-6 Annual Operations for 2050

| Aircraft Group | Type of Aircraft | Airframe | Number of Operations | Op Type | Engine | AEDT Equip ID | Stage Length |
|----------------|------------------|------------------------------|----------------------|---------|-----------------------------|---------------|--------------|
| Passenger | Narrowbody | Boeing 737-900-ER | 5,475 | D | CFM56-7B26E | 4356 | 1 |
| Passenger | Narrowbody | Boeing 737-900-ER | 4,015 | D | CFM56-7B26E | 4356 | 2 |
| Passenger | Narrowbody | Boeing 737-900-ER | 5,110 | D | CFM56-7B26E | 4356 | 3 |
| Passenger | Narrowbody | Boeing 757-200 Series | 8,395 | D | PW2037 | 385 | 4 |
| Passenger | Widebody | Airbus A330-200 Series | 365 | D | Trent 772 | 1094 | 4 |
| Passenger | Widebody | B787-8R | 730 | D | Trent 1000 Pkg B T1000-A/01 | 3996 | 3 |
| Passenger | Widebody | B787-8R | 2,920 | D | Trent 1000 Pkg B T1000-A/01 | 3996 | 4 |
| Passenger | Regional Jet | Embraer ERJ175 | 1,095 | D | CF34-8E5 | 1771 | 1 |
| Passenger | Regional Jet | Embraer ERJ175 | 1,095 | D | CF34-8E5 | 1771 | 2 |
| Passenger | Regional Jet | Embraer ERJ175 | 365 | D | CF34-8E5 | 1771 | 3 |
| Passenger | Narrowbody | Airbus A320-200 Series | 365 | D | V2527-A5 | 1019 | 2 |
| Passenger | Narrowbody | Airbus A321-100 Series | 365 | D | CFM56-5B3/P | 1031 | 4 |
| Passenger | Narrowbody | Boeing 737-700 MAX | 365 | D | LEAP-1A35A/AA/33B2/32/30 | 4128 | 2 |
| Passenger | Narrowbody | Boeing 737-800 MAX | 365 | D | LEAP-1A35A/AA/33B2/32/30 | 4129 | 3 |
| Passenger | Narrowbody | Boeing 737-700 with winglets | 365 | D | CFM56-7B27/3 | 4131 | 4 |
| Passenger | Narrowbody | Boeing 737-800 Series | 365 | D | CFM56-7B26/3 | 2497 | 2 |
| Passenger | Narrowbody | Boeing 737-800 Series | 730 | D | CFM56-7B26/3 | 2497 | 3 |
| Passenger | Narrowbody | Boeing 737-800 Series | 365 | D | CFM56-7B26/3 | 2497 | 4 |
| Passenger | Narrowbody | Boeing 737-900-ER | 1,460 | D | CFM56-7B26E | 4356 | 2 |
| Passenger | Narrowbody | Boeing 737-900-ER | 365 | D | CFM56-7B26E | 4356 | 3 |
| Passenger | Narrowbody | Boeing 737-900-ER | 365 | D | CFM56-7B26E | 4356 | 4 |
| Passenger | Widebody | Airbus A330-300 Series | 365 | D | Trent 772 | 1095 | 7 |
| Passenger | Widebody | Airbus A340-300 Series | 730 | D | CFM56-5C4 | 1142 | 7 |
| Passenger | Widebody | Boeing 777-200 ER | 365 | D | Trent 895 | 4213 | 7 |
| Passenger | Widebody | B787-8R | 730 | D | Trent 1000 Pkg B T1000-A/01 | 3996 | 7 |
| Passenger | Widebody | Boeing 787-900 Dreamliner | 730 | D | Trent 1000-A | 4860 | 7 |
| Passenger | Widebody | Boeing 787-900 Dreamliner | 365 | D | Trent 1000-A | 4860 | 9 |

Table C-6 Annual Operations for 2050

| Aircraft Group | Type of Aircraft | Airframe | Number of Operations | Op Type | Engine | AEDT Equip ID | Stage Length |
|------------------|--------------------------------------|--|----------------------|---------|----------------------|---------------|--------------|
| Passenger | Regional Jet | Embraer ERJ175 | 1,825 | D | CF34-8E5 | 1771 | 3 |
| Other Air Taxi | Business Jet multi-engine heavy | Gulfstream V-SP | 365 | D | BR700-710A1-10 | 2432 | 1 |
| Cargo | Narrowbody | Boeing 757-200 Series | 365 | D | PW2037 | 385 | 4 |
| Cargo | Widebody | Boeing 767-200 Series | 1,460 | D | JT9D-7R4D,-7R4D1 | 437 | 3 |
| Cargo | Widebody | Boeing 767-200 Series | 1,095 | D | JT9D-7R4D,-7R4D1 | 437 | 4 |
| Cargo | Turboprop | Raytheon Beech 99 | 1,460 | D | PT6A-27 | 1495 | 1 |
| Cargo | Turboprop | Fairchild SA-226-TC Metro II | 730 | D | TPE331-11U-601G | 3125 | 1 |
| General Aviation | Business Jet multi-engine heavy | Cessna 560 Citation XLS | 487 | D | BIZMEDIUMJET_F | 3634 | 1 |
| General Aviation | Business Jet multi-engine heavy | Gulfstream G400 | 243 | D | TAY611-8C | 1916 | 1 |
| General Aviation | Business Jet multi-engine heavy | Bombardier Challenger 300 | 487 | D | HTF7350 (AS907-2-1A) | 4856 | 1 |
| General Aviation | Business Jet multi-engine heavy | Bombardier Challenger 350 | 487 | D | HTF7350 (AS907-2-1A) | 5345 | 1 |
| General Aviation | Business Jet multi-engine heavy | Bombardier Challenger 600 | 487 | D | CF34-3B | 1237 | 1 |
| General Aviation | Business Jet multi-engine light plus | Cessna 525B CitationJet | 243 | D | BIZLIGHTJET_F | 3986 | 1 |
| General Aviation | Business Jet multi-engine light plus | CX 750 Citation X+ | 487 | D | AE3007C2 | 4249 | 1 |
| Military | Narrowbody | Boeing 737-700 with winglets | 365 | D | CFM56-7B27/3 | 4131 | 1 |
| Military | Multi-engine turboprop | Raytheon Super King Air 200 | 365 | D | PT6A-61 | 3034 | 1 |
| Helicopter | | Robinson R44 Raven/Lycoming O-540-F1B5 | 183 | D | TIO-540-J2B2 | 3161 | 1 |
| Total | | | 290,175 | | | | |

1.1.2 Emission Factors

AEDT default emission factors were used to estimate all aircraft emissions. AEDT calculates emissions related to aircraft operations which includes emissions from taxi, aircraft engine startup, and auxiliary power units (APUs).

The four methods listed below are used by AEDT to compute airborne aircraft emissions.

- The Boeing Fuel Flow Method 2 (BFFM2) is used to compute NO_x, hydrocarbons (HC), and CO;
- A First Order Approximation (FOA) 3.0 is used to compute particulate matter below the mixing height;
- Fuel composition-based factors are used to compute SO_x, CO₂, and water (H₂O) in addition to particulate matter above the mixing height; and
- Derivative factors are used to compute non-methane hydrocarbons (NMHC), VOC, total organic compounds (TOG), and speciated organic gases.

1.1.3 Taxi/Delay

Taxi/delay emissions associated with emission inventories (EIs) are based on airport-wide taxi times. **Table C-7** shows the taxi/delay times associated with the emissions inventories. Notably, taxi/delay times for Alternative 2 and Alternative 3 would be essentially the same as times for the proposed project because the future aircraft and passenger activity levels, and key improvements such as the provision of additional gates and development of the new on-airport access road, would be comparable under both scenarios.

Table C-7 Aircraft Taxi/Delay Times for Existing/Baseline, Alternative 1 (No Project), Proposed Project, and Alternative 4 (minutes)

| Project Phase | Year | Scenario | Taxi-in | Taxi-out | Total |
|----------------|------|----------------------------|---------|----------|-------|
| Existing | 2018 | Existing/Baseline | 4.2 | 16.9 | 21.0 |
| 1a | 2024 | Alternative 1 (No Project) | 4.8 | 16.6 | 21.5 |
| | | Proposed Project | 4.8 | 14.8 | 19.6 |
| | | Alternative 4 | 5.3 | 15.2 | 20.4 |
| 1b | 2026 | Alternative 1 (No Project) | 4.8 | 17.6 | 22.5 |
| | | Proposed Project | 4.6 | 15.5 | 20.2 |
| | | Alternative 4 | 4.7 | 15.1 | 19.8 |
| 2a | 2030 | Alternative 1 (No Project) | 5.0 | 19.5 | 24.5 |
| | | Proposed Project | 4.6 | 16.5 | 21.1 |
| | | Alternative 4 | 4.9 | 16.1 | 21.0 |
| 2b | 2035 | Alternative 1 (No Project) | 5.0 | 24.7 | 29.7 |
| | | Proposed Project | 4.8 | 21.1 | 25.9 |
| | | Alternative 4 | 4.9 | 20.2 | 25.2 |
| Not applicable | 2050 | Alternative 1 (No Project) | 5.0 | 24.7 | 29.7 |
| | | Proposed Project | 4.8 | 21.1 | 25.9 |
| | | Alternative 4 4 | 4.9 | 20.2 | 25.2 |

Source: CDM Smith 2019.

Airport-specific, ground-based TIM for taxi-in, taxi-out and ground delay times were derived from the SIMMOD analysis.

Taxi/delay emissions associated with dispersion modeling are based on AEDT’s Delay and Sequencing Module (DSQM). The DSQM takes into account taxiway assignments, delay, distance traveled, and aircraft ground speed.

APU and aircraft startup emissions were also estimated using AEDT defaults. Startup emissions are only inclusive of total hydrocarbons (THC), NMHC, VOC, and TOG. Because all passenger-related aircraft gates at SDIA are currently equipped with 400 hertz (Hz) electric power (i.e., “ground power”) and preconditioned air (PCA) and following FAA’s AQ Handbook, the analysis assumed APU usage for the passenger-related aircraft was seven minutes. For all other aircraft, APU run times were assumed to be AEDT defaults.

1.1.4 Runway Utilization

For dispersion analysis only, AEDT uses operational configurations to assign aircraft operations (i.e., arrivals and departures) to runway ends. Typically, aircraft arrive and depart into the wind. Therefore, aircraft were assigned to a runway end based on hourly wind direction. **Table C-8** shows the operational configurations used to assign aircraft to runway ends.

Table C-8 Runway Utilization

| Runway End | Aircraft Size | Arrival Percentage | Departure Percentage | Wind Direction (deg) |
|------------|---------------|--------------------|----------------------|----------------------|
| 27 | Heavy | 100 | 100 | 181 – 359 |
| | Large | | | |
| | Small | | | |
| 9 | Heavy | 100 | 100 | 0 - 180 |
| | Large | | | |
| | Small | | | |

Source : KB Environmental Sciences, Inc. 2019.

1.1.5 Temporal Factors

Temporal factors (also referred to as profiles) are used to describe the relationship of activity levels in one period of time to another (i.e., the relationship of the activity during 15-minute to the activity during a 24-hour period). Temporal factors represent a fraction to the peak period. Thus, annual operations can be represented as a weekly, daily, and quarter hour activity. The use of temporal factors gives the model the ability to more accurately reflect real world conditions.

Aircraft temporal profiles that reflect the variation in operations by month, day and quarter hour were derived from gate schedules developed in support of the ADP. **Tables C-9** through **C-11** presents the aircraft operational temporal factors for quarter hourly-arrivals and departures, daily operations, and monthly operations, respectively.

Table C-9 Monthly Operational Profiles for Aircraft

| Month | All Aircraft |
|-----------|--------------|
| January | 0.85 |
| February | 0.74 |
| March | 0.90 |
| April | 0.92 |
| May | 0.91 |
| June | 0.95 |
| July | 1.00 |
| August | 0.98 |
| September | 0.90 |
| October | 0.93 |
| November | 0.89 |
| December | 0.90 |

Source : KB Environmental Sciences, Inc., 2019.

Table C-10 Daily Operational Profiles for Aircraft

| Day | All Aircraft |
|-----------|--------------|
| Monday | 0.99 |
| Tuesday | 0.95 |
| Wednesday | 0.96 |
| Thursday | 0.99 |
| Friday | 1.00 |
| Saturday | 0.83 |
| Sunday | 0.93 |

Source : KB Environmental Sciences, Inc., 2019.

Table C-11 Quarter Hourly Operational Profiles for Aircraft

| Time | Operational Profile | | Time | Operational Profile | | Time | Operational Profile |
|------|---------------------|--|-------|---------------------|--|-------|---------------------|
| 0:00 | 0.03 | | 8:15 | 0.86 | | 16:45 | 0.77 |
| 0:15 | 0.03 | | 8:30 | 0.86 | | 17:00 | 0.81 |
| 0:30 | 0.03 | | 9:00 | 0.81 | | 17:15 | 0.81 |
| 0:45 | 0.03 | | 9:15 | 0.81 | | 17:30 | 0.81 |
| 1:00 | 0.01 | | 9:30 | 0.81 | | 18:15 | 0.74 |
| 1:15 | 0.01 | | 9:45 | 0.81 | | 18:30 | 0.74 |
| 1:30 | 0.01 | | 10:00 | 1.00 | | 18:45 | 0.74 |
| 1:45 | 0.01 | | 10:15 | 1.00 | | 19:00 | 0.81 |
| 2:00 | 0.00 | | 10:30 | 1.00 | | 19:15 | 0.81 |
| 2:15 | 0.00 | | 10:45 | 1.00 | | 19:30 | 0.81 |
| 2:30 | 0.00 | | 11:00 | 0.93 | | 19:45 | 0.81 |
| 2:45 | 0.00 | | 11:15 | 0.93 | | 20:00 | 0.70 |
| 3:00 | 0.00 | | 11:30 | 0.93 | | 20:15 | 0.70 |
| 3:15 | 0.00 | | 11:45 | 0.93 | | 20:30 | 0.70 |
| 3:30 | 0.00 | | 12:00 | 0.90 | | 20:45 | 0.70 |
| 3:45 | 0.00 | | 12:15 | 0.90 | | 21:00 | 0.67 |
| 4:00 | 0.01 | | 12:30 | 0.90 | | 21:15 | 0.67 |
| 4:15 | 0.01 | | 12:45 | 0.90 | | 21:30 | 0.67 |
| 4:30 | 0.01 | | 13:00 | 0.84 | | 21:45 | 0.67 |
| 4:45 | 0.01 | | 13:15 | 0.84 | | 22:00 | 0.72 |
| 5:00 | 0.04 | | 13:30 | 0.84 | | 22:15 | 0.72 |
| 5:15 | 0.04 | | 13:45 | 0.84 | | 22:30 | 0.72 |
| 5:30 | 0.04 | | 14:00 | 0.83 | | 22:45 | 0.72 |
| 5:45 | 0.04 | | 14:15 | 0.83 | | 23:00 | 0.33 |
| 6:00 | 0.60 | | 14:30 | 0.83 | | 23:15 | 0.33 |
| 6:15 | 0.60 | | 14:45 | 0.83 | | 23:30 | 0.33 |
| 6:30 | 0.60 | | 15:00 | 0.81 | | 23:45 | 0.33 |
| 6:45 | 0.60 | | 15:15 | 0.81 | | | |
| 7:00 | 0.83 | | 15:30 | 0.81 | | | |
| 7:15 | 0.83 | | 15:45 | 0.81 | | | |
| 7:30 | 0.83 | | 16:00 | 0.77 | | | |
| 7:45 | 0.83 | | 16:15 | 0.77 | | | |
| 8:00 | 0.86 | | 16:30 | 0.77 | | | |
| 8:45 | 0.86 | | 17:45 | 0.81 | | | |
| 9:00 | 0.81 | | 18:00 | 0.74 | | | |

Source : KB Environmental Sciences, Inc., 2019.

1.2 Stationary Sources

Stationary sources were modeled using project-specific data and AEDT; and consisted of boilers, cooling towers, emergency generators, and fuel storage/transfer facilities. The existing Central Utility Plant (CUP), located along Airport Terminal Road adjacent to the T2 Parking Plaza, contains boilers, chillers, and cooling towers providing heated and chilled water for building heating and cooling. The proposed project calls for the expansion of the existing CUP which involves increasing the capacity of these units.

The total firing rate of all the existing boilers at SDIA is equal to 27.8 million British Thermal Units per hour (MMBtu/hour) (2 x 6.7 MMBtu/hour + 4 x 3.6 MMBtu/hour). The expansion of the existing CUP involves replacing aging boilers in-place (2 x 6.7 MMBtu/hour boilers) with four new boilers of firing rate 3.6 MMBtu/hour each. Thus, the new firing rate of all the boilers including the new boilers is equal to 28.8 MMBtu/hour (8 x 3.6 MMBtu/hour). **Table C-12** presents the annual natural gas usage for all boilers.

Table C-12 Annual Natural Gas Usage for Boilers (ft³)

| Equipment | No Project | Proposed Project |
|---------------|-------------|------------------|
| Total Boilers | 234,161,538 | 242,584,615 |

Source : KB Environmental Sciences, Inc. 2019.

As a part of the expansion of the CUP, capacity of the cooling tower would be increased from 5,000 tons to 6,250 tons. Emissions from the existing and proposed cooling towers were computed using default emission factor provided in the South Coast Air Quality Management District (AQMD) Guidelines for Calculating Emissions from Cooling Towers.¹ Emissions from the diesel emergency generators were based on an existing and future annual fuel usage of 17,550 gallons and computed using AP-42 emission factors.² Emissions from the existing and proposed fuel storage/transfer facilities were computed using the throughputs presented in **Table C-13**.

Table C-13 Annual Throughputs for Fuel Storage/Transfer Facilities (Gallons)

| Equipment | 2018 | 2024 | 2026 | 2030 | 2035 | 2050 |
|--|-------------|-------------|-------------|-------------|-------------|-------------|
| Total Fuel Storage/Transfer Facilities | 207,102,359 | 233,241,492 | 237,598,014 | 247,316,409 | 259,715,741 | 266,418,083 |

Source : KB Environmental Sciences, Inc. 2019.

With the exception of cooling towers and emergency generators, stationary sources emission factors were assumed to be the default AEDT factors.

Existing and proposed boilers, cooling towers, emergency generators and fuel storage/transfer facilities were also included in the dispersion analysis.

¹ South Coast Air Quality Management District (AQMD), Guidelines for Calculating Emissions from Cooling Towers, <http://www.aqmd.gov/docs/default-source/planning/annual-emission-reporting/guidecalcemiscooltowerdec13.pdf>.

² U.S. EPA, 1999. "Compilation of Air Pollution Emission Factors. Volume 1: Stationary Point and Area Sources" AP-42, 5th Edition and Supplements, U.S. EPA, Office of Air Quality Planning and Standards, Environmental Sciences Research Laboratory, Research Triangle Park, NC.

1.3 Motor Vehicles

The motor vehicle emissions that would result from the daily operation of airport-related motor vehicles under the proposed project, No Project Alternative, and Alternatives 2 and 3 scenarios depend on several factors including the volume of vehicles, the vehicle fleet and fuel mix, the motor vehicle emission factors, travel distance, speed, and the year of analysis. These factors are obtained from several sources including the San Diego County Regional Airport Authority (SDCRAA), the traffic analysis prepared in support of the ADP (see Section 3.14, Traffic and Circulation, and Appendix R-H of the Recirculated Draft EIR), and CARB’s emission factor model EMFAC2017³. **Table C-14** provides a summary of the data inputs needed to compute motor vehicle emissions, their descriptions, sources, and assumptions.

Table C-14: Summary of Motor Vehicle Emissions Data Inputs

| Data | Description | Source | Assumptions |
|--|--|------------------------|--|
| Vehicle Fleet Mix | Percent of each vehicle type operating on on-airport and off-airport roads. | SDCRAA ^a | Fleet mix is representative of the traffic in the vicinity of the airport. All applicable California policies are applied. |
| Fuel Mix | Percent of fuel usage for each vehicle type (e.g. gasoline, diesel, biodiesel, electric etc.) | SDCRAA | Fuel mix is representative of the traffic in the vicinity of the airport. All applicable California policies are applied. |
| Roadways | The network of roadway segments on which traffic volume were obtained | Traffic Analysis | Roadways analyzed are representative of where project impacts will occur. |
| Off-Airport Daily Traffic Volumes | Traffic volumes on roads in the vicinity of the airport. Volumes were developed in total and for airport- and non-airport-related traffic. | Traffic Analysis | Data provided is representative of daily average conditions and can be applied annually. |
| On-Airport Daily Traffic Volumes | Traffic volumes occurring on road segments on airport property including terminal roadways, parking facilities, and rental car facilities. | Traffic Analysis | Data provided is representative of daily conditions and can be applied annually. |
| Roadway Lengths | Lengths of roadway segments both on-and off-airport. | Determined using GIS | Lengths based on GIS locations are sufficiently accurate. |
| Emission factors | The rate a pollutant is released into the air by a source. | EMFAC2017 ^b | The San Diego Air Basin is used for representative emission factors. |
| Curbside Idle Times | Times cars are idle while waiting at the terminal curbsides for drop-offs and pick-ups. | Traffic Analysis | Idle times occur at terminal curbsides. |
| Parking Facility Traffic | Traffic counts in and out of parking facilities | SDCRAA | Traffic counts provided for July 2018 are representative conditions. |

Source: KB Environmental Sciences, Inc., 2019.

^aSan Diego County Regional Airport Authority

^bCARB, EMFAC2017 Volume III – Technical Documentation Version 1.0.7, July 2018.

³ CARB, EMFAC2017 Volume III – Technical Documentation Version 1.0.7, <https://ww3.arb.ca.gov/msei/downloads/emfac2017-volume-iii-technical-documentation.pdf>, July 2018.

The following equation is used to obtain annual emissions for motor vehicles:

$$\text{Motor Vehicle Emissions (Tons/year)} = \text{Emission Factor (g/mile)} \times \text{vehicle miles travelled per day} \times (365 \text{ days/year}) \times (1 \text{ pound}/453.59 \text{ grams}) \times (1 \text{ ton}/2,000 \text{ pounds})$$

1.3.1 Fleet and Fuel Mix

The emission factors for motor vehicles on roadways in the vicinity of SDIA (both on- and off-airport) were based on data from EMFAC and the SDCRAA. The vehicle categories were passenger cars, light duty trucks (i.e. vans, pickup trucks), shuttle buses (with less than 20 seats), and commercial buses (with more than 20 seats). The fuel types considered for each vehicle type was gasoline, diesel, hybrids, compressed natural gas (CNG), biodiesel, propane and electric.

The recent State of California mandate for airport shuttles to transition to all-electric (i.e., zero emission vehicles (ZEVs) by 2035 were also considered.⁴ The mandate for the transition of airport shuttles stipulates that by 2027, 33 percent of the shuttles be ZEVs, by 2031 66 percent will be ZEVs, and by 2035 all shuttles will be ZEVs. This initiative is considered for the composite emission factors for each applicable year. Also considered for Alternative 4 is the inclusion of the shuttle service between the Old Town Transit Center and SDIA terminals. The shuttle buses will all be electric and serve to lower passenger cars traveling to the Airport beginning in 2020. These initiatives are considered in both the fuel mix and daily traffic volumes. Both of these data inputs, therefore, vary by scenario (i.e., No Project Alternative, Proposed Project, and Alternative 4) and analysis year.

The mandate for public buses to transition was also considered. The Innovative Clean Transit (ICT) regulation was adopted in December 2018 and requires all public transit agencies to gradually transition to a 100 percent zero-emission bus (ZEB) fleet. Beginning in 2029, 100 percent of new purchases by transit agencies must be ZEBs, with a goal for full transition by 2040. It applies to all transit agencies that own, operate, or lease buses with a gross vehicle weight rating (GVWR) greater than 14,000 lbs. It includes standard, articulated, over-the-road, double-decker, and cutaway buses.⁵

Table C-15 and **Table C-16** present the vehicle categories considered, and the fleet percentages by fuel type for each analysis year and scenario. Alternative 1 (No Project) and the Proposed Project have the same vehicle and fuel mixes. Only Alternative 4 differs due to the inclusion of the shuttle service between the Old Town Transit Center and SDIA terminals. The Alternative 4 vehicle and fuel mix therefore accounts for reduced passenger cars and light duty vehicles and increased electric shuttles.

⁴ California Air Resources Board Bulletin. California transitioning to all-electric public bus fleet by 2040. December 14, 2018. Available: <https://ww2.arb.ca.gov/news/california-transitioning-all-electric-public-bus-fleet-2040>.

⁵ California Air Resources Board. Innovative Clean Transit (ICT) Regulation Fact Sheet. May 16, 2019. Available: <https://ww2.arb.ca.gov/resources/fact-sheets/innovative-clean-transit-ict-regulation-fact-sheet>.

Table C-15. Vehicle and Fuel Mixes for the No-Project Alternative and Proposed Project

| Vehicle | Fuel | Percentage of Vehicle/Fuel Type by Analysis Year | | | | | |
|--|-----------|--|--------|--------|--------|--------|--------|
| | | 2018 | 2024 | 2026 | 2030 | 2035 | 2050 |
| Passenger Cars | Gas | 59.52 | 59.52 | 59.52 | 59.52 | 59.52 | 59.52 |
| | Hybrid | 15.79 | 15.79 | 15.79 | 15.79 | 15.79 | 15.79 |
| | CNG | 0.004 | 0.004 | 0.004 | 0.004 | 0.004 | 0.004 |
| Light Duty Trucks | Gas | 17.79 | 17.79 | 17.79 | 17.79 | 17.79 | 17.79 |
| | Diesel | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 |
| | CNG | 0.22 | 0.22 | 0.22 | 0.22 | 0.22 | 0.22 |
| | Biodiesel | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 |
| | Hybrid | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 |
| | Propane | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 |
| Shuttle Buses | Gas | 2.59 | 2.59 | 2.59 | 1.73 | -- | -- |
| | Biodiesel | 0.19 | 0.19 | 0.19 | 0.13 | -- | -- |
| | CNG | 0.25 | 0.25 | 0.25 | 0.17 | -- | -- |
| | Flex Fuel | 0.06 | 0.06 | 0.06 | 0.04 | -- | -- |
| | Diesel | 0.06 | 0.06 | 0.06 | 0.04 | -- | -- |
| | Electric | -- | -- | -- | 1.32 | 4.01 | 4.01 |
| Commuter Buses | Gas | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | -- |
| | Propane | 2.04 | 2.04 | 2.04 | 2.04 | 2.04 | -- |
| | CNG | 0.51 | 0.51 | 0.51 | 0.51 | 0.51 | -- |
| | Electric | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 2.57 |
| Total | | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 |
| Source: KB Environmental Sciences, Inc. 2019, and San Diego County Regional Airport Authority. Note: Values subject to rounding. CNG = Compressed Natural Gas. -- = Not applicable. | | | | | | | |

Table C-16. Vehicle and Fuel Mixes for Alternative 4

| Vehicle | Fuel | Percentage of Vehicle/Fuel Type by Analysis Year | | | | | |
|-------------------|-----------|--|--------|--------|--------|--------|--------|
| | | 2018 | 2024 | 2026 | 2030 | 2035 | 2050 |
| Passenger Cars | Gas | 59.52 | 57.61 | 57.61 | 57.61 | 57.61 | 57.61 |
| | Hybrid | 15.79 | 15.28 | 15.28 | 15.28 | 15.28 | 15.28 |
| | CNG | <0.01 | <0.01 | <0.01 | <0.01 | <0.01 | <0.01 |
| Light Duty Trucks | Gas | 18 | 15 | 15 | 15 | 15 | 15 |
| | Diesel | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 |
| | CNG | 0.22 | 0.19 | 0.19 | 0.19 | 0.19 | 0.19 |
| | Biodiesel | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 |
| | Hybrid | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 |
| | Propane | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 |
| Shuttle Buses | Gas | 2.6 | -- | -- | -- | -- | -- |
| | Biodiesel | 0.19 | -- | -- | -- | -- | -- |
| | CNG | 0.25 | -- | -- | -- | -- | -- |
| | Flex Fuel | 0.06 | -- | -- | -- | -- | -- |
| | Diesel | 0.06 | -- | -- | -- | -- | -- |
| | Electric | -- | 8.84 | 8.84 | 8.84 | 8.84 | 8.84 |
| Commuter Buses | Gas | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | -- |
| | Propane | 2.04 | 2.04 | 2.04 | 2.04 | 2.04 | -- |
| | CNG | 0.51 | 0.51 | 0.51 | 0.51 | 0.51 | -- |
| | Electric | -- | -- | -- | -- | -- | 2.57 |
| Total | | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 |

Source: KB Environmental Sciences, Inc. 2019, and San Diego County Regional Airport Authority.
 Note: Values subject to rounding. CNG = Compressed Natural Gas. -- = Not applicable.

1.3.2 Emission Factors

CARB’s EMFAC2017 model was used to derive the emission factors for motor vehicles. The model includes updates to emission factors based on new vehicle testing data and the incorporation of state and federal regulations. New forecasting methods reflect emission benefits of CARB’s recent rulemakings including on-road diesel fleet rules, California’s Advanced Clean Car Standards (ACC), and the Smartway/Phase I Heavy Duty Vehicle Greenhouse Gas Regulation. In general, the current model predicts lower emissions after 2020.⁶ Notably, the models used to estimate air emissions are approved by regulatory agencies and include current and future regulatory emission controls. These data are embedded within the model. Changes to the emission factors that are a result of these emission controls can only be made by the regulatory agencies that develop the models.

Using EMFAC2017, a composite emission factor representative of the vehicle and fuel mix at an aggregated speed was calculated for each pollutant, scenario, and analysis year. **Table C-17** and **Table C-18** present the cruising speed and idle (terminal curbside) motor vehicle emission factors for 2018, 2024, 2026, 2030, 2035, and 2050, for Alternative 1 (No Project)/the proposed project and Alternative 4, respectively.

⁶ CARB, EMFAC2014 Volume III – Technical Documentation Version 1.0.7, <https://www.arb.ca.gov/msei/downloads/emfac2014/emfac2014-vol3-technical-documentation-052015.pdf>, May 2015.

Table C-17. EMFAC2017 Composite Cruise Emission Factors (grams/mile)

| Year | Pollutant Emissions (grams/mile) | | | | | | | | |
|--|----------------------------------|-----------------|------------------|-------------------|------|-----------------|-----------------|-----------------|------------------|
| | VOC | NO _x | PM ₁₀ | PM _{2.5} | CO | SO _x | CO ₂ | CH ₄ | N ₂ O |
| Alternative 1 (No Project) and Proposed Project | | | | | | | | | |
| 2018 | 0.04 | 0.16 | 0.05 | 0.05 | 1.15 | 0.003 | 362 | 0.06 | 0.02 |
| 2024 | 0.01 | 0.07 | 0.05 | 0.04 | 0.59 | 0.003 | 314 | 0.04 | 0.02 |
| 2026 | 0.01 | 0.07 | 0.05 | 0.04 | 0.53 | 0.003 | 299 | 0.04 | 0.01 |
| 2030 | 0.01 | 0.04 | 0.05 | 0.04 | 0.43 | 0.002 | 262 | 0.04 | 0.01 |
| 2035 | 0.003 | 0.03 | 0.04 | 0.04 | 0.36 | 0.002 | 223 | 0.03 | 0.01 |
| 2050 | 0.002 | 0.02 | 0.04 | 0.03 | 0.32 | 0.002 | 182 | 0.00 | 0.00 |
| Alternative 4 | | | | | | | | | |
| 2018 | 0.04 | 0.16 | 0.05 | 0.05 | 1.15 | 0.003 | 362 | 0.06 | 0.02 |
| 2024 | 0.01 | 0.05 | 0.04 | 0.04 | 0.52 | 0.003 | 260 | 0.04 | 0.01 |
| 2026 | 0.01 | 0.05 | 0.04 | 0.04 | 0.46 | 0.002 | 247 | 0.04 | 0.01 |
| 2030 | 0.004 | 0.03 | 0.04 | 0.04 | 0.39 | 0.002 | 226 | 0.03 | 0.01 |
| 2035 | 0.003 | 0.03 | 0.04 | 0.04 | 0.34 | 0.002 | 212 | 0.03 | 0.01 |
| 2050 | 0.002 | 0.01 | 0.04 | 0.03 | 0.30 | 0.002 | 172 | 0.00 | 0.00 |
| <p>Source: EMFAC2017.</p> <p>Notes: Alternative 4 emission factors were applied to all of the on-airport roadways anticipated to be impacted by the Old Town Trolley Shuttle Service as well as Pacific Highway and North Harbor Drive. The emissions benefit (i.e., reduction in emissions) with the Old Town Trolley Shuttle was accounted for by a reduction in the number of passenger-related motor vehicle trips on these roadways. For all other off-airport roadways, the emission factors were the same both with and without the Proposed Project.</p> | | | | | | | | | |

Table C-18 EMFAC2017 Composite Idle Emission Factors (grams/mile)

| Year | Pollutant Emissions (grams/mile) | | | | | | | | |
|--|----------------------------------|-----------------|------------------|-------------------|-------|-----------------|-----------------|-----------------|------------------|
| | VOC | NO _x | PM ₁₀ | PM _{2.5} | CO | SO _x | CO ₂ | CH ₄ | N ₂ O |
| Alternative 1 (No Project) and Proposed Project | | | | | | | | | |
| 2018 | 2.68 | 3.31 | 0.20 | 0.19 | 29.85 | 0.08 | 8,189 | 2.64 | 1.50 |
| 2024 | 0.60 | 1.84 | 0.14 | 0.13 | 14.29 | 0.07 | 7,155 | 1.47 | 1.39 |
| 2026 | 0.48 | 1.71 | 0.12 | 0.12 | 12.97 | 0.06 | 6,797 | 1.33 | 1.33 |
| 2030 | 0.31 | 1.10 | 0.07 | 0.06 | 10.19 | 0.05 | 5,489 | 0.38 | 0.84 |
| 2035 | 0.18 | 0.45 | 0.05 | 0.05 | 6.84 | 0.05 | 4,933 | 0.99 | 0.07 |
| 2050 | 0.10 | 0.28 | 0.03 | 0.03 | 6.10 | 0.04 | 4,187 | 0.04 | 0.05 |
| Alternative 4 | | | | | | | | | |
| 2018 | 2.68 | 3.31 | 0.20 | 0.19 | 29.9 | 0.08 | 8,189 | 2.64 | 1.50 |
| 2024 | 0.51 | 0.81 | 0.13 | 0.12 | 10.1 | 0.06 | 5,782 | 1.40 | 0.11 |
| 2026 | 0.40 | 0.69 | 0.11 | 0.11 | 8.9 | 0.05 | 5,485 | 1.27 | 0.10 |
| 2030 | 0.26 | 0.42 | 0.06 | 0.06 | 7.4 | 0.05 | 4,585 | 0.34 | 0.07 |
| 2035 | 0.17 | 0.43 | 0.05 | 0.04 | 6.5 | 0.05 | 4,689 | 0.99 | 0.07 |
| 2050 | 0.10 | 0.26 | 0.03 | 0.03 | 5.8 | 0.04 | 3,958 | 0.04 | 0.05 |
| <p>Source: CARB's EMFAC2017.</p> | | | | | | | | | |

1.3.3 Traffic Volumes

The traffic analysis developed Average Daily Traffic (ADT) for both on-airport and off-airport roadway segments. On-airport ADT includes traffic that enters the airport roadways and travels on Terminal 1, Terminal 2 roads, and associated parking facilities and curbsides. **Figure C-1** shows the on-airport roadways analyzed. The off-airport roadway network extends south of the airport to Harbor Island Drive, north to Pacific Highway, and east to India Street. Also included is North Harbor Drive from Scott Street to Ash Street. The evaluated off-airport roadways are shown on **Figure C-2**. The on-airport ADT are provided in **Tables C-19, C-20, and C-21**. Off-airport ADT are provided in **Tables C-22, C-23, and C-24**.

Figure C-1: On-Airport Roadways

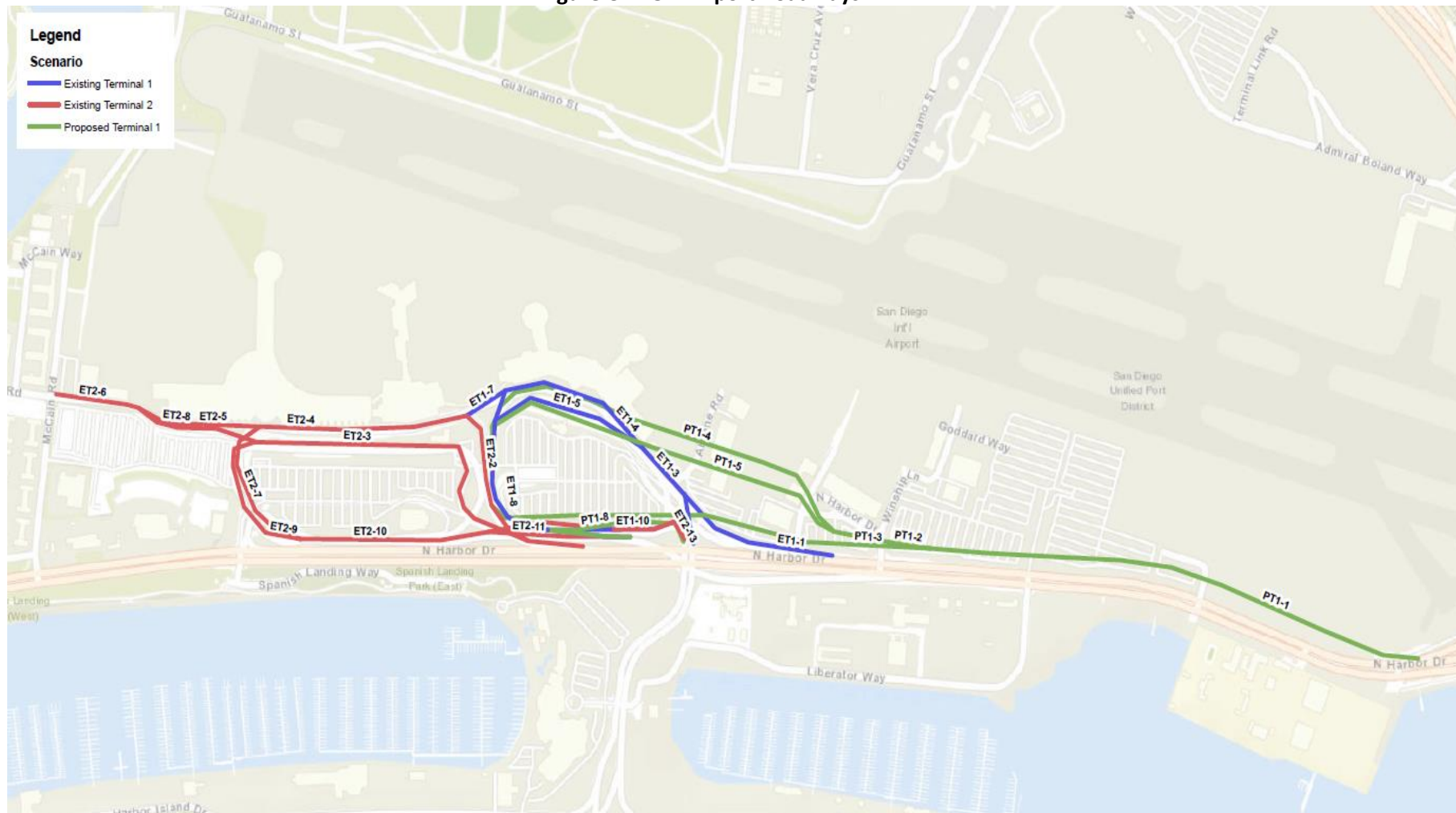
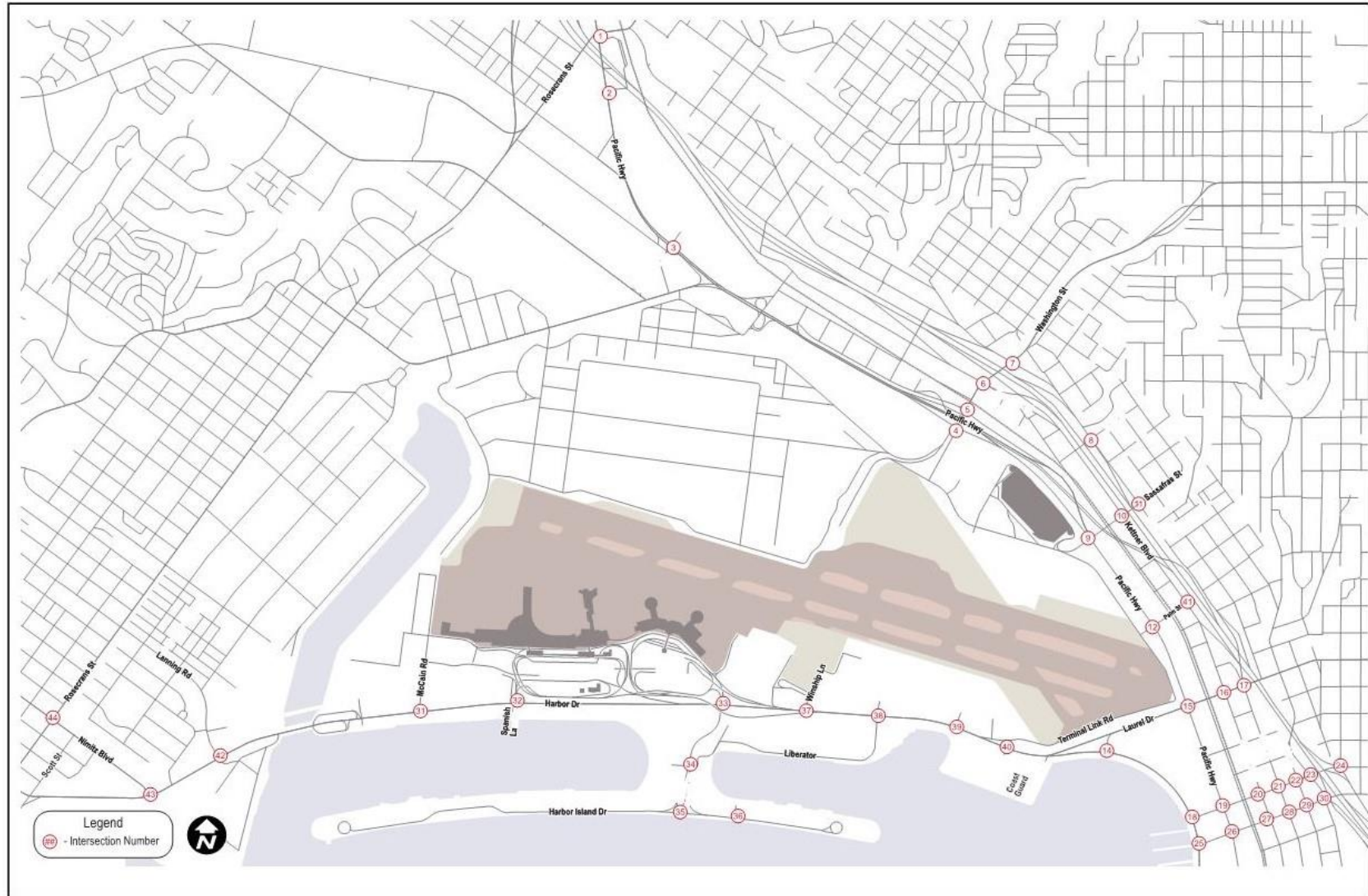


Figure C-2. Off-Airport Roadway Analysis Locations



Source: Kimley-Horn, 2019

Table C-19. Alternative 1 (No Project) On-Airport Daily Traffic Volumes

| LINK ID | Analysis Years | | | | | |
|---------|----------------|--------|--------|--------|--------|--------|
| | 2018 | 2024 | 2026 | 2030 | 2035 | 2050 |
| ET1-1 | 17,050 | 15,857 | 17,391 | 19,267 | 21,313 | 21,313 |
| ET1-10 | 6,392 | 5,945 | 6,520 | 7,223 | 7,990 | 7,990 |
| ET1-2 | 2,319 | 2,157 | 2,365 | 2,620 | 2,899 | 2,899 |
| ET1-3 | 19,369 | 18,013 | 19,756 | 21,887 | 24,211 | 24,211 |
| ET1-4 | 19,333 | 17,980 | 19,720 | 21,846 | 24,166 | 24,166 |
| ET1-5 | 1,823 | 1,695 | 1,859 | 2,060 | 2,279 | 2,279 |
| ET1-6 | 17,159 | 15,958 | 17,502 | 19,390 | 21,449 | 21,449 |
| ET1-7 | 2,174 | 2,022 | 2,217 | 2,457 | 2,718 | 2,718 |
| ET1-8 | 18,982 | 17,653 | 19,362 | 21,450 | 23,728 | 23,728 |
| ET1-9 | 42,956 | 39,949 | 43,815 | 48,540 | 53,695 | 53,695 |
| ET2-1 | 16,429 | 15,279 | 16,758 | 18,565 | 20,536 | 20,536 |
| ET2-10 | 28,154 | 26,183 | 28,717 | 31,814 | 35,193 | 35,193 |
| ET2-11 | 26,476 | 24,623 | 27,006 | 29,918 | 33,095 | 33,095 |
| ET2-12 | 3,830 | 3,562 | 3,907 | 4,328 | 4,788 | 4,788 |
| ET2-13 | 6,686 | 6,218 | 6,820 | 7,555 | 8,358 | 8,358 |
| ET2-2 | 6,872 | 6,391 | 7,009 | 7,765 | 8,590 | 8,590 |
| ET2-3 | 9,557 | 8,888 | 9,748 | 10,799 | 11,946 | 11,946 |
| ET2-4 | 9,466 | 8,803 | 9,655 | 10,697 | 11,833 | 11,833 |
| ET2-5 | 2,000 | 1,860 | 2,040 | 2,260 | 2,500 | 2,500 |
| ET2-6 | 4,637 | 4,312 | 4,730 | 5,240 | 5,796 | 5,796 |
| ET2-7 | 7,466 | 6,943 | 7,615 | 8,437 | 9,333 | 9,333 |
| ET2-8 | 2,637 | 2,452 | 2,690 | 2,980 | 3,296 | 3,296 |
| ET2-9 | 17,996 | 16,736 | 18,356 | 20,335 | 22,495 | 22,495 |
| T1-P | 8,025 | 8587 | 7865 | 6982 | 6019 | 6019 |
| T2-PG | 12,483 | 13357 | 12233 | 10860 | 9362 | 9362 |
| T2-PL | 7,750 | 8292 | 7595 | 6742 | 5812 | 5812 |

Source: Kimley-Horn, 2019.

ET1 = Existing Terminal 1 ET2 = Existing Terminal 2 T1-P = Terminal 1 Parking T2-PG = Terminal 2 Parking Garage T2-PL = Terminal 2 Parking Plaza PT1 = Proposed Terminal 1 T1-PF = Proposed Future Terminal 1 Parking Structure

Table C-20. Proposed Project On-Airport Daily Traffic Volumes

| LINK ID | Analysis Years | | | | |
|---------|----------------|--------|--------|--------|--------|
| | 2024 | 2026 | 2030 | 2035 | 2050 |
| ET2-10 | 18,116 | 19,722 | 22,473 | 24,767 | 25,594 |
| ET2-11 | 14,493 | 15,778 | 17,979 | 19,814 | 20,475 |
| ET2-12 | 1,811 | 1,972 | 2,247 | 2,476 | 2,559 |
| ET2-2 | 4,971 | 5,411 | 6,166 | 6,795 | 7,022 |
| ET2-3 | 6,813 | 7,417 | 8,452 | 9,314 | 9,625 |
| ET2-4 | 4,924 | 5,360 | 6,108 | 6,732 | 6,956 |
| ET2-5 | 2,184 | 2,377 | 2,709 | 2,985 | 3,085 |
| ET2-6 | 3,763 | 4,096 | 4,668 | 5,144 | 5,316 |
| ET2-7 | 5,203 | 5,664 | 6,454 | 7,113 | 7,350 |
| ET2-8 | 1,579 | 1,719 | 1,959 | 2,159 | 2,231 |
| ET2-9 | 8,950 | 9,743 | 11,102 | 12,235 | 12,644 |
| PT1-1 | 41,636 | 45,325 | 51,650 | 56,920 | 58,821 |
| PT1-2 | 19,293 | 21,003 | 23,934 | 26,376 | 27,257 |
| PT1-3 | 22,217 | 24,186 | 27,561 | 30,373 | 31,387 |
| PT1-4 | 11,706 | 12,743 | 14,521 | 16,003 | 16,538 |
| PT1-5 | 10,374 | 11,294 | 12,869 | 14,183 | 14,657 |
| PT1-6 | 7,216 | 7,855 | 8,951 | 9,865 | 10,194 |
| PT1-7 | 38,013 | 41,381 | 47,156 | 51,967 | 53,703 |
| PT1-8 | 3,468 | 3,775 | 4,302 | 4,741 | 4,900 |
| T1-PF | 8587 | 7865 | 6982 | 6019 | 6019 |
| T2-PG | 13357 | 12233 | 10860 | 9362 | 9362 |
| T2-PL | 8292 | 7595 | 6742 | 5812 | 5812 |

Source: Kimley-Horn, 2019.
 ET1 = Existing Terminal 1 ET2 = Existing Terminal 2 T1-P = Terminal 1 Parking T2-PG = Terminal 2 Parking Garage T2-PL = Terminal 2 Parking Plaza PT1 = Proposed Terminal 1 T1-PF = Proposed Future Terminal 1 Parking

Table C-21. Alternative 4 On-Airport Daily Traffic Volumes

| LINK ID | Analysis Years | | | | |
|---------|----------------|--------|--------|--------|--------|
| | 2024 | 2026 | 2030 | 2035 | 2050 |
| ET2-10 | 13,393 | 14,677 | 16,328 | 17,979 | 18,580 |
| ET2-11 | 1,674 | 1,834 | 2,041 | 2,247 | 2,322 |
| ET2-12 | 4,593 | 5,034 | 5,600 | 6,166 | 6,372 |
| ET2-2 | 6,296 | 6,899 | 7,675 | 8,452 | 8,734 |
| ET2-3 | 4,550 | 4,986 | 5,547 | 6,108 | 6,312 |
| ET2-4 | 2,018 | 2,211 | 2,460 | 2,709 | 2,799 |
| ET2-5 | 3,477 | 3,810 | 4,239 | 4,668 | 4,824 |
| ET2-6 | 4,808 | 5,269 | 5,862 | 6,454 | 6,670 |
| ET2-7 | 1,459 | 1,599 | 1,779 | 1,959 | 2,024 |
| ET2-8 | 8,270 | 9,063 | 10,083 | 11,102 | 11,473 |
| ET2-9 | 38,474 | 42,163 | 46,907 | 51,650 | 53,375 |
| PT1-1 | 17,828 | 19,538 | 21,736 | 23,934 | 24,733 |
| PT1-2 | 20,647 | 22,626 | 25,172 | 27,717 | 28,643 |
| PT1-3 | 10,817 | 11,854 | 13,188 | 14,521 | 15,006 |
| PT1-4 | 9,586 | 10,506 | 11,687 | 12,869 | 13,299 |
| PT1-5 | 6,668 | 7,307 | 8,129 | 8,951 | 9,250 |
| PT1-6 | 35,126 | 38,494 | 42,825 | 47,156 | 48,731 |
| PT1-7 | 3,205 | 3,512 | 3,907 | 4,302 | 4,446 |
| PT1-8 | 8,587 | 7,865 | 6,982 | 6,019 | 6,019 |
| T1-PF | 13,357 | 12,233 | 10,860 | 9,362 | 9,362 |
| T2-PG | 8,292 | 7,595 | 6,742 | 5,812 | 5,812 |
| T2-PL | 13,393 | 14,677 | 16,328 | 17,979 | 18,580 |

Source: Kimley-Horn, 2019.
 ET1 = Existing Terminal 1 ET2 = Existing Terminal 2 T1-P = Terminal 1 Parking T2-PG = Terminal 2 Parking Garage T2-PL = Terminal 2 Parking Plaza PT1 = Proposed Terminal 1 T1-PF = Proposed Future Terminal 1 Parking

Table C-22. Alternative 1 (No Project) Off-Airport Daily Traffic Volumes

| Roadway | Roadway Segment | Existing | | | 2024 | | | 2026 | | | 2030 | | | 2035 | | | 2050 | | |
|-------------------|-----------------------------------|----------|--------|-----------|--------|--------|-----------|--------|--------|-----------|--------|--------|-----------|--------|--------|-----------|--------|--------|-----------|
| | | Total | Airp. | Non Airp. | Total | Airp. | Non Airp. | Total | Airp. | Non Airp. | Total | Airp. | Non Airp. | Total | Airp. | Non Airp. | Total | Airp. | Non Airp. |
| Pacific Highway | Kurtz St to Barnett Ave | 21,780 | 2,580 | 19,200 | 23,243 | 2,883 | 20,360 | 23,698 | 3,108 | 20,590 | 24,579 | 3,523 | 21,056 | 25,516 | 3,864 | 21,653 | 28,648 | 3,993 | 24,784 |
| | Barnett Ave to Washington St | 51,778 | 4,158 | 47,620 | 62,035 | 5,406 | 56,630 | 63,637 | 5,789 | 57,848 | 65,612 | 6,518 | 59,095 | 67,847 | 7,155 | 60,692 | 71,910 | 7,394 | 64,755 |
| | Washington St to Sassafras St | 14,219 | 4,872 | 9,347 | 15,308 | 4,684 | 10,625 | 15,869 | 5,089 | 10,780 | 16,907 | 5,812 | 11,094 | 20,595 | 6,368 | 14,228 | 38,904 | 6,581 | 32,536 |
| | Sassafras St to Palm St | 18,988 | 9,991 | 8,997 | 21,811 | 11,315 | 10,496 | 22,892 | 12,191 | 10,701 | 24,927 | 13,810 | 11,117 | 26,798 | 15,147 | 11,650 | 29,605 | 15,653 | 14,458 |
| | Palm St to Laurel St | 20,447 | 12,428 | 8,019 | 23,029 | 13,657 | 9,372 | 24,332 | 14,735 | 9,596 | 26,778 | 16,716 | 10,062 | 30,445 | 18,331 | 12,114 | 37,047 | 18,944 | 18,716 |
| | Laurel Dr to Juniper St | 10,478 | 6,924 | 3,554 | 14,119 | 7,964 | 6,156 | 14,873 | 8,574 | 6,299 | 16,319 | 9,706 | 6,613 | 18,749 | 10,647 | 8,102 | 22,270 | 11,002 | 11,623 |
| Kettner Blvd | Vine St to Sassafras St | 26,492 | 18,117 | 8,375 | 33,140 | 19,025 | 14,115 | 35,468 | 20,574 | 14,894 | 40,762 | 23,391 | 17,370 | 45,494 | 25,644 | 19,850 | 39,871 | 26,500 | 14,227 |
| | Sassafras St to Palm St | 18,406 | 15,838 | 2,568 | 30,000 | 16,935 | 13,065 | 32,163 | 18,298 | 13,865 | 37,279 | 20,785 | 16,495 | 43,417 | 22,789 | 20,629 | 44,109 | 23,550 | 21,320 |
| | Palm St to Laurel St | 18,406 | 10,719 | 7,687 | 24,101 | 10,304 | 13,797 | 25,825 | 11,196 | 14,629 | 30,054 | 12,787 | 17,267 | 32,581 | 14,009 | 18,572 | 33,977 | 14,477 | 19,968 |
| India St | Sassafras St to Laurel St | 14,465 | 11,303 | 3,162 | 22,494 | 16,935 | 5,559 | 24,526 | 18,298 | 6,229 | 29,270 | 20,785 | 8,485 | 31,831 | 22,789 | 9,042 | 34,348 | 23,550 | 11,559 |
| | Laurel St to Juniper St | 3,884 | 0 | 3,884 | 4,022 | 0 | 4,022 | 4,063 | 0 | 4,063 | 4,144 | 0 | 4,144 | 4,249 | 0 | 4,249 | 4,579 | 0 | 4,579 |
| Washington St | West of Pacific Hwy | 4,847 | 2,683 | 2,164 | 6,383 | 4,289 | 2,094 | 6,771 | 4,558 | 2,214 | 7,545 | 5,091 | 2,454 | 8,315 | 5,596 | 2,720 | 9,971 | 5,782 | 4,376 |
| | Hancock St to San Diego Ave | 22,972 | 3,397 | 19,575 | 25,553 | 3,567 | 21,986 | 26,315 | 3,858 | 22,457 | 27,743 | 4,386 | 23,357 | 28,841 | 4,808 | 24,033 | 31,132 | 4,969 | 26,324 |
| | East of India St | 24,710 | 3,397 | 21,313 | 29,954 | 3,567 | 26,386 | 30,814 | 3,858 | 26,956 | 32,460 | 4,386 | 28,074 | 33,677 | 4,808 | 28,869 | 36,344 | 4,969 | 31,536 |
| Admiral Boland Wy | Washington St to Terminal Link Rd | 13,099 | 13,099 | 0 | 21,786 | 20,942 | 844 | 23,235 | 22,251 | 984 | 26,124 | 24,857 | 1,267 | 28,949 | 27,319 | 1,629 | 31,006 | 28,232 | 3,686 |
| | Terminal Link Rd to Pacific Hwy | 13,099 | 13,099 | 0 | 21,951 | 20,942 | 1,009 | 23,402 | 22,251 | 1,151 | 26,294 | 24,857 | 1,437 | 29,124 | 27,319 | 1,804 | 31,194 | 28,232 | 3,874 |
| Sassafras St | Pacific Hwy to Kettner Blvd | 15,983 | 12,852 | 3,131 | 22,686 | 18,994 | 3,692 | 24,096 | 20,238 | 3,858 | 26,865 | 22,672 | 4,194 | 33,156 | 24,908 | 8,248 | 35,627 | 25,740 | 10,719 |

| Roadway | Roadway Segment | Existing | | | 2024 | | | 2026 | | | 2030 | | | 2035 | | | 2050 | | |
|-----------------|-------------------------------------|----------|--------|-----------|--------|--------|-----------|--------|--------|-----------|--------|--------|-----------|--------|--------|-----------|--------|--------|-----------|
| | | Total | Airp. | Non Airp. | Total | Airp. | Non Airp. | Total | Airp. | Non Airp. | Total | Airp. | Non Airp. | Total | Airp. | Non Airp. | Total | Airp. | Non Airp. |
| Palm St | Pacific Hwy to Kettner Blvd | 1,940 | 1,700 | 240 | 7,891 | 2,342 | 5,550 | 8,198 | 2,544 | 5,653 | 8,722 | 2,906 | 5,816 | 12,648 | 3,184 | 9,465 | 13,270 | 12,675 | 682 |
| Laurel St | Harbor Dr to Pacific Hwy | 35,441 | 32,004 | 3,437 | 50,475 | 40,063 | 10,411 | 55,367 | 43,524 | 11,844 | 66,248 | 49,705 | 16,543 | 72,351 | 54,456 | 17,895 | 78,436 | 56,275 | 23,980 |
| | Pacific Hwy to India St | 21,042 | 16,552 | 4,490 | 25,245 | 16,213 | 9,032 | 27,341 | 17,598 | 9,744 | 32,165 | 20,079 | 12,086 | 34,753 | 22,001 | 12,751 | 37,587 | 22,736 | 15,586 |
| | India St to State St/ Reynard Wy | 14,072 | 3,397 | 10,675 | 14,495 | 3,567 | 10,928 | 14,929 | 3,858 | 11,072 | 15,748 | 4,386 | 11,362 | 16,543 | 4,808 | 11,735 | 17,879 | 4,969 | 13,071 |
| Hawthorn St | Harbor Dr to Pacific Hwy | 26,337 | 16,566 | 9,771 | 27,940 | 15,924 | 12,016 | 29,604 | 17,302 | 12,302 | 32,644 | 19,762 | 12,882 | 38,044 | 21,651 | 16,394 | 41,328 | 22,374 | 19,677 |
| | Pacific Hwy to India St | 30,936 | 16,566 | 14,370 | 33,178 | 15,924 | 17,254 | 35,637 | 17,302 | 18,334 | 41,439 | 19,762 | 21,676 | 55,852 | 21,651 | 34,202 | 60,272 | 22,374 | 38,621 |
| | India St to State St | 30,936 | 16,566 | 14,370 | 33,715 | 15,924 | 17,791 | 36,250 | 17,302 | 18,948 | 42,026 | 19,762 | 22,264 | 56,370 | 21,651 | 34,719 | 60,829 | 22,374 | 39,178 |
| | State St to Albatross St | 10,483 | 0 | 10,483 | 10,856 | 0 | 10,856 | 10,965 | 0 | 10,965 | 11,185 | 0 | 11,185 | 11,468 | 0 | 11,468 | 12,358 | 0 | 12,358 |
| Grape St | Harbor Dr to Pacific Hwy | 23,826 | 19,002 | 4,824 | 28,409 | 18,266 | 10,143 | 30,920 | 19,847 | 11,073 | 36,884 | 22,668 | 14,216 | 53,203 | 24,835 | 28,369 | 57,465 | 25,664 | 32,630 |
| | Pacific Hwy to India St1 | 28,167 | 19,002 | 9,165 | 38,686 | 18,266 | 20,419 | 41,299 | 19,847 | 21,452 | 47,472 | 22,668 | 24,804 | 62,486 | 24,835 | 37,652 | 67,469 | 25,664 | 42,635 |
| | India St to State St | 32,386 | 19,002 | 13,384 | 48,045 | 18,266 | 29,779 | 52,391 | 19,847 | 32,544 | 59,646 | 22,668 | 36,978 | 77,125 | 24,835 | 52,291 | 83,245 | 25,664 | 58,411 |
| | Albatross St to Front St1 | 2,172 | 0 | 2,172 | 3,138 | 0 | 3,138 | 3,415 | 0 | 3,415 | 4,413 | 0 | 4,413 | 5,555 | 0 | 5,555 | 5,986 | 0 | 5,986 |
| North Harbor Dr | Scott Rd to Nimitz Blvd2 | 11,759 | 2,923 | 8,836 | 16,522 | 2,810 | 13,712 | 16,932 | 3,053 | 13,879 | 17,704 | 3,487 | 14,216 | 18,470 | 3,821 | 14,649 | 19,962 | 3,948 | 16,142 |
| | Nimitz Blvd to Laning Rd2 | 19,644 | 8,770 | 10,874 | 25,941 | 8,431 | 17,511 | 26,934 | 9,160 | 17,774 | 28,770 | 10,462 | 18,308 | 30,454 | 11,462 | 18,992 | 32,993 | 11,845 | 21,531 |
| | Laning Rd to McCain Rd | 28,798 | 11,694 | 17,104 | 30,248 | 11,241 | 19,008 | 32,003 | 12,213 | 19,789 | 36,245 | 13,950 | 22,296 | 38,414 | 15,283 | 23,131 | 41,559 | 15,793 | 26,276 |
| | Mccain Rd to Spanish Landing | 29,392 | 7,980 | 21,412 | 30,335 | 11,241 | 19,094 | 32,150 | 12,213 | 19,937 | 36,394 | 13,950 | 22,445 | 38,473 | 15,283 | 23,190 | 41,334 | 15,793 | 26,051 |
| | Spanish Landing to Harbor Island Dr | 30,278 | 5,732 | 24,546 | 44,351 | 24,038 | 20,313 | 47,703 | 26,947 | 20,756 | 52,226 | 30,212 | 22,014 | 55,943 | 33,251 | 22,692 | 61,567 | 34,362 | 27,205 |

| Roadway | Roadway Segment | Existing | | | 2024 | | | 2026 | | | 2030 | | | 2035 | | | 2050 | | |
|------------------|---|----------|--------|-----------|---------|--------|-----------|---------|--------|-----------|---------|--------|-----------|---------|---------|-----------|---------|---------|-----------|
| | | Total | Airp. | Non Airp. | Total | Airp. | Non Airp. | Total | Airp. | Non Airp. | Total | Airp. | Non Airp. | Total | Airp. | Non Airp. | Total | Airp. | Non Airp. |
| Harbor Island Dr | Harbor Island Dr to Winship Ln2 | 77,384 | 21,445 | 55,939 | 49,996 | 31,387 | 18,609 | 57,042 | 34,417 | 22,625 | 75,552 | 38,130 | 37,422 | 80,650 | 42,178 | 38,472 | 90,143 | 43,587 | 46,556 |
| | Winship Ln to Liberator Way | 89,066 | 75,645 | 13,421 | 101,911 | 74,963 | 26,948 | 113,229 | 81,791 | 31,438 | 139,501 | 92,133 | 47,368 | 151,416 | 101,378 | 50,038 | 173,618 | 104,764 | 68,854 |
| | Liberator Way to Cell Phone Lot | 94,942 | 75,645 | 19,297 | 105,851 | 77,239 | 28,612 | 117,407 | 84,288 | 33,119 | 143,983 | 94,900 | 49,083 | 156,233 | 104,438 | 51,795 | 178,675 | 107,926 | 70,749 |
| | Cell Phone Lot to Laurel St/ Solar Turbines | 95,096 | 87,131 | 7,965 | 109,443 | 80,122 | 29,321 | 121,400 | 87,450 | 33,950 | 148,564 | 98,403 | 50,161 | 161,504 | 108,313 | 53,191 | 185,076 | 111,931 | 73,145 |
| | Laurel St/ Solar Turbines to W Laurel St | 76,603 | 70,000 | 6,603 | 65,744 | 41,000 | 24,744 | 73,805 | 44,542 | 29,263 | 96,120 | 50,867 | 45,252 | 103,727 | 55,729 | 47,997 | 114,246 | 57,591 | 58,516 |
| | Laurel St to Hawthorn St | 59,521 | 43,364 | 16,157 | 66,921 | 41,684 | 25,237 | 73,129 | 45,291 | 27,838 | 88,614 | 51,730 | 36,883 | 116,755 | 56,674 | 60,082 | 125,941 | 58,567 | 69,267 |
| | Hawthorn St to Grape St1 | 37,881 | 26,798 | 11,083 | 43,369 | 25,760 | 17,609 | 47,956 | 27,989 | 19,967 | 60,489 | 31,968 | 28,521 | 82,007 | 35,023 | 46,983 | 88,165 | 36,193 | 53,142 |
| | Grape St to Ash St1 | 20,437 | 7,796 | 12,641 | 22,096 | 7,494 | 14,602 | 23,606 | 8,142 | 15,464 | 27,770 | 9,300 | 18,470 | 29,241 | 10,189 | 19,053 | 31,420 | 10,529 | 21,231 |
| Harbor Island Dr | Harbor Dr to Old Rent A Car Access | 12,743 | 1,132 | 11,611 | 13,543 | 1,189 | 12,354 | 17,419 | 1,286 | 16,133 | 32,445 | 1,462 | 30,983 | 32,936 | 1,603 | 31,334 | 34,097 | 1,656 | 32,494 |
| | West of Harbor Island Dr | 7,661 | 1,132 | 6,529 | 13,556 | 1,189 | 12,367 | 13,788 | 1,286 | 12,502 | 14,238 | 1,462 | 12,776 | 14,730 | 1,603 | 13,127 | 15,891 | 1,656 | 14,289 |
| | Harbor Island Dr to Parking Lot | 4,801 | 0 | 4,801 | 6,902 | 0 | 6,902 | 7,013 | 0 | 7,013 | 7,153 | 0 | 7,153 | 8,044 | 0 | 8,044 | 13,296 | 0 | 13,296 |
| | East of Parking Lot | 3,929 | 0 | 3,929 | 6,902 | 0 | 6,902 | 7,013 | 0 | 7,013 | 7,153 | 0 | 7,153 | 8,044 | 0 | 8,044 | 13,296 | 0 | 13,296 |

Source: Kimley-Horn, 2019.

Table C-23. Proposed Project Off-Airport Daily Traffic Volumes

| Roadway | Roadway Segment | Existing | | | 2024 | | | 2026 | | | 2030 | | | 2035 | | | 2050 | | |
|-------------------|-----------------------------------|----------|--------|-----------|--------|--------|-----------|--------|--------|-----------|--------|--------|-----------|--------|--------|-----------|--------|--------|-----------|
| | | Total | Airp. | Non Airp. | Total | Airp. | Non Airp. | Total | Airp. | Non Airp. | Total | Airp. | Non Airp. | Total | Airp. | Non Airp. | Total | Airp. | Non Airp. |
| Pacific Highway | Kurtz St to Barnett Ave | 21,780 | 2,580 | 19,200 | 23,148 | 2,883 | 20,360 | 23,594 | 3,108 | 20,590 | 24,463 | 3,523 | 21,056 | 25,389 | 3,864 | 21,653 | 28,517 | 3,993 | 24,655 |
| | Barnett Ave to Washington St | 51,778 | 4,158 | 47,620 | 61,940 | 5,406 | 56,630 | 63,533 | 5,789 | 57,848 | 65,497 | 6,518 | 59,095 | 67,720 | 7,155 | 60,692 | 71,782 | 7,394 | 64,516 |
| | Washington St to Sassafras St | 14,219 | 4,872 | 9,347 | 1,570 | 4,684 | 10,625 | 15,609 | 5,089 | 10,780 | 16,618 | 5,812 | 11,094 | 20,278 | 6,368 | 14,228 | 38,575 | 6,581 | 32,323 |
| | Sassafras St to Palm St | 18,988 | 9,991 | 8,997 | 21,454 | 11,315 | 10,496 | 22,503 | 12,191 | 10,701 | 24,493 | 13,810 | 11,117 | 20,322 | 15,147 | 11,650 | 29,115 | 15,653 | 13,952 |
| | Palm St to Laurel St | 20,447 | 12,428 | 8,019 | 22,553 | 13,657 | 9,372 | 23,813 | 14,735 | 9,596 | 26,149 | 16,716 | 10,062 | 29,810 | 18,331 | 12,114 | 36,393 | 18,944 | 18,104 |
| | Laurel Dr to Juniper St | 10,478 | 6,924 | 3,554 | 13,882 | 7,964 | 6,156 | 14,614 | 8,574 | 6,299 | 16,030 | 9,706 | 6,613 | 18,432 | 10,647 | 8,102 | 21,944 | 11,002 | 11,268 |
| Kettner Blvd | Vine St to Sassafras St | 26,492 | 18,117 | 8,375 | 32,379 | 19,025 | 14,115 | 34,633 | 20,574 | 14,894 | 39,836 | 23,391 | 17,370 | 44,478 | 25,644 | 19,850 | 33,321 | 26,500 | 13,371 |
| | Sassafras St to Palm St | 18,406 | 15,838 | 2,568 | 29,358 | 16,935 | 13,065 | 31,462 | 18,298 | 13,865 | 36,498 | 20,785 | 16,495 | 42,560 | 22,789 | 20,629 | 43,224 | 23,550 | 20,559 |
| | Palm St to Laurel St | 18,406 | 10,719 | 7,687 | 23,578 | 10,304 | 13,797 | 25,254 | 11,196 | 14,629 | 29,417 | 12,787 | 17,267 | 31,885 | 14,009 | 18,572 | 33,253 | 14,477 | 19,500 |
| India St | Sassafras St to Laurel St | 14,465 | 11,303 | 3,162 | 21,852 | 16,935 | 5,559 | 23,326 | 18,298 | 6,229 | 28,489 | 20,785 | 8,485 | 30,974 | 22,789 | 9,042 | 33,463 | 23,550 | 10,798 |
| | Laurel St to Juniper St | 3,884 | 0 | 3,884 | 4,022 | 0 | 4,022 | 4,063 | 0 | 4,063 | 4,144 | 0 | 4,144 | 4,249 | 0 | 4,249 | 4,579 | 0 | 4,579 |
| Washington St | West of Pacific Hwy | 4,847 | 2,683 | 2,164 | 6,383 | 4,289 | 2,094 | 6,771 | 4,558 | 2,214 | 7,545 | 5,091 | 2,454 | 8,315 | 5,596 | 2,720 | 9,475 | 5,782 | 4,189 |
| | Hancock St to San Diego Ave | 22,972 | 3,397 | 19,575 | 25,410 | 3,567 | 21,986 | 26,159 | 3,858 | 22,457 | 27,569 | 4,386 | 23,357 | 28,650 | 4,808 | 24,033 | 30,935 | 4,969 | 26,164 |
| | East of India St | 24,710 | 3,397 | 21,313 | 29,811 | 3,567 | 26,386 | 30,658 | 3,858 | 26,956 | 32,286 | 4,386 | 28,074 | 33,468 | 4,808 | 28,869 | 36,147 | 4,969 | 31,375 |
| Admiral Boland Wy | Washington St to Terminal Link Rd | 13,099 | 13,099 | 0 | 21,786 | 20,942 | 844 | 23,235 | 22,251 | 984 | 26,124 | 24,857 | 1,267 | 28,949 | 27,319 | 1,629 | 31,006 | 28,232 | 2,774 |
| | Terminal Link Rd to Pacific Hwy | 13,099 | 13,099 | 0 | 21,951 | 20,942 | 1,009 | 23,402 | 22,251 | 1,151 | 26,294 | 24,857 | 1,437 | 29,124 | 27,319 | 1,804 | 31,194 | 28,232 | 2,962 |
| Sassafras St | Pacific Hwy to Kettner Blvd | 15,983 | 12,852 | 3,131 | 22,568 | 18,994 | 3,692 | 23,966 | 20,238 | 3,858 | 26,721 | 22,672 | 4,194 | 32,998 | 24,908 | 8,248 | 35,476 | 25,740 | 9,887 |

| Roadway | Roadway Segment | Existing | | | 2024 | | | 2026 | | | 2030 | | | 2035 | | | 2050 | | |
|-----------------|----------------------------------|----------|--------|-----------|--------|--------|-----------|--------|--------|-----------|--------|--------|-----------|--------|--------|-----------|--------|--------|-----------|
| | | Total | Airp. | Non Airp. | Total | Airp. | Non Airp. | Total | Airp. | Non Airp. | Total | Airp. | Non Airp. | Total | Airp. | Non Airp. | Total | Airp. | Non Airp. |
| Palm St | Pacific Hwy to Kettner Blvd | 1,940 | 1,700 | 240 | 7,772 | 2,342 | 5,550 | 8,068 | 2,544 | 5,653 | 8,577 | 2,906 | 5,816 | 12,490 | 3,184 | 9,465 | 12,845 | 12,710 | 595 |
| Laurel St | Harbor Dr to Pacific Hwy | 35,441 | 32,004 | 3,437 | 48,454 | 40,063 | 10,411 | 53,162 | 43,524 | 11,844 | 63,789 | 49,705 | 16,543 | 69,652 | 54,456 | 17,895 | 75,639 | 56,275 | 22,161 |
| | Pacific Hwy to India St | 21,042 | 16,552 | 4,490 | 24,460 | 16,213 | 9,032 | 26,485 | 17,598 | 9,744 | 32,210 | 20,079 | 12,086 | 33,705 | 22,001 | 12,751 | 36,501 | 22,736 | 14,851 |
| | India St to State St/ Reynard Wy | 14,072 | 3,397 | 10,675 | 14,353 | 3,567 | 10,928 | 14,774 | 3,858 | 11,072 | 15,575 | 4,386 | 11,362 | 16,353 | 4,808 | 11,735 | 17,683 | 4,969 | 12,911 |
| Hawthorn St | Harbor Dr to Pacific Hwy | 26,337 | 16,566 | 9,771 | 27,131 | 15,924 | 12,016 | 28,722 | 17,302 | 12,302 | 31,661 | 19,762 | 12,882 | 36,965 | 21,651 | 16,394 | 40,204 | 22,374 | 18,954 |
| | Pacific Hwy to India St | 30,936 | 16,566 | 14,370 | 32,370 | 15,924 | 17,254 | 34,755 | 17,302 | 18,334 | 40,455 | 19,762 | 21,676 | 54,773 | 21,651 | 34,202 | 59,153 | 22,374 | 37,898 |
| | India St to State St | 30,936 | 16,566 | 14,370 | 32,906 | 15,924 | 17,791 | 35,368 | 17,302 | 18,948 | 41,043 | 19,762 | 22,264 | 55,290 | 21,651 | 34,719 | 59,710 | 22,374 | 38,455 |
| | State St to Albatross St | 10,483 | 0 | 10,483 | 10,356 | 0 | 10,856 | 10,965 | 0 | 10,965 | 11,185 | 0 | 11,185 | 11,468 | 0 | 11,468 | 12,358 | 0 | 12,358 |
| Grape St | Harbor Dr to Pacific Hwy | 23,826 | 19,002 | 4,824 | 27,482 | 18,266 | 10,143 | 29,908 | 19,847 | 11,073 | 35,756 | 22,668 | 14,216 | 51,965 | 24,835 | 28,369 | 56,182 | 25,664 | 31,801 |
| | Pacific Hwy to India St1 | 28,167 | 19,002 | 9,165 | 37,758 | 18,266 | 20,419 | 40,287 | 19,847 | 21,452 | 46,344 | 22,668 | 24,804 | 61,248 | 24,835 | 37,652 | 66,186 | 25,664 | 41,805 |
| | India St to State St | 32,386 | 19,002 | 13,384 | 47,118 | 18,266 | 29,779 | 51,379 | 19,847 | 32,544 | 58,518 | 22,668 | 36,978 | 75,887 | 24,835 | 52,291 | 81,962 | 25,664 | 57,581 |
| | Albatross St to Front St1 | 2,172 | 0 | 2,172 | 3,138 | 0 | 3,138 | 3,415 | 0 | 3,415 | 4,413 | 0 | 4,413 | 5,555 | 0 | 5,555 | 5,986 | 0 | 5,986 |
| North Harbor Dr | Scott Rd to Nimitz Blvd2 | 11,759 | 2,923 | 8,836 | 16,379 | 2,810 | 13,712 | 16,776 | 3,053 | 13,879 | 17,530 | 3,487 | 14,216 | 18,279 | 3,821 | 14,649 | 19,765 | 3,948 | 16,014 |
| | Nimitz Blvd to Laning Rd2 | 19,644 | 8,770 | 10,874 | 25,531 | 8,431 | 17,511 | 26,467 | 9,160 | 17,774 | 28,249 | 10,462 | 18,308 | 29,882 | 11,462 | 18,992 | 32,401 | 11,845 | 21,148 |
| | Laning Rd to McCain Rd | 28,798 | 11,694 | 17,104 | 29,678 | 11,241 | 19,008 | 31,380 | 12,213 | 19,789 | 35,551 | 13,950 | 22,296 | 37,652 | 15,283 | 23,131 | 40,769 | 15,793 | 25,765 |
| | McCain Rd to Spanish Landing | 29,392 | 7,980 | 21,412 | 29,764 | 11,241 | 19,094 | 16,776 | 12,213 | 19,937 | 35,700 | 13,950 | 22,445 | 37,711 | 15,283 | 23,190 | 40,544 | 15,793 | 25,541 |
| | Spanish Landing to | 30,278 | 5,732 | 24,546 | 28,626 | 8,759 | 20,313 | 30,424 | 10,189 | 20,756 | 33,082 | 11,647 | 22,014 | 34,772 | 12,715 | 22,692 | 37,309 | 10,683 | 27,205 |

| Roadway | Roadway Segment | Existing | | | 2024 | | | 2026 | | | 2030 | | | 2035 | | | 2050 | | |
|------------------|---|----------|--------|-----------|--------|--------|-----------|--------|--------|-----------|--------|--------|-----------|---------|--------|-----------|---------|--------|-----------|
| | | Total | Airp. | Non Airp. | Total | Airp. | Non Airp. | Total | Airp. | Non Airp. | Total | Airp. | Non Airp. | Total | Airp. | Non Airp. | Total | Airp. | Non Airp. |
| | Harbor Island Dr | | | | | | | | | | | | | | | | | | |
| | Harbor Island Dr to Winship Ln2 | 77,384 | 21,445 | 55,939 | 18,861 | 252 | 18,609 | 22,893 | 268 | 22,625 | 37,722 | 299 | 37,422 | 38,801 | 329 | 38,472 | 46,856 | 299 | 46,556 |
| | Winship Ln to Liberator Way | 89,066 | 75,645 | 13,421 | 65,879 | 41,000 | 26,948 | 73,723 | 44,542 | 31,438 | 95,719 | 50,867 | 47,368 | 103,004 | 55,729 | 50,038 | 113,184 | 46,845 | 68,855 |
| | Liberator Way to Cell Phone Lot | 94,942 | 75,645 | 19,297 | 67,543 | 41,000 | 28,612 | 75,404 | 44,542 | 33,119 | 97,433 | 50,867 | 49,083 | 104,762 | 55,729 | 51,795 | 115,078 | 46,845 | 70,749 |
| | Cell Phone Lot to Laurel St/ Solar Turbines | 95,096 | 87,131 | 7,965 | 68,252 | 41,000 | 29,321 | 76,235 | 44,542 | 33,950 | 98,512 | 50,867 | 50,161 | 106,158 | 55,729 | 53,191 | 117,475 | 46,845 | 73,145 |
| | Laurel St/ Solar Turbines to W Laurel St | 76,603 | 70,000 | 6,603 | 63,675 | 41,000 | 24,744 | 71,548 | 44,542 | 29,263 | 93,603 | 50,867 | 45,252 | 100,964 | 55,729 | 47,997 | 111,383 | 57,591 | 56,655 |
| | Laurel St to Hawthorn St | 59,521 | 43,364 | 16,157 | 64,805 | 41,684 | 25,237 | 70,820 | 45,291 | 27,838 | 86,039 | 51,730 | 36,883 | 113,929 | 56,674 | 60,082 | 123,012 | 58,567 | 67,374 |
| | Hawthorn St to Grape St1 | 37,881 | 26,798 | 11,083 | 42,061 | 25,760 | 17,609 | 46,259 | 27,989 | 19,967 | 58,898 | 31,968 | 28,521 | 80,260 | 35,023 | 46,983 | 86,355 | 36,193 | 51,972 |
| | Grape St to Ash St1 | 20,437 | 7,796 | 12,641 | 21,715 | 7,494 | 14,602 | 23,191 | 8,142 | 15,464 | 27,307 | 9,300 | 18,470 | 28,733 | 10,189 | 19,053 | 30,893 | 10,529 | 20,891 |
| Harbor Island Dr | Harbor Dr to Old Rent A Car Access | 12,743 | 1,132 | 11,611 | 13,495 | 1,189 | 12,354 | 17,367 | 1,286 | 16,133 | 32,387 | 1,462 | 30,983 | 32,873 | 1,603 | 31,334 | 34,031 | 1,656 | 32,440 |
| | West of Harbor Island Dr | 7,661 | 1,132 | 6,529 | 13,508 | 1,189 | 12,367 | 13,736 | 1,286 | 12,502 | 14,180 | 1,462 | 12,776 | 14,667 | 1,603 | 13,127 | 15,826 | 1,656 | 14,235 |
| | Harbor Island Dr to Parking Lot | 4,801 | 0 | 4,801 | 6,902 | 0 | 6,902 | 7,013 | 0 | 7,013 | 7,153 | 0 | 7,153 | 8,044 | 0 | 8,044 | 13,296 | 0 | 13,296 |
| | East of Parking Lot | 3,929 | 0 | 3,929 | 6,902 | 0 | 6,902 | 7,013 | 0 | 7,013 | 7,153 | 0 | 7,153 | 8,044 | 0 | 8,044 | 13,296 | 0 | 13,296 |

Source: Kimley-Horn, 2019.

Table C-24. Alternative 4 Off-Airport Daily Traffic Volumes

| Roadway | Roadway Segment | Existing | | | 2024 | | | 2026 | | | 2030 | | | 2035 | | | 2050 | | |
|-------------------|-----------------------------------|----------|--------|-----------|--------|--------|-----------|--------|--------|-----------|--------|--------|-----------|--------|--------|-----------|--------|--------|-----------|
| | | Total | Airp. | Non Airp. | Total | Airp. | Non Airp. | Total | Airp. | Non Airp. | Total | Airp. | Non Airp. | Total | Airp. | Non Airp. | Total | Airp. | Non Airp. |
| Pacific Highway | Kurtz St to Barnett Ave | 21,780 | 2,580 | 19,200 | 23,113 | 2,753 | 20,360 | 23,512 | 2,922 | 20,590 | 24,297 | 3,241 | 21,056 | 25,201 | 3,549 | 21,653 | 28,317 | 3,498 | 24,819 |
| | Barnett Ave to Washington St | 51,778 | 4,158 | 47,620 | 61,697 | 5,067 | 56,630 | 63,252 | 5,404 | 57,848 | 65,090 | 5,995 | 59,095 | 67,266 | 6,574 | 60,692 | 71,300 | 6,482 | 64,818 |
| | Washington St to Sassafras St | 14,219 | 4,872 | 9,347 | 14,995 | 4,371 | 10,625 | 15,404 | 4,625 | 10,780 | 16,245 | 5,150 | 11,094 | 19,875 | 5,647 | 14,228 | 38,150 | 5,556 | 32,594 |
| | Sassafras St to Palm St | 18,988 | 9,991 | 8,997 | 21,200 | 10,704 | 10,496 | 22,089 | 11,387 | 10,701 | 23,791 | 12,674 | 11,117 | 25,565 | 13,915 | 11,650 | 28,310 | 13,716 | 14,594 |
| | Palm St to Laurel St | 20,447 | 12,428 | 8,019 | 22,064 | 12,692 | 9,372 | 23,098 | 13,502 | 9,596 | 25,113 | 15,051 | 10,062 | 28,654 | 16,540 | 12,114 | 35,171 | 16,290 | 18,881 |
| | Laurel Dr to Juniper St | 10,478 | 6,924 | 3,554 | 13,683 | 7,527 | 6,156 | 14,315 | 8,016 | 6,299 | 15,544 | 8,931 | 6,613 | 17,917 | 9,815 | 8,102 | 21,395 | 9,676 | 11,719 |
| Kettner Blvd | Vine St to Sassafras St | 26,492 | 18,117 | 8,375 | 31,382 | 17,267 | 14,115 | 33,241 | 18,347 | 14,894 | 37,836 | 20,465 | 17,370 | 42,341 | 22,491 | 19,850 | 36,577 | 22,118 | 14,459 |
| | Sassafras St to Palm St | 18,406 | 15,838 | 2,568 | 28,723 | 15,659 | 13,065 | 30,512 | 16,646 | 13,865 | 35,059 | 18,564 | 16,495 | 41,030 | 20,401 | 20,629 | 41,609 | 20,084 | 21,526 |
| | Palm St to Laurel St | 18,406 | 10,719 | 7,687 | 23,402 | 9,605 | 13,797 | 24,811 | 10,181 | 14,629 | 28,639 | 11,373 | 17,267 | 31,072 | 12,499 | 18,572 | 32,397 | 12,301 | 20,096 |
| India St | Sassafras St to Laurel St | 14,465 | 11,303 | 3,162 | 20,937 | 15,379 | 5,559 | 22,578 | 16,349 | 6,229 | 26,717 | 18,231 | 8,485 | 29,078 | 20,036 | 9,042 | 31,471 | 19,706 | 11,765 |
| | Laurel St to Juniper St | 3,884 | 0 | 3,884 | 4,022 | 0 | 4,022 | 4,063 | 0 | 4,063 | 4,144 | 0 | 4,144 | 4,249 | 0 | 4,249 | 4,579 | 0 | 4,579 |
| Washington St | West of Pacific Hwy | 4,847 | 2,683 | 2,164 | 6,027 | 3,934 | 2,094 | 6,433 | 4,219 | 2,214 | 7,136 | 4,682 | 2,454 | 7,864 | 5,144 | 2,720 | 9,497 | 5,072 | 4,424 |
| | Hancock St to San Diego Ave | 22,972 | 3,397 | 19,575 | 25,224 | 3,238 | 21,986 | 25,897 | 3,440 | 22,457 | 27,194 | 3,837 | 23,357 | 28,250 | 4,217 | 24,033 | 30,515 | 4,147 | 26,368 |
| | East of India St | 24,710 | 3,397 | 21,313 | 29,624 | 3,238 | 26,386 | 30,396 | 3,440 | 26,956 | 31,911 | 3,837 | 28,074 | 33,086 | 4,217 | 28,869 | 35,726 | 4,147 | 31,579 |
| Admiral Boland Wy | Washington St to Terminal Link Rd | 13,099 | 13,099 | 0 | 20,050 | 19,206 | 844 | 21,583 | 20,599 | 984 | 24,126 | 22,859 | 1,267 | 26,744 | 25,115 | 1,629 | 28,689 | 24,765 | 3,924 |
| | Terminal Link Rd to Pacific Hwy | 13,099 | 13,099 | 0 | 20,348 | 19,338 | 1,009 | 21,882 | 20,731 | 1,151 | 24,428 | 22,991 | 1,437 | 27,051 | 25,247 | 1,804 | 29,014 | 24,901 | 4,112 |
| Sassafras St | Pacific Hwy to Kettner Blvd | 15,983 | 12,852 | 3,131 | 21,364 | 17,672 | 3,692 | 22,781 | 18,924 | 3,858 | 25,212 | 21,019 | 4,194 | 31,342 | 23,094 | 8,248 | 33,717 | 22,780 | 10,937 |

| Roadway | Roadway Segment | Existing | | | 2024 | | | 2026 | | | 2030 | | | 2035 | | | 2050 | | |
|-----------------|----------------------------------|----------|--------|-----------|--------|--------|-----------|--------|--------|-----------|--------|--------|-----------|--------|--------|-----------|--------|--------|-----------|
| | | Total | Airp. | Non Airp. | Total | Airp. | Non Airp. | Total | Airp. | Non Airp. | Total | Airp. | Non Airp. | Total | Airp. | Non Airp. | Total | Airp. | Non Airp. |
| Palm St | Pacific Hwy to Kettner Blvd | 1,940 | 1,700 | 240 | 7,669 | 2,119 | 5,550 | 7,900 | 2,246 | 5,653 | 8,325 | 2,509 | 5,816 | 12,222 | 2,758 | 9,465 | 12,758 | 12,622 | 135 |
| Laurel St | Harbor Dr to Pacific Hwy | 35,441 | 32,004 | 3,437 | 47,233 | 36,822 | 10,411 | 50,873 | 39,030 | 11,844 | 60,139 | 43,596 | 16,543 | 65,810 | 47,915 | 17,895 | 71,599 | 47,123 | 24,477 |
| | Pacific Hwy to India St | 21,042 | 16,552 | 4,490 | 23,994 | 14,962 | 9,032 | 25,611 | 15,867 | 9,744 | 29,805 | 17,719 | 12,086 | 32,226 | 19,474 | 12,751 | 34,944 | 19,158 | 15,786 |
| | India St to State St/ Reynard Wy | 14,072 | 3,397 | 10,675 | 14,166 | 3,238 | 10,928 | 14,512 | 3,440 | 11,072 | 15,200 | 3,837 | 11,362 | 15,952 | 4,217 | 11,735 | 17,262 | 4,147 | 13,115 |
| Hawthorn St | Harbor Dr to Pacific Hwy | 26,337 | 16,566 | 9,771 | 26,428 | 14,412 | 12,016 | 27,577 | 15,275 | 12,302 | 29,945 | 17,062 | 12,882 | 35,146 | 18,753 | 16,394 | 38,302 | 18,428 | 19,875 |
| | Pacific Hwy to India St | 30,936 | 16,566 | 14,370 | 31,666 | 14,412 | 17,254 | 33,609 | 15,275 | 18,334 | 38,739 | 17,062 | 21,676 | 52,954 | 18,753 | 34,202 | 57,246 | 18,428 | 38,818 |
| | India St to State St | 30,936 | 16,566 | 14,370 | 32,203 | 14,412 | 17,791 | 34,222 | 15,275 | 18,948 | 39,326 | 17,062 | 22,264 | 53,472 | 18,753 | 34,719 | 57,803 | 18,428 | 39,376 |
| | State St to Albatross St | 10,483 | 0 | 10,483 | 10,856 | 0 | 10,856 | 10,965 | 0 | 10,965 | 11,185 | 0 | 11,185 | 11,468 | 0 | 11,468 | 12,358 | 0 | 12,358 |
| Grape St | Harbor Dr to Pacific Hwy | 23,826 | 19,002 | 4,824 | 26,675 | 16,532 | 10,143 | 28,594 | 17,521 | 11,073 | 33,787 | 19,571 | 14,216 | 49,879 | 21,510 | 28,369 | 53,994 | 21,138 | 32,857 |
| | Pacific Hwy to India St1 | 28,167 | 19,002 | 9,165 | 36,951 | 16,532 | 20,419 | 38,973 | 17,521 | 21,452 | 44,375 | 19,571 | 24,804 | 59,162 | 21,510 | 37,652 | 63,999 | 21,138 | 42,861 |
| | India St to State St | 32,386 | 19,002 | 13,384 | 46,310 | 16,532 | 29,779 | 50,065 | 17,521 | 32,544 | 56,549 | 19,571 | 36,978 | 73,801 | 21,510 | 52,291 | 79,775 | 21,138 | 58,637 |
| | Albatross St to Front St1 | 2,172 | 0 | 2,172 | 3,138 | 0 | 3,138 | 3,415 | 0 | 3,415 | 4,413 | 0 | 4,413 | 5,555 | 0 | 5,555 | 5,986 | 0 | 5,986 |
| North Harbor Dr | Scott Rd to Nimitz Blvd2 | 11,759 | 2,923 | 8,836 | 16,255 | 2,543 | 13,712 | 16,574 | 2,696 | 13,879 | 17,227 | 3,011 | 14,216 | 17,958 | 3,309 | 14,649 | 19,428 | 3,252 | 16,177 |
| | Nimitz Blvd to Laning Rd2 | 19,644 | 8,770 | 10,874 | 25,141 | 7,630 | 17,511 | 25,861 | 8,087 | 17,774 | 27,341 | 9,033 | 18,308 | 28,919 | 9,928 | 18,992 | 31,391 | 9,756 | 21,636 |
| | Laning Rd to McCain Rd | 28,798 | 11,694 | 17,104 | 29,181 | 10,173 | 19,008 | 30,571 | 10,782 | 19,789 | 34,340 | 12,044 | 22,296 | 36,368 | 13,237 | 23,131 | 39,423 | 13,008 | 26,415 |
| | McCain Rd to Spanish Landing | 29,392 | 7,980 | 21,412 | 29,267 | 10,173 | 19,094 | 30,719 | 10,782 | 19,937 | 34,489 | 12,044 | 22,445 | 36,427 | 13,237 | 23,190 | 39,198 | 13,008 | 26,190 |
| | Spanish Landing to | 30,278 | 5,732 | 24,546 | 29,360 | 9,047 | 20,313 | 30,695 | 9,938 | 20,756 | 33,061 | 11,047 | 22,014 | 34,822 | 12,130 | 22,692 | 37,344 | 11,909 | 25,435 |

| Roadway | Roadway Segment | Existing | | | 2024 | | | 2026 | | | 2030 | | | 2035 | | | 2050 | | |
|------------------|---|----------|--------|-----------|--------|--------|-----------|--------|--------|-----------|--------|--------|-----------|---------|--------|-----------|---------|--------|-----------|
| | | Total | Airp. | Non Airp. | Total | Airp. | Non Airp. | Total | Airp. | Non Airp. | Total | Airp. | Non Airp. | Total | Airp. | Non Airp. | Total | Airp. | Non Airp. |
| | Harbor Island Dr | | | | | | | | | | | | | | | | | | |
| | Harbor Island Dr to Winship Ln2 | 77,384 | 21,445 | 55,939 | 20,031 | 1,422 | 18,609 | 23,882 | 1,257 | 22,625 | 38,824 | 1,401 | 37,422 | 40,020 | 1,548 | 38,472 | 48,113 | 1,510 | 46,603 |
| | Winship Ln to Liberator Way | 89,066 | 75,645 | 13,421 | 64,653 | 37,705 | 26,948 | 71,276 | 39,838 | 31,438 | 91,866 | 44,498 | 47,368 | 98,947 | 48,910 | 50,038 | 108,919 | 48,057 | 60,862 |
| | Liberator Way to Cell Phone Lot | 94,942 | 75,645 | 19,297 | 66,729 | 38,117 | 28,612 | 73,386 | 40,267 | 33,119 | 94,045 | 44,962 | 49,083 | 101,203 | 49,407 | 51,795 | 111,328 | 48,571 | 62,756 |
| | Cell Phone Lot to Laurel St/ Solar Turbines | 95,096 | 87,131 | 7,965 | 67,437 | 38,117 | 29,321 | 74,217 | 40,267 | 33,950 | 95,123 | 44,962 | 50,161 | 102,598 | 49,407 | 53,191 | 113,724 | 48,571 | 65,153 |
| | Laurel St/ Solar Turbines to W Laurel St | 76,603 | 70,000 | 6,603 | 62,993 | 38,249 | 24,744 | 69,663 | 40,399 | 29,263 | 90,346 | 45,094 | 45,252 | 97,537 | 49,539 | 47,997 | 107,769 | 48,708 | 59,061 |
| | Laurel St to Hawthorn St | 59,521 | 43,364 | 16,157 | 63,227 | 37,990 | 25,237 | 68,086 | 40,248 | 27,838 | 81,810 | 44,927 | 36,883 | 109,433 | 49,352 | 60,082 | 118,294 | 48,510 | 69,784 |
| | Hawthorn St to Grape St1 | 37,881 | 26,798 | 11,083 | 41,186 | 23,578 | 17,609 | 44,940 | 24,973 | 19,967 | 56,386 | 27,865 | 28,521 | 77,582 | 30,599 | 46,983 | 83,543 | 30,082 | 53,461 |
| | Grape St to Ash St1 | 20,437 | 7,796 | 12,641 | 21,648 | 7,046 | 14,602 | 22,916 | 7,452 | 15,464 | 26,763 | 8,293 | 18,470 | 28,142 | 9,089 | 19,053 | 30,269 | 8,945 | 21,324 |
| Harbor Island Dr | Harbor Dr to Old Rent A Car Access | 12,743 | 1,132 | 11,611 | 13,433 | 1,079 | 12,354 | 17,280 | 1,147 | 16,133 | 32,262 | 1,279 | 30,983 | 32,739 | 1,406 | 31,334 | 33,891 | 1,382 | 32,508 |
| | West of Harbor Island Dr | 7,661 | 1,132 | 6,529 | 13,446 | 1,079 | 12,367 | 13,649 | 1,147 | 12,502 | 14,055 | 1,279 | 12,776 | 14,533 | 1,406 | 13,127 | 15,685 | 1,382 | 14,303 |
| | Harbor Island Dr to Parking Lot | 4,801 | 0 | 4,801 | 6,902 | 0 | 6,902 | 7,013 | 0 | 7,013 | 7,153 | 0 | 7,153 | 8,044 | 0 | 8,044 | 13,296 | 0 | 13,296 |
| | East of Parking Lot | 3,929 | 0 | 3,929 | 6,902 | 0 | 6,902 | 7,013 | 0 | 7,013 | 7,153 | 0 | 7,153 | 8,044 | 0 | 8,044 | 13,296 | 0 | 13,296 |

Source: Kimley-Horn, 2019.

1.4 Other Sources

Criteria pollutants are emitted as a result of activities in buildings for which electricity and natural gas are used as energy sources. Emissions of the criteria air pollutants and their precursors due to the use of natural gas was estimated for existing conditions and all future years. The estimates were prepared using the California Air Pollution Control Officers Association's (CAPCOA's) California Emissions Estimator Model (CalEEMod-Version 2016.3.2) and were based on project-specific land uses and sizes.

CalEEMod's emission factors for natural gas combustion are based on EPA's AP-42 Compilation and the California Climate Action Registry (CCAR). For the existing condition and Alternative 1 (No Project), the total square footage of all of the buildings at the airport were used for input to CalEEMod. These are:

- Administrative Building/ Former Commuter Terminal – 132,000 square feet (sf)
- Terminal 1 – 336,000 sf
- Terminal 2 (East) – 350,000 sf
- Terminal 2 (West) – 889,000 sf

The proposed project was also modeled using CalEEMod and were based on the information and square footages provided in Section 1.5.3 of this Appendix.

1.5 Construction Activities

For this assessment, construction-related emissions are primarily associated with the exhaust from heavy equipment (e.g., backhoes, loaders, graders, etc.), delivery trucks (e.g., cement trucks, dump trucks, etc.), and construction worker vehicles getting to and from the Airport construction site(s); dust from site preparation, land clearing, material handling, equipment movement on unpaved areas, and demolition activities; and fugitive emissions from the storage/transfer of raw materials. These emissions are temporary in nature and generally confined to the construction site and the access/egress roadways.

Emissions of CO, NO_x, VOC, SO_x, PM_{10/2.5}, as well as GHG (i.e., CO₂, CH₄, and N₂O) were evaluated for the proposed project's 15-year construction period of approximately late 2020/early 2021 to 2035. Emission factors for on-road motor vehicles and off-road construction equipment were developed using CARB's EMFAC2017 and OFFROAD2017, respectively. Fugitive emissions were calculated using emission factors within U.S. EPA's Compilation of Air Pollutant Emission Factors (AP-42).⁷

Data regarding the types of construction activities and equipment/vehicle activity data (e.g., equipment mixes/operating times) were estimated from the Airport Construction Emissions Inventory Tool (ACEIT) based on the proposed project's development phasing (i.e., Phases 1a, 1b, 2a, and 2b).

⁷ U.S. EPA, Emissions Factors and AP-42, *Compilation of Air Pollutant Emission Factors*, <http://www.epa.gov/ttn/chief/ap42/index.html#toc>.

1.5.1 On-road Vehicles

For on-road vehicles, the estimated vehicles miles traveled (VMT) were estimated to determine annual emissions. In deriving the VMT, the following was assumed.

- VMT by hauling, delivering, and pickup trucks were based on the number of trips and a roundtrip travel distance of 40 miles.
- In deriving the VMT for each worker traveling to and from the construction site, it was assumed that a composite of passenger cars and trucks would commute a roundtrip distance of 30 miles.

The following equation was used to obtain annual emissions for on-road vehicles:

$$\text{On-road Vehicle Emissions (tons/year) for on-road vehicles} = \text{Emission Factor (g/mile)} \times \text{vehicle miles travelled per day} \times \text{days/year} \times (1 \text{ pound}/453.59 \text{ grams}) \times (1 \text{ ton}/2,000 \text{ pounds})$$

EMFAC2017 emission factors associated with commuter vehicles, hauling, delivery, and pickup trucks for the construction period are presented in **Table C-25**.

Table C-25 On-road Vehicle Emission Factors (grams/mile)

| Vehicles | EMFAC Vehicle Classification | Pollutant | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 |
|--------------------|------------------------------|-------------------|-------|-------|-------|-------|-------|-------|-------|
| Employee Commuters | LDA (Gasoline) | CO | 0.63 | 0.59 | 0.55 | 0.52 | 0.49 | 0.47 | 0.45 |
| | | NO _x | 0.040 | 0.035 | 0.031 | 0.028 | 0.026 | 0.024 | 0.023 |
| | | VOC | 0.010 | 0.009 | 0.008 | 0.007 | 0.006 | 0.005 | 0.005 |
| | | SO _x | 0.003 | 0.003 | 0.003 | 0.003 | 0.002 | 0.002 | 0.002 |
| | | PM ₁₀ | 0.002 | 0.002 | 0.001 | 0.001 | 0.001 | 0.001 | 0.001 |
| | | PM _{2.5} | 0.002 | 0.001 | 0.001 | 0.001 | 0.001 | 0.001 | 0.001 |
| | | CO ₂ | 275 | 268 | 260 | 253 | 246 | 239 | 233 |
| | | CH ₄ | 0.003 | 0.002 | 0.002 | 0.002 | 0.002 | 0.002 | 0.001 |
| Haul Trucks | T7 Single (Diesel) | N ₂ O | 0.005 | 0.004 | 0.004 | 0.004 | 0.004 | 0.003 | 0.003 |
| | | CO | 1.04 | 0.48 | 0.21 | 0.21 | 0.21 | 0.22 | 0.22 |
| | | NO _x | 5.76 | 3.45 | 2.05 | 2.08 | 2.11 | 2.14 | 2.15 |
| | | VOC | 0.33 | 0.13 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 |
| | | SO _x | 0.015 | 0.014 | 0.014 | 0.014 | 0.013 | 0.013 | 0.013 |
| | | PM ₁₀ | 0.14 | 0.045 | 0.012 | 0.012 | 0.012 | 0.012 | 0.013 |
| | | PM _{2.5} | 0.13 | 0.043 | 0.011 | 0.011 | 0.012 | 0.012 | 0.012 |
| | | CO ₂ | 1,617 | 1,523 | 1,446 | 1,430 | 1,415 | 1,400 | 1,382 |
| Material Delivery | T7 Tractor (Diesel) | CH ₄ | 0.015 | 0.006 | 0.001 | 0.001 | 0.001 | 0.001 | 0.001 |
| | | N ₂ O | 0.254 | 0.239 | 0.227 | 0.225 | 0.222 | 0.220 | 0.217 |
| | | CO | 0.48 | 0.26 | 0.16 | 0.16 | 0.16 | 0.16 | 0.16 |
| | | NO _x | 3.86 | 2.99 | 2.02 | 2.02 | 2.02 | 2.01 | 1.99 |
| | | VOC | 0.12 | 0.06 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 |
| | | SO _x | 0.013 | 0.013 | 0.012 | 0.012 | 0.012 | 0.011 | 0.011 |
| | | PM ₁₀ | 0.079 | 0.040 | 0.028 | 0.028 | 0.029 | 0.029 | 0.029 |
| | | PM _{2.5} | 0.075 | 0.038 | 0.027 | 0.027 | 0.028 | 0.028 | 0.028 |
| CO ₂ | 1,379 | 1,333 | 1,265 | 1,246 | 1,226 | 1,205 | 1,181 | | |
| CH ₄ | 0.006 | 0.003 | 0.001 | 0.001 | 0.001 | 0.001 | 0.001 | | |
| N ₂ O | 0.217 | 0.210 | 0.199 | 0.196 | 0.193 | 0.189 | 0.186 | | |

Source : CARB's EMFAC2017.

Table C-25 (Continued) On-road Vehicle Emission Factors (grams/mile)

| Vehicles | EMFAC Vehicle Classification | Pollutant | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 |
|--------------------|------------------------------|-------------------|-------|-------|-------|-------|-------|-------|-------|-------|
| Employee Commuters | Composite of LDA/LDT1 | CO | 0.44 | 0.43 | 0.42 | 0.41 | 0.40 | 0.39 | 0.39 | 0.38 |
| | | NO _x | 0.021 | 0.020 | 0.020 | 0.019 | 0.019 | 0.018 | 0.018 | 0.018 |
| | | VOC | 0.004 | 0.004 | 0.004 | 0.003 | 0.003 | 0.003 | 0.003 | 0.003 |
| | | SO _x | 0.002 | 0.002 | 0.002 | 0.002 | 0.002 | 0.002 | 0.002 | 0.002 |
| | | PM ₁₀ | 0.001 | 0.001 | 0.001 | 0.001 | 0.001 | 0.001 | 0.001 | 0.001 |
| | | PM _{2.5} | 0.001 | 0.001 | 0.001 | 0.001 | 0.001 | 0.001 | 0.001 | 0.001 |
| | | CO ₂ | 228 | 223 | 219 | 215 | 212 | 209 | 207 | 205 |
| | | CH ₄ | 0.001 | 0.001 | 0.001 | 0.001 | 0.001 | 0.001 | 0.001 | 0.001 |
| Haul Trucks | T7 Single | N ₂ O | 0.003 | 0.003 | 0.003 | 0.003 | 0.003 | 0.003 | 0.003 | 0.003 |
| | | CO | 0.22 | 0.22 | 0.22 | 0.22 | 0.22 | 0.22 | 0.22 | 0.22 |
| | | NO _x | 2.17 | 2.18 | 2.20 | 2.21 | 2.22 | 2.23 | 2.23 | 2.22 |
| | | VOC | 0.02 | 0.02 | 0.018 | 0.018 | 0.018 | 0.018 | 0.018 | 0.018 |
| | | SO _x | 0.013 | 0.013 | 0.013 | 0.012 | 0.012 | 0.012 | 0.012 | 0.012 |
| | | PM ₁₀ | 0.013 | 0.013 | 0.013 | 0.013 | 0.013 | 0.014 | 0.014 | 0.014 |
| | | PM _{2.5} | 0.012 | 0.012 | 0.013 | 0.013 | 0.013 | 0.013 | 0.013 | 0.013 |
| | | CO ₂ | 1,365 | 1,350 | 1,336 | 1,323 | 1,309 | 1,295 | 1,279 | 1,262 |
| Material Delivery | T7 Tractor | CH ₄ | 0.001 | 0.001 | 0.001 | 0.001 | 0.001 | 0.001 | 0.001 | 0.001 |
| | | N ₂ O | 0.215 | 0.212 | 0.210 | 0.208 | 0.206 | 0.203 | 0.201 | 0.198 |
| | | CO | 0.16 | 0.16 | 0.16 | 0.16 | 0.16 | 0.16 | 0.16 | 0.16 |
| | | NO _x | 1.97 | 1.94 | 1.92 | 1.89 | 1.87 | 1.85 | 1.83 | 1.81 |
| | | VOC | 0.02 | 0.02 | 0.019 | 0.019 | 0.019 | 0.018 | 0.018 | 0.018 |
| | | SO _x | 0.011 | 0.011 | 0.010 | 0.010 | 0.010 | 0.010 | 0.010 | 0.010 |
| | | PM ₁₀ | 0.029 | 0.029 | 0.028 | 0.028 | 0.028 | 0.028 | 0.028 | 0.027 |
| | | PM _{2.5} | 0.028 | 0.027 | 0.027 | 0.027 | 0.027 | 0.027 | 0.026 | 0.026 |
| CO ₂ | 1,157 | 1,133 | 1,110 | 1,088 | 1,066 | 1,046 | 1,027 | 1,009 | | |
| CH ₄ | 0.001 | 0.001 | 0.001 | 0.001 | 0.001 | 0.001 | 0.001 | 0.001 | | |
| N ₂ O | 0.182 | 0.178 | 0.175 | 0.171 | 0.168 | 0.164 | 0.161 | 0.159 | | |

Source : CARB's EMFAC2017.
 Passenger Cars = LDA
 Light-Duty Trucks = LDT
 Heavy Heavy Truck = T7

1.5.2 Off-road Construction Equipment

CARB's OFFROAD2017 model is used to estimate emissions for off-road equipment. **Table C-26** presents the off-road equipment used for the analysis along with the corresponding OFFROAD2017 category description and the horsepower (hp) assigned to each type of construction equipment. A load factor was applied to account for the average operational load level applied to each piece of equipment.

Table C-26 Construction Equipment Data

| Equipment | OFFROAD Equipment | Horsepower | Load Factor |
|---------------------------|-------------------------------------|------------|-------------|
| 40 Ton Crane | Cranes | 300 | 0.43 |
| 90 Ton Crane | | | |
| Air Compressor | Non-Rental Compressors | 100 | 0.43 |
| Asphalt Paver | Pavers | 175 | 0.59 |
| Backhoe | Tractors/Loaders/Backhoes | 100 | 0.21 |
| Caisson Drilling Rig | Bore/Drill Rigs | 175 | 0.43 |
| Chain Saw | Concrete/Industrial Saws | 25 | 0.7 |
| Chipper/Stump Grinder | Agricultural Construction Equipment | 100 | 0.43 |
| Concrete Pump | Light Commercial Pumps | 25 | 0.43 |
| Concrete Ready Mix Trucks | Off-Highway Trucks | 600 | 0.59 |
| Concrete Saws | Concrete/Industrial Saws | 50 | 0.59 |
| Concrete Truck | Off-Highway Trucks | 600 | 0.59 |
| Curb/Gutter Paver | Pavers | 175 | 0.59 |
| Distributing Tanker | Off-Highway Trucks | 600 | 0.59 |
| Dozer | Rubber Tired Dozers | 175 | 0.59 |
| Dump Truck | Off-Highway Trucks | 600 | 0.59 |
| Excavator | Excavators | 175 | 0.59 |
| Flatbed Truck | Off-Highway Trucks | 600 | 0.59 |
| Fork Lift | Rough Terrain Forklifts | 100 | 0.59 |
| Fork Truck | Rough Terrain Forklifts | 100 | 0.59 |
| Generator | Non-Rental Generator | 50 | 0.43 |
| Grader | Graders | 300 | 0.59 |
| High Lift | Aerial Lifts | 100 | 0.59 |
| Hydroseeder | Agricultural - Others | 600 | 0.59 |
| Loader | Tractors/Loaders/Backhoes | 100 | 0.59 |
| | | 175 | |
| Man Lift | Aerial Lifts | 75 | 0.21 |
| Material Deliveries | Off-Highway Trucks | 600 | 0.59 |
| Off-Road Truck | Off-Highway Trucks | 600 | 0.59 |
| Other General | Other Construction Equipment | 175 | 0.43 |

| Equipment | OFFROAD Equipment | Horsepower | Load Factor |
|------------------------------------|------------------------------|-------------------|--------------------|
| Equipment | | | |
| Pickup Truck | Off-Highway Trucks | 600 | 0.59 |
| Pumps | Light Commercial Pumps | 25 | 0.43 |
| Roller | Rollers | 100 | 0.59 |
| Rubber Tired Loader | Rubber Tire Loaders | 175 | 0.59 |
| Scraper | Scrapers | 600 | 0.59 |
| Skid Steer Loader | Skid Steer Loaders | 75 | 0.21 |
| Slip Form Paver | Paving Equipment | 175 | 0.59 |
| Surfacing Equipment (Grooving) | Paving Equipment | 50 | 0.59 |
| Survey Crew Trucks | Off-Highway Trucks | 600 | 0.59 |
| Tool Truck | Off-Highway Trucks | 600 | 0.59 |
| Tractor Trailer- Material Delivery | Off-Highway Trucks | 600 | 0.59 |
| Tractor Trailer- Steel Deliveries | Off-Highway Trucks | 600 | 0.59 |
| Tractor Trailers Temp Fac. | Off-Highway Trucks | 600 | 0.59 |
| Tractors/Loader/Backhoe | Tractors/Loaders/Backhoes | 75 | 0.21 |
| | | 100 | |
| Trencher | Trenchers | 75 | 0.59 |
| Trowel Machine | Other Construction Equipment | 600 | 0.59 |
| Vibratory Compactor | Plate Compactors | 25 | 0.43 |
| Water Truck | Off-Highway Trucks | 600 | 0.59 |

Source: OFFROAD2017; ACEIT.

The following equation was used to obtain emission estimates for off-road construction equipment:

$$\text{Construction Equipment Emissions (tons/year)} = \text{Emission Factor (grams/hp-hour)} \times \text{Horsepower (hp)} \times \text{hours per year} \times \text{Load Factor} \times (1 \text{ pound}/453.59 \text{ grams}) \times (1 \text{ ton}/2,000 \text{ pounds})$$

Tables C-27 through C-41 present the construction emissions factors (grams/horsepower-hour) for 2021 through 2035, respectively, for both criteria pollutants/precursor pollutants and GHGs.

Table C-27 2021 Construction Equipment Emission Factors (grams/hp-hr)

| Equipment | Horsepower | VOC | CO | NO _x | SO ₂ | PM ₁₀ | PM _{2.5} | CO ₂ | CH ₄ | N ₂ O |
|---------------------------------------|------------|------|------|-----------------|-----------------|------------------|-------------------|-----------------|-----------------|------------------|
| Agricultural - Construction Equipment | 100 | 0.26 | 1.29 | 1.76 | 0.0003 | 0.143 | 0.131 | 28.1 | 0.0112 | 0.0051 |
| Agricultural - Others | 600 | 0.10 | 0.52 | 1.01 | 0.0002 | 0.042 | 0.039 | 18.7 | 0.0074 | 0.0034 |
| Bore/Drill Rigs | 175 | 0.07 | 1.26 | 0.69 | 0.0021 | 0.030 | 0.028 | 226.9 | 0.0127 | 0.0058 |
| Cranes | 300 | 0.08 | 0.38 | 0.90 | 0.0010 | 0.036 | 0.033 | 111.9 | 0.0062 | 0.0029 |
| Excavators | 175 | 0.07 | 0.99 | 0.65 | 0.0016 | 0.032 | 0.029 | 168.3 | 0.0094 | 0.0043 |
| Graders | 300 | 0.10 | 0.40 | 1.19 | 0.0014 | 0.039 | 0.036 | 155.8 | 0.0087 | 0.0040 |
| Off-Highway Trucks | 600 | 0.05 | 0.32 | 0.47 | 0.0012 | 0.017 | 0.016 | 126.5 | 0.0071 | 0.0032 |
| Other Construction Equipment | 175 | 0.12 | 1.15 | 1.25 | 0.0018 | 0.065 | 0.060 | 190.1 | 0.0106 | 0.0048 |
| | 600 | 0.05 | 0.40 | 0.61 | 0.0013 | 0.022 | 0.020 | 139.1 | 0.0078 | 0.0035 |
| Pavers | 175 | 0.10 | 1.13 | 1.02 | 0.0018 | 0.050 | 0.046 | 198.0 | 0.0111 | 0.0050 |
| Paving Equipment | 50 | 0.15 | 1.04 | 0.96 | 0.0013 | 0.050 | 0.046 | 143.9 | 0.0080 | 0.0037 |
| | 175 | 0.07 | 0.91 | 0.72 | 0.0014 | 0.036 | 0.033 | 156.0 | 0.0087 | 0.0040 |
| Rollers | 100 | 0.11 | 1.14 | 1.15 | 0.0016 | 0.070 | 0.064 | 172.8 | 0.0097 | 0.0044 |
| Rough Terrain Forklifts | 100 | 0.05 | 1.25 | 0.81 | 0.0019 | 0.025 | 0.023 | 204.4 | 0.0114 | 0.0052 |
| Rubber Tired Dozers | 175 | 0.23 | 1.28 | 2.22 | 0.0016 | 0.127 | 0.117 | 175.1 | 0.0098 | 0.0045 |
| Rubber Tired Loaders | 175 | 0.11 | 1.04 | 0.97 | 0.0015 | 0.053 | 0.049 | 163.4 | 0.0091 | 0.0042 |
| Scrapers | 600 | 0.09 | 0.68 | 1.08 | 0.0017 | 0.041 | 0.038 | 179.4 | 0.0100 | 0.0046 |
| Skid Steer Loaders | 75 | 0.06 | 1.13 | 0.81 | 0.0017 | 0.033 | 0.030 | 182.8 | 0.0102 | 0.0047 |
| Tractors/Loaders/Backhoes | 75 | 0.57 | 1.90 | 4.47 | 0.0017 | 0.358 | 0.330 | 185.9 | 0.0104 | 0.0047 |
| | 100 | 0.09 | 1.08 | 0.89 | 0.0015 | 0.052 | 0.047 | 162.2 | 0.0091 | 0.0041 |
| | 175 | 0.07 | 0.94 | 0.62 | 0.0015 | 0.032 | 0.029 | 158.5 | 0.0089 | 0.0040 |
| Trenchers | 75 | 0.40 | 2.07 | 3.38 | 0.0023 | 0.228 | 0.210 | 250.7 | 0.0140 | 0.0064 |
| Aerial Lifts | 75 | 0.03 | 0.94 | 0.48 | 0.0014 | 0.011 | 0.010 | 156.7 | 0.0088 | 0.0040 |
| | 100 | 0.03 | 0.77 | 0.48 | 0.0012 | 0.006 | 0.006 | 127.0 | 0.0071 | 0.0032 |
| Concrete/Industrial Saws | 25 | 0.29 | 1.21 | 2.23 | 0.0037 | 0.083 | 0.077 | 293.1 | 0.0168 | 0.0076 |
| | 50 | 0.29 | 2.17 | 1.96 | 0.0036 | 0.089 | 0.082 | 274.7 | 0.0158 | 0.0072 |
| Plate Compactors | 25 | 0.08 | 0.48 | 0.57 | 0.0012 | 0.022 | 0.020 | 78.2 | 0.0045 | 0.0020 |
| Light Commercial - Pumps | 25 | 0.20 | 0.99 | 1.46 | 0.0026 | 0.068 | 0.063 | 184.9 | 0.0106 | 0.0048 |
| Non-Rental Compressor | 100 | 0.06 | 0.91 | 0.70 | 0.0012 | 0.046 | 0.043 | 134.3 | 0.0075 | 0.0034 |
| Non-Rental Generator | 50 | 0.13 | 1.52 | 1.35 | 0.0014 | 0.064 | 0.059 | 148.0 | 0.0083 | 0.0038 |

Source: OFFROAD 2017.

Table C-28 2022 Construction Equipment Emission Factors (grams/hp-hr)

| Equipment | HP | VOC | CO | NO _x | SO ₂ | PM ₁₀ | PM _{2.5} | CO ₂ | CH ₄ | N ₂ O |
|---------------------------------------|-----|------|------|-----------------|-----------------|------------------|-------------------|-----------------|-----------------|------------------|
| Agricultural - Construction Equipment | 100 | 0.25 | 1.28 | 1.65 | 0.0003 | 0.135 | 0.124 | 28.1 | 0.0112 | 0.0051 |
| Agricultural - Others | 600 | 0.10 | 0.50 | 0.95 | 0.0002 | 0.040 | 0.037 | 18.7 | 0.0074 | 0.0034 |
| Bore/Drill Rigs | 175 | 0.06 | 1.26 | 0.56 | 0.0021 | 0.025 | 0.023 | 227.1 | 0.0127 | 0.0058 |
| Cranes | 300 | 0.07 | 0.38 | 0.79 | 0.0010 | 0.033 | 0.030 | 111.7 | 0.0062 | 0.0028 |
| Excavators | 175 | 0.06 | 0.98 | 0.54 | 0.0016 | 0.026 | 0.024 | 168.3 | 0.0094 | 0.0043 |
| Graders | 300 | 0.09 | 0.38 | 1.06 | 0.0014 | 0.035 | 0.032 | 155.7 | 0.0087 | 0.0040 |
| Off-Highway Trucks | 600 | 0.05 | 0.30 | 0.36 | 0.0012 | 0.013 | 0.012 | 126.4 | 0.0071 | 0.0032 |
| Other Construction Equipment | 175 | 0.11 | 1.14 | 1.09 | 0.0018 | 0.057 | 0.052 | 190.0 | 0.0106 | 0.0048 |
| | 600 | 0.05 | 0.36 | 0.50 | 0.0013 | 0.018 | 0.017 | 139.2 | 0.0078 | 0.0035 |
| Pavers | 175 | 0.08 | 1.13 | 0.83 | 0.0018 | 0.040 | 0.037 | 198.2 | 0.0111 | 0.0050 |
| Paving Equipment | 50 | 0.14 | 1.05 | 0.95 | 0.0013 | 0.047 | 0.043 | 144.0 | 0.0080 | 0.0037 |
| | 175 | 0.07 | 0.91 | 0.67 | 0.0014 | 0.036 | 0.033 | 155.2 | 0.0087 | 0.0040 |
| Rollers | 100 | 0.10 | 1.13 | 1.02 | 0.0016 | 0.059 | 0.054 | 172.9 | 0.0097 | 0.0044 |
| Rough Terrain Forklifts | 100 | 0.05 | 1.24 | 0.75 | 0.0019 | 0.020 | 0.018 | 204.5 | 0.0114 | 0.0052 |
| Rubber Tired Dozers | 175 | 0.21 | 1.23 | 1.89 | 0.0016 | 0.120 | 0.111 | 170.0 | 0.0095 | 0.0043 |
| Rubber Tired Loaders | 175 | 0.09 | 1.02 | 0.78 | 0.0015 | 0.042 | 0.039 | 163.3 | 0.0091 | 0.0042 |
| Scrapers | 600 | 0.08 | 0.62 | 0.90 | 0.0017 | 0.034 | 0.032 | 179.5 | 0.0100 | 0.0046 |
| Skid Steer Loaders | 75 | 0.06 | 1.13 | 0.75 | 0.0017 | 0.028 | 0.025 | 183.0 | 0.0102 | 0.0047 |
| Tractors/Loaders/Backhoes | 75 | 0.56 | 1.87 | 4.40 | 0.0017 | 0.356 | 0.328 | 186.0 | 0.0104 | 0.0047 |
| | 100 | 0.08 | 1.07 | 0.78 | 0.0015 | 0.041 | 0.038 | 162.4 | 0.0091 | 0.0041 |
| | 175 | 0.06 | 0.93 | 0.53 | 0.0015 | 0.027 | 0.025 | 158.6 | 0.0089 | 0.0040 |
| Trenchers | 75 | 0.41 | 2.08 | 3.45 | 0.0023 | 0.236 | 0.218 | 249.8 | 0.0139 | 0.0064 |
| Aerial Lifts | 75 | 0.03 | 0.95 | 0.49 | 0.0014 | 0.009 | 0.008 | 156.9 | 0.0088 | 0.0040 |
| | 100 | 0.02 | 0.76 | 0.38 | 0.0012 | 0.007 | 0.007 | 127.8 | 0.0071 | 0.0033 |
| Concrete/Industrial Saws | 25 | 0.30 | 1.22 | 2.27 | 0.0038 | 0.085 | 0.078 | 297.2 | 0.0170 | 0.0078 |
| | 50 | 0.26 | 2.13 | 1.89 | 0.0035 | 0.076 | 0.070 | 273.4 | 0.0157 | 0.0072 |
| Plate Compactors | 25 | 0.08 | 0.48 | 0.57 | 0.0012 | 0.022 | 0.020 | 78.2 | 0.0045 | 0.0020 |
| Light Commercial - Pumps | 25 | 0.19 | 0.99 | 1.44 | 0.0026 | 0.065 | 0.060 | 184.9 | 0.0106 | 0.0048 |
| Non-Rental Compressor | 100 | 0.04 | 0.91 | 0.56 | 0.0012 | 0.037 | 0.034 | 134.3 | 0.0075 | 0.0034 |
| Non-Rental Generator | 50 | 0.13 | 1.52 | 1.35 | 0.0014 | 0.064 | 0.059 | 148.0 | 0.0083 | 0.0038 |

Source: OFFROAD 2017.

Table C-29 2023 Construction Equipment Emission Factors (grams/hp-hr)

| Equipment | HP | VOC | CO | NO _x | SO ₂ | PM ₁₀ | PM _{2.5} | CO ₂ | CH ₄ | N ₂ O |
|---------------------------------------|-----|------|------|-----------------|-----------------|------------------|-------------------|-----------------|-----------------|------------------|
| Agricultural - Construction Equipment | 100 | 0.23 | 1.27 | 1.54 | 0.0003 | 0.127 | 0.117 | 28.1 | 0.0112 | 0.0051 |
| Agricultural - Others | 600 | 0.10 | 0.48 | 0.89 | 0.0002 | 0.037 | 0.034 | 18.7 | 0.0074 | 0.0034 |
| Bore/Drill Rigs | 175 | 0.05 | 1.26 | 0.47 | 0.0021 | 0.021 | 0.019 | 228.2 | 0.0127 | 0.0058 |
| Cranes | 300 | 0.07 | 0.38 | 0.73 | 0.0010 | 0.031 | 0.028 | 111.5 | 0.0062 | 0.0028 |
| Excavators | 175 | 0.06 | 0.98 | 0.47 | 0.0016 | 0.023 | 0.021 | 168.3 | 0.0094 | 0.0043 |
| Graders | 300 | 0.08 | 0.38 | 0.95 | 0.0014 | 0.032 | 0.029 | 154.7 | 0.0086 | 0.0039 |
| Off-Highway Trucks | 600 | 0.04 | 0.29 | 0.32 | 0.0012 | 0.011 | 0.011 | 126.4 | 0.0071 | 0.0032 |
| Other Construction Equipment | 175 | 0.10 | 1.14 | 0.98 | 0.0018 | 0.051 | 0.047 | 190.0 | 0.0106 | 0.0048 |
| | 600 | 0.05 | 0.35 | 0.46 | 0.0013 | 0.017 | 0.016 | 139.8 | 0.0078 | 0.0036 |
| Pavers | 175 | 0.08 | 1.12 | 0.74 | 0.0018 | 0.035 | 0.033 | 198.2 | 0.0111 | 0.0050 |
| Paving Equipment | 50 | 0.13 | 1.05 | 0.93 | 0.0013 | 0.043 | 0.039 | 144.2 | 0.0081 | 0.0037 |
| | 175 | 0.07 | 0.92 | 0.62 | 0.0014 | 0.032 | 0.030 | 155.5 | 0.0087 | 0.0040 |
| Rollers | 100 | 0.09 | 1.12 | 0.95 | 0.0016 | 0.052 | 0.048 | 172.9 | 0.0097 | 0.0044 |
| Rough Terrain Forklifts | 100 | 0.05 | 1.25 | 0.71 | 0.0019 | 0.017 | 0.016 | 204.6 | 0.0114 | 0.0052 |
| Rubber Tired Dozers | 175 | 0.20 | 1.23 | 1.84 | 0.0016 | 0.117 | 0.107 | 168.9 | 0.0094 | 0.0043 |
| Rubber Tired Loaders | 175 | 0.08 | 1.02 | 0.69 | 0.0015 | 0.037 | 0.034 | 163.2 | 0.0091 | 0.0042 |
| Scrapers | 600 | 0.08 | 0.60 | 0.84 | 0.0017 | 0.032 | 0.030 | 179.5 | 0.0100 | 0.0046 |
| Skid Steer Loaders | 75 | 0.05 | 1.13 | 0.71 | 0.0017 | 0.024 | 0.022 | 183.3 | 0.0102 | 0.0047 |
| Tractors/Loaders/Backhoes | 75 | 0.56 | 1.87 | 4.38 | 0.0017 | 0.356 | 0.328 | 186.6 | 0.0104 | 0.0048 |
| | 100 | 0.07 | 1.07 | 0.71 | 0.0015 | 0.034 | 0.031 | 162.5 | 0.0091 | 0.0041 |
| | 175 | 0.06 | 0.93 | 0.46 | 0.0015 | 0.023 | 0.021 | 158.9 | 0.0089 | 0.0040 |
| Trenchers | 75 | 0.42 | 2.08 | 3.48 | 0.0023 | 0.241 | 0.222 | 248.0 | 0.0139 | 0.0063 |
| Aerial Lifts | 75 | 0.03 | 0.91 | 0.49 | 0.0014 | 0.011 | 0.010 | 151.6 | 0.0085 | 0.0039 |
| | 100 | 0.02 | 0.76 | 0.34 | 0.0012 | 0.004 | 0.004 | 126.1 | 0.0070 | 0.0032 |
| Concrete/Industrial Saws | 25 | 0.30 | 1.23 | 2.27 | 0.0038 | 0.085 | 0.078 | 297.7 | 0.0168 | 0.0077 |
| | 50 | 0.24 | 2.11 | 1.84 | 0.0035 | 0.065 | 0.060 | 274.0 | 0.0158 | 0.0072 |
| Plate Compactors | 25 | 0.08 | 0.48 | 0.57 | 0.0012 | 0.022 | 0.020 | 78.2 | 0.0045 | 0.0020 |
| Light Commercial - Pumps | 25 | 0.19 | 0.98 | 1.43 | 0.0026 | 0.062 | 0.057 | 184.9 | 0.0106 | 0.0048 |
| Non-Rental Compressor | 100 | 0.04 | 0.91 | 0.53 | 0.0012 | 0.035 | 0.032 | 134.3 | 0.0075 | 0.0034 |
| Non-Rental Generator | 50 | 0.13 | 1.52 | 1.35 | 0.0014 | 0.064 | 0.059 | 148.0 | 0.0083 | 0.0038 |

Source: OFFROAD 2017.

Table C-30 2024 Construction Equipment Emission Factors (grams/hp-hr)

| Equipment | HP | VOC | CO | NO _x | SO ₂ | PM ₁₀ | PM _{2.5} | CO ₂ | CH ₄ | N ₂ O |
|---------------------------------------|-----|------|------|-----------------|-----------------|------------------|-------------------|-----------------|-----------------|------------------|
| Agricultural - Construction Equipment | 100 | 0.22 | 1.27 | 1.44 | 0.0003 | 0.120 | 0.110 | 28.1 | 0.0112 | 0.0051 |
| Agricultural - Others | 600 | 0.09 | 0.46 | 0.84 | 0.0002 | 0.035 | 0.032 | 18.7 | 0.0074 | 0.0034 |
| Bore/Drill Rigs | 175 | 0.05 | 1.27 | 0.45 | 0.0021 | 0.020 | 0.019 | 227.9 | 0.0127 | 0.0058 |
| Cranes | 300 | 0.06 | 0.36 | 0.66 | 0.0010 | 0.028 | 0.025 | 111.3 | 0.0062 | 0.0028 |
| Excavators | 175 | 0.05 | 0.98 | 0.43 | 0.0016 | 0.021 | 0.019 | 168.4 | 0.0094 | 0.0043 |
| Graders | 300 | 0.08 | 0.37 | 0.85 | 0.0014 | 0.028 | 0.026 | 154.3 | 0.0086 | 0.0039 |
| Off-Highway Trucks | 600 | 0.04 | 0.29 | 0.30 | 0.0012 | 0.011 | 0.010 | 126.5 | 0.0071 | 0.0032 |
| Other Construction Equipment | 175 | 0.10 | 1.14 | 0.92 | 0.0018 | 0.048 | 0.044 | 189.9 | 0.0106 | 0.0048 |
| | 600 | 0.04 | 0.35 | 0.41 | 0.0013 | 0.015 | 0.014 | 139.7 | 0.0078 | 0.0036 |
| Pavers | 175 | 0.07 | 1.13 | 0.69 | 0.0018 | 0.033 | 0.030 | 198.1 | 0.0111 | 0.0050 |
| Paving Equipment | 50 | 0.13 | 1.06 | 0.93 | 0.0013 | 0.041 | 0.037 | 144.1 | 0.0081 | 0.0037 |
| | 175 | 0.07 | 0.92 | 0.59 | 0.0014 | 0.031 | 0.029 | 155.8 | 0.0087 | 0.0040 |
| Rollers | 100 | 0.09 | 1.12 | 0.90 | 0.0016 | 0.047 | 0.043 | 172.9 | 0.0097 | 0.0044 |
| Rough Terrain Forklifts | 100 | 0.05 | 1.25 | 0.69 | 0.0019 | 0.017 | 0.015 | 204.6 | 0.0114 | 0.0052 |
| Rubber Tired Dozers | 175 | 0.19 | 1.21 | 1.66 | 0.0016 | 0.107 | 0.099 | 169.9 | 0.0095 | 0.0043 |
| Rubber Tired Loaders | 175 | 0.08 | 1.02 | 0.59 | 0.0015 | 0.032 | 0.029 | 163.1 | 0.0091 | 0.0042 |
| Scrapers | 600 | 0.08 | 0.58 | 0.78 | 0.0017 | 0.030 | 0.028 | 179.6 | 0.0100 | 0.0046 |
| Skid Steer Loaders | 75 | 0.05 | 1.13 | 0.67 | 0.0017 | 0.021 | 0.019 | 183.3 | 0.0102 | 0.0047 |
| Tractors/Loaders/Backhoes | 75 | 0.57 | 1.90 | 4.48 | 0.0017 | 0.359 | 0.330 | 185.0 | 0.0103 | 0.0047 |
| | 100 | 0.07 | 1.07 | 0.67 | 0.0015 | 0.030 | 0.027 | 162.6 | 0.0091 | 0.0041 |
| | 175 | 0.05 | 0.94 | 0.42 | 0.0015 | 0.021 | 0.019 | 159.1 | 0.0089 | 0.0041 |
| Trenchers | 75 | 0.39 | 2.04 | 3.40 | 0.0023 | 0.254 | 0.234 | 254.9 | 0.0142 | 0.0065 |
| Aerial Lifts | 75 | 0.03 | 0.91 | 0.47 | 0.0014 | 0.010 | 0.010 | 151.6 | 0.0085 | 0.0039 |
| | 100 | 0.02 | 0.76 | 0.34 | 0.0012 | 0.004 | 0.004 | 126.4 | 0.0071 | 0.0032 |
| Concrete/Industrial Saws | 25 | 0.30 | 1.24 | 2.30 | 0.0038 | 0.086 | 0.079 | 301.7 | 0.0168 | 0.0077 |
| | 50 | 0.22 | 2.09 | 1.78 | 0.0035 | 0.056 | 0.051 | 273.9 | 0.0157 | 0.0072 |
| Plate Compactors | 25 | 0.08 | 0.48 | 0.57 | 0.0012 | 0.022 | 0.020 | 78.2 | 0.0045 | 0.0020 |
| Light Commercial - Pumps | 25 | 0.19 | 0.98 | 1.42 | 0.0026 | 0.060 | 0.055 | 184.9 | 0.0106 | 0.0048 |
| Non-Rental Compressor | 100 | 0.04 | 0.91 | 0.55 | 0.0012 | 0.036 | 0.033 | 134.3 | 0.0075 | 0.0034 |
| Non-Rental Generator | 50 | 0.13 | 1.52 | 1.35 | 0.0014 | 0.064 | 0.059 | 148.0 | 0.0083 | 0.0038 |

Source: OFFROAD 2017.

Table C-31 2025 Construction Equipment Emission Factors (grams/hp-hr)

| Equipment | HP | VOC | CO | NO_x | SO₂ | PM₁₀ | PM_{2.5} | CO₂ | CH₄ | N₂O |
|---------------------------------------|-----------|------------|-----------|-----------------------|-----------------------|------------------------|-------------------------|-----------------------|-----------------------|-----------------------|
| Agricultural - Construction Equipment | 100 | 0.21 | 1.26 | 1.34 | 0.0003 | 0.113 | 0.104 | 28.1 | 0.0112 | 0.0051 |
| Agricultural - Others | 600 | 0.09 | 0.45 | 0.78 | 0.0002 | 0.033 | 0.031 | 18.7 | 0.0074 | 0.0034 |
| Bore/Drill Rigs | 175 | 0.05 | 1.27 | 0.39 | 0.0021 | 0.017 | 0.016 | 227.5 | 0.0127 | 0.0058 |
| Cranes | 300 | 0.06 | 0.32 | 0.58 | 0.0010 | 0.025 | 0.023 | 110.9 | 0.0062 | 0.0028 |
| Excavators | 175 | 0.05 | 0.98 | 0.37 | 0.0016 | 0.018 | 0.017 | 168.4 | 0.0094 | 0.0043 |
| Graders | 300 | 0.07 | 0.36 | 0.72 | 0.0014 | 0.024 | 0.022 | 154.7 | 0.0086 | 0.0039 |
| Off-Highway Trucks | 600 | 0.04 | 0.28 | 0.26 | 0.0012 | 0.009 | 0.008 | 126.4 | 0.0071 | 0.0032 |
| Other Construction Equipment | 175 | 0.09 | 1.14 | 0.79 | 0.0018 | 0.041 | 0.038 | 190.1 | 0.0106 | 0.0048 |
| | 600 | 0.04 | 0.34 | 0.38 | 0.0013 | 0.014 | 0.013 | 141.4 | 0.0079 | 0.0036 |
| Pavers | 175 | 0.07 | 1.13 | 0.63 | 0.0018 | 0.030 | 0.028 | 198.1 | 0.0111 | 0.0050 |
| Paving Equipment | 50 | 0.12 | 1.04 | 0.90 | 0.0013 | 0.035 | 0.032 | 144.1 | 0.0080 | 0.0037 |
| | 175 | 0.06 | 0.92 | 0.50 | 0.0014 | 0.026 | 0.024 | 156.3 | 0.0087 | 0.0040 |
| Rollers | 100 | 0.08 | 1.12 | 0.85 | 0.0016 | 0.042 | 0.039 | 172.8 | 0.0097 | 0.0044 |
| Rough Terrain Forklifts | 100 | 0.05 | 1.25 | 0.66 | 0.0019 | 0.014 | 0.013 | 204.6 | 0.0114 | 0.0052 |
| Rubber Tired Dozers | 175 | 0.17 | 1.19 | 1.44 | 0.0016 | 0.093 | 0.086 | 170.1 | 0.0095 | 0.0043 |
| Rubber Tired Loaders | 175 | 0.07 | 1.02 | 0.50 | 0.0015 | 0.026 | 0.024 | 163.1 | 0.0091 | 0.0042 |
| Scrapers | 600 | 0.07 | 0.53 | 0.65 | 0.0017 | 0.025 | 0.023 | 179.0 | 0.0100 | 0.0046 |
| Skid Steer Loaders | 75 | 0.05 | 1.13 | 0.65 | 0.0017 | 0.020 | 0.018 | 183.2 | 0.0102 | 0.0047 |
| Tractors/Loaders/Backhoes | 75 | 0.56 | 1.87 | 4.41 | 0.0017 | 0.356 | 0.328 | 184.4 | 0.0103 | 0.0047 |
| | 100 | 0.06 | 1.07 | 0.62 | 0.0015 | 0.024 | 0.022 | 162.8 | 0.0091 | 0.0041 |
| | 175 | 0.05 | 0.93 | 0.36 | 0.0015 | 0.018 | 0.016 | 159.1 | 0.0089 | 0.0041 |
| Trenchers | 75 | 0.46 | 2.10 | 3.63 | 0.0023 | 0.277 | 0.255 | 246.9 | 0.0138 | 0.0063 |
| Aerial Lifts | 75 | 0.03 | 0.92 | 0.45 | 0.0014 | 0.008 | 0.008 | 155.2 | 0.0087 | 0.0040 |
| | 100 | 0.02 | 0.78 | 0.36 | 0.0012 | 0.005 | 0.005 | 128.4 | 0.0072 | 0.0033 |
| Concrete/Industrial Saws | 25 | 0.30 | 1.24 | 2.30 | 0.0038 | 0.086 | 0.079 | 302.1 | 0.0172 | 0.0078 |
| | 50 | 0.21 | 2.08 | 1.74 | 0.0036 | 0.048 | 0.044 | 274.9 | 0.0158 | 0.0072 |
| Plate Compactors | 25 | 0.08 | 0.48 | 0.57 | 0.0012 | 0.022 | 0.020 | 78.2 | 0.0045 | 0.0020 |
| Light Commercial - Pumps | 25 | 0.19 | 0.98 | 1.41 | 0.0026 | 0.059 | 0.054 | 184.9 | 0.0106 | 0.0048 |
| Non-Rental Compressor | 100 | 0.04 | 0.90 | 0.48 | 0.0012 | 0.034 | 0.031 | 134.3 | 0.0075 | 0.0034 |
| Non-Rental Generator | 50 | 0.13 | 1.52 | 1.02 | 0.0014 | 0.039 | 0.036 | 148.0 | 0.0083 | 0.0038 |

Source: OFFROAD 2017.

Table C-32 2026 Construction Equipment Emission Factors (grams/hp-hr)

| Equipment | HP | VOC | CO | NO _x | SO ₂ | PM ₁₀ | PM _{2.5} | CO ₂ | CH ₄ | N ₂ O |
|---------------------------------------|-----|------|------|-----------------|-----------------|------------------|-------------------|-----------------|-----------------|------------------|
| Agricultural - Construction Equipment | 100 | 0.20 | 1.25 | 1.25 | 0.0003 | 0.106 | 0.097 | 28.1 | 0.0112 | 0.0051 |
| Agricultural - Others | 600 | 0.09 | 0.43 | 0.73 | 0.0002 | 0.031 | 0.029 | 18.7 | 0.0074 | 0.0034 |
| Bore/Drill Rigs | 175 | 0.05 | 1.27 | 0.38 | 0.0021 | 0.017 | 0.016 | 227.7 | 0.0127 | 0.0058 |
| Cranes | 300 | 0.05 | 0.31 | 0.53 | 0.0010 | 0.022 | 0.020 | 111.0 | 0.0062 | 0.0028 |
| Excavators | 175 | 0.05 | 0.98 | 0.32 | 0.0016 | 0.016 | 0.014 | 168.4 | 0.0094 | 0.0043 |
| Graders | 300 | 0.06 | 0.35 | 0.62 | 0.0014 | 0.021 | 0.019 | 154.7 | 0.0086 | 0.0039 |
| Off-Highway Trucks | 600 | 0.04 | 0.28 | 0.24 | 0.0012 | 0.009 | 0.008 | 126.5 | 0.0071 | 0.0032 |
| Other Construction Equipment | 175 | 0.08 | 1.13 | 0.71 | 0.0018 | 0.036 | 0.034 | 190.2 | 0.0106 | 0.0048 |
| | 600 | 0.04 | 0.33 | 0.34 | 0.0013 | 0.013 | 0.012 | 141.7 | 0.0079 | 0.0036 |
| Pavers | 175 | 0.06 | 1.13 | 0.56 | 0.0018 | 0.027 | 0.025 | 198.1 | 0.0111 | 0.0050 |
| Paving Equipment | 50 | 0.11 | 1.03 | 0.88 | 0.0013 | 0.031 | 0.029 | 144.1 | 0.0080 | 0.0037 |
| | 175 | 0.05 | 0.90 | 0.45 | 0.0014 | 0.022 | 0.020 | 154.6 | 0.0086 | 0.0039 |
| Rollers | 100 | 0.08 | 1.12 | 0.81 | 0.0016 | 0.038 | 0.035 | 172.9 | 0.0097 | 0.0044 |
| Rough Terrain Forklifts | 100 | 0.04 | 1.25 | 0.64 | 0.0019 | 0.013 | 0.012 | 204.6 | 0.0114 | 0.0052 |
| Rubber Tired Dozers | 175 | 0.14 | 1.18 | 1.22 | 0.0016 | 0.072 | 0.067 | 173.6 | 0.0097 | 0.0044 |
| Rubber Tired Loaders | 175 | 0.07 | 1.02 | 0.43 | 0.0015 | 0.023 | 0.021 | 163.2 | 0.0091 | 0.0042 |
| Scrapers | 600 | 0.07 | 0.52 | 0.59 | 0.0017 | 0.023 | 0.021 | 179.1 | 0.0100 | 0.0046 |
| Skid Steer Loaders | 75 | 0.05 | 1.12 | 0.63 | 0.0017 | 0.018 | 0.016 | 183.2 | 0.0102 | 0.0047 |
| Tractors/Loaders/Backhoes | 75 | 0.55 | 1.83 | 4.28 | 0.0017 | 0.353 | 0.324 | 186.2 | 0.0104 | 0.0047 |
| | 100 | 0.06 | 1.07 | 0.58 | 0.0015 | 0.020 | 0.018 | 162.9 | 0.0091 | 0.0042 |
| | 175 | 0.05 | 0.94 | 0.33 | 0.0015 | 0.016 | 0.015 | 159.2 | 0.0089 | 0.0041 |
| Trenchers | 75 | 0.48 | 2.13 | 3.76 | 0.0022 | 0.283 | 0.260 | 244.6 | 0.0137 | 0.0062 |
| Aerial Lifts | 75 | 0.03 | 0.93 | 0.46 | 0.0014 | 0.009 | 0.008 | 155.6 | 0.0087 | 0.0040 |
| | 100 | 0.02 | 0.76 | 0.34 | 0.0012 | 0.004 | 0.004 | 126.9 | 0.0071 | 0.0032 |
| Concrete/Industrial Saws | 25 | 0.29 | 1.22 | 2.25 | 0.0038 | 0.084 | 0.077 | 295.6 | 0.0168 | 0.0077 |
| | 50 | 0.20 | 2.06 | 1.68 | 0.0035 | 0.041 | 0.037 | 274.4 | 0.0158 | 0.0072 |
| Plate Compactors | 25 | 0.08 | 0.48 | 0.57 | 0.0012 | 0.022 | 0.020 | 78.2 | 0.0045 | 0.0020 |
| Light Commercial - Pumps | 25 | 0.19 | 0.97 | 1.40 | 0.0026 | 0.058 | 0.053 | 184.9 | 0.0106 | 0.0048 |
| Non-Rental Compressor | 100 | 0.04 | 0.90 | 0.48 | 0.0012 | 0.034 | 0.031 | 134.3 | 0.0075 | 0.0034 |
| Non-Rental Generator | 50 | 0.13 | 1.52 | 1.02 | 0.0014 | 0.039 | 0.036 | 148.0 | 0.0083 | 0.0038 |

Source: OFFROAD 2017.

Table C-33 2027 Construction Equipment Emission Factors (grams/hp-hr)

| Equipment | HP | VOC | CO | NO _x | SO ₂ | PM ₁₀ | PM _{2.5} | CO ₂ | CH ₄ | N ₂ O |
|---------------------------------------|-----|------|------|-----------------|-----------------|------------------|-------------------|-----------------|-----------------|------------------|
| Agricultural - Construction Equipment | 100 | 0.19 | 1.25 | 1.17 | 0.0003 | 0.099 | 0.091 | 28.1 | 0.0112 | 0.0051 |
| Agricultural - Others | 600 | 0.08 | 0.42 | 0.68 | 0.0002 | 0.029 | 0.027 | 18.7 | 0.0074 | 0.0034 |
| Bore/Drill Rigs | 175 | 0.05 | 1.27 | 0.37 | 0.0021 | 0.017 | 0.016 | 227.8 | 0.0127 | 0.0058 |
| Cranes | 300 | 0.05 | 0.30 | 0.47 | 0.0010 | 0.020 | 0.018 | 110.8 | 0.0062 | 0.0028 |
| Excavators | 175 | 0.05 | 0.98 | 0.29 | 0.0016 | 0.014 | 0.013 | 168.4 | 0.0094 | 0.0043 |
| Graders | 300 | 0.06 | 0.35 | 0.54 | 0.0014 | 0.018 | 0.017 | 155.1 | 0.0087 | 0.0040 |
| Off-Highway Trucks | 600 | 0.04 | 0.28 | 0.23 | 0.0012 | 0.008 | 0.008 | 126.4 | 0.0071 | 0.0032 |
| Other Construction Equipment | 175 | 0.08 | 1.14 | 0.66 | 0.0018 | 0.034 | 0.032 | 190.2 | 0.0106 | 0.0048 |
| | 600 | 0.04 | 0.33 | 0.32 | 0.0013 | 0.012 | 0.011 | 141.6 | 0.0079 | 0.0036 |
| Pavers | 175 | 0.06 | 1.13 | 0.52 | 0.0018 | 0.025 | 0.023 | 198.0 | 0.0111 | 0.0050 |
| Paving Equipment | 50 | 0.11 | 1.02 | 0.88 | 0.0013 | 0.032 | 0.029 | 144.1 | 0.0080 | 0.0037 |
| | 175 | 0.05 | 0.90 | 0.42 | 0.0014 | 0.020 | 0.018 | 154.6 | 0.0086 | 0.0039 |
| Rollers | 100 | 0.07 | 1.12 | 0.78 | 0.0016 | 0.035 | 0.032 | 172.9 | 0.0097 | 0.0044 |
| Rough Terrain Forklifts | 100 | 0.04 | 1.25 | 0.63 | 0.0019 | 0.012 | 0.011 | 204.7 | 0.0114 | 0.0052 |
| Rubber Tired Dozers | 175 | 0.13 | 1.18 | 1.12 | 0.0016 | 0.065 | 0.060 | 174.0 | 0.0097 | 0.0044 |
| Rubber Tired Loaders | 175 | 0.06 | 1.02 | 0.38 | 0.0015 | 0.020 | 0.018 | 163.2 | 0.0091 | 0.0042 |
| Scrapers | 600 | 0.06 | 0.52 | 0.55 | 0.0017 | 0.022 | 0.020 | 179.7 | 0.0100 | 0.0046 |
| Skid Steer Loaders | 75 | 0.04 | 1.12 | 0.61 | 0.0017 | 0.016 | 0.015 | 183.2 | 0.0102 | 0.0047 |
| Tractors/Loaders/Backhoes | 75 | 0.55 | 1.84 | 4.29 | 0.0017 | 0.353 | 0.325 | 186.2 | 0.0104 | 0.0047 |
| | 100 | 0.05 | 1.07 | 0.56 | 0.0015 | 0.017 | 0.015 | 162.9 | 0.0091 | 0.0041 |
| | 175 | 0.05 | 0.94 | 0.29 | 0.0015 | 0.014 | 0.013 | 159.2 | 0.0089 | 0.0041 |
| Trenchers | 75 | 0.47 | 2.16 | 3.80 | 0.0022 | 0.265 | 0.244 | 241.7 | 0.0135 | 0.0062 |
| Aerial Lifts | 75 | 0.03 | 0.94 | 0.46 | 0.0014 | 0.009 | 0.008 | 155.8 | 0.0087 | 0.0040 |
| | 100 | 0.02 | 0.75 | 0.34 | 0.0012 | 0.004 | 0.004 | 126.4 | 0.0071 | 0.0032 |
| Concrete/Industrial Saws | 25 | 0.30 | 1.23 | 2.28 | 0.0038 | 0.085 | 0.078 | 299.4 | 0.0171 | 0.0078 |
| | 50 | 0.19 | 2.05 | 1.64 | 0.0035 | 0.034 | 0.031 | 273.9 | 0.0158 | 0.0072 |
| Plate Compactors | 25 | 0.08 | 0.48 | 0.57 | 0.0012 | 0.022 | 0.020 | 78.2 | 0.0045 | 0.0020 |
| Light Commercial - Pumps | 25 | 0.18 | 0.97 | 1.40 | 0.0026 | 0.057 | 0.052 | 184.9 | 0.0106 | 0.0048 |
| Non-Rental Compressor | 100 | 0.04 | 0.90 | 0.43 | 0.0012 | 0.031 | 0.029 | 134.3 | 0.0075 | 0.0034 |
| Non-Rental Generator | 50 | 0.13 | 1.52 | 1.02 | 0.0014 | 0.039 | 0.036 | 148.0 | 0.0083 | 0.0038 |

Source: OFFROAD 2017.

Table C-34 2028 Construction Equipment Emission Factors (grams/hp-hr)

| Equipment | HP | VOC | CO | NO _x | SO ₂ | PM ₁₀ | PM _{2.5} | CO ₂ | CH ₄ | N ₂ O |
|---------------------------------------|-----|------|------|-----------------|-----------------|------------------|-------------------|-----------------|-----------------|------------------|
| Agricultural - Construction Equipment | 100 | 0.18 | 1.24 | 1.09 | 0.0003 | 0.093 | 0.085 | 28.1 | 0.0112 | 0.0051 |
| Agricultural - Others | 600 | 0.08 | 0.40 | 0.64 | 0.0002 | 0.028 | 0.025 | 18.7 | 0.0074 | 0.0034 |
| Bore/Drill Rigs | 175 | 0.05 | 1.28 | 0.37 | 0.0021 | 0.017 | 0.016 | 227.8 | 0.0127 | 0.0058 |
| Cranes | 300 | 0.05 | 0.30 | 0.44 | 0.0010 | 0.019 | 0.017 | 111.1 | 0.0062 | 0.0028 |
| Excavators | 175 | 0.04 | 0.98 | 0.27 | 0.0016 | 0.013 | 0.012 | 168.3 | 0.0094 | 0.0043 |
| Graders | 300 | 0.06 | 0.35 | 0.49 | 0.0014 | 0.017 | 0.016 | 155.2 | 0.0087 | 0.0040 |
| Off-Highway Trucks | 600 | 0.04 | 0.28 | 0.21 | 0.0012 | 0.008 | 0.007 | 126.4 | 0.0071 | 0.0032 |
| Other Construction Equipment | 175 | 0.08 | 1.14 | 0.63 | 0.0018 | 0.033 | 0.030 | 190.2 | 0.0106 | 0.0048 |
| | 600 | 0.04 | 0.33 | 0.30 | 0.0013 | 0.011 | 0.011 | 141.3 | 0.0079 | 0.0036 |
| Pavers | 175 | 0.06 | 1.13 | 0.46 | 0.0018 | 0.022 | 0.020 | 198.1 | 0.0111 | 0.0050 |
| Paving Equipment | 50 | 0.11 | 1.03 | 0.88 | 0.0013 | 0.031 | 0.028 | 144.1 | 0.0080 | 0.0037 |
| | 175 | 0.05 | 0.92 | 0.40 | 0.0015 | 0.021 | 0.020 | 157.4 | 0.0088 | 0.0040 |
| Rollers | 100 | 0.07 | 1.12 | 0.74 | 0.0016 | 0.031 | 0.028 | 173.0 | 0.0097 | 0.0044 |
| Rough Terrain Forklifts | 100 | 0.04 | 1.24 | 0.61 | 0.0019 | 0.011 | 0.010 | 204.9 | 0.0114 | 0.0052 |
| Rubber Tired Dozers | 175 | 0.11 | 1.16 | 0.85 | 0.0016 | 0.050 | 0.046 | 174.1 | 0.0097 | 0.0044 |
| Rubber Tired Loaders | 175 | 0.06 | 1.03 | 0.34 | 0.0015 | 0.017 | 0.015 | 163.2 | 0.0091 | 0.0042 |
| Scrapers | 600 | 0.06 | 0.51 | 0.51 | 0.0017 | 0.020 | 0.019 | 179.9 | 0.0100 | 0.0046 |
| Skid Steer Loaders | 75 | 0.04 | 1.12 | 0.59 | 0.0017 | 0.015 | 0.014 | 183.2 | 0.0102 | 0.0047 |
| Tractors/Loaders/Backhoes | 75 | 0.55 | 1.83 | 4.29 | 0.0017 | 0.353 | 0.324 | 185.5 | 0.0104 | 0.0047 |
| | 100 | 0.05 | 1.08 | 0.54 | 0.0015 | 0.015 | 0.014 | 163.0 | 0.0091 | 0.0042 |
| | 175 | 0.04 | 0.94 | 0.27 | 0.0015 | 0.013 | 0.012 | 159.1 | 0.0089 | 0.0041 |
| Trenchers | 75 | 0.49 | 2.20 | 3.95 | 0.0022 | 0.280 | 0.257 | 242.7 | 0.0136 | 0.0062 |
| Aerial Lifts | 75 | 0.03 | 0.94 | 0.46 | 0.0014 | 0.009 | 0.008 | 155.5 | 0.0087 | 0.0040 |
| | 100 | 0.02 | 0.74 | 0.34 | 0.0012 | 0.004 | 0.003 | 125.8 | 0.0070 | 0.0032 |
| Concrete/Industrial Saws | 25 | 0.30 | 1.23 | 2.29 | 0.0038 | 0.085 | 0.079 | 299.8 | 0.0172 | 0.0078 |
| | 50 | 0.18 | 2.04 | 1.60 | 0.0035 | 0.028 | 0.025 | 274.1 | 0.0158 | 0.0072 |
| Plate Compactors | 25 | 0.08 | 0.48 | 0.57 | 0.0012 | 0.022 | 0.020 | 78.2 | 0.0045 | 0.0020 |
| Light Commercial - Pumps | 25 | 0.18 | 0.97 | 1.39 | 0.0026 | 0.056 | 0.051 | 184.9 | 0.0106 | 0.0048 |
| Non-Rental Compressor | 100 | 0.04 | 0.90 | 0.42 | 0.0012 | 0.031 | 0.029 | 134.3 | 0.0075 | 0.0034 |
| Non-Rental Generator | 50 | 0.13 | 1.52 | 1.02 | 0.0014 | 0.039 | 0.036 | 148.0 | 0.0083 | 0.0038 |

Source: OFFROAD 2017.

Table C-35 2029 Construction Equipment Emission Factors (grams/hp-hr)

| Equipment | HP | VOC | CO | NO _x | SO ₂ | PM ₁₀ | PM _{2.5} | CO ₂ | CH ₄ | N ₂ O |
|---------------------------------------|-----|------|------|-----------------|-----------------|------------------|-------------------|-----------------|-----------------|------------------|
| Agricultural - Construction Equipment | 100 | 0.17 | 1.24 | 1.01 | 0.0003 | 0.087 | 0.080 | 28.1 | 0.0112 | 0.0051 |
| Agricultural - Others | 600 | 0.08 | 0.39 | 0.60 | 0.0002 | 0.026 | 0.024 | 18.7 | 0.0074 | 0.0034 |
| Bore/Drill Rigs | 175 | 0.05 | 1.27 | 0.35 | 0.0021 | 0.017 | 0.015 | 227.8 | 0.0127 | 0.0058 |
| Cranes | 300 | 0.05 | 0.30 | 0.43 | 0.0010 | 0.018 | 0.017 | 111.2 | 0.0062 | 0.0028 |
| Excavators | 175 | 0.04 | 0.99 | 0.25 | 0.0016 | 0.012 | 0.011 | 168.3 | 0.0094 | 0.0043 |
| Graders | 300 | 0.06 | 0.34 | 0.46 | 0.0014 | 0.016 | 0.015 | 154.7 | 0.0086 | 0.0039 |
| Off-Highway Trucks | 600 | 0.04 | 0.28 | 0.20 | 0.0012 | 0.007 | 0.006 | 126.7 | 0.0071 | 0.0032 |
| Other Construction Equipment | 175 | 0.08 | 1.14 | 0.62 | 0.0018 | 0.032 | 0.030 | 190.1 | 0.0106 | 0.0048 |
| | 600 | 0.04 | 0.33 | 0.29 | 0.0013 | 0.011 | 0.010 | 140.6 | 0.0079 | 0.0036 |
| Pavers | 175 | 0.06 | 1.13 | 0.44 | 0.0018 | 0.022 | 0.020 | 198.0 | 0.0111 | 0.0050 |
| Paving Equipment | 50 | 0.11 | 1.04 | 0.88 | 0.0013 | 0.030 | 0.028 | 144.2 | 0.0081 | 0.0037 |
| | 175 | 0.05 | 0.92 | 0.37 | 0.0015 | 0.020 | 0.018 | 157.3 | 0.0088 | 0.0040 |
| Rollers | 100 | 0.07 | 1.12 | 0.72 | 0.0016 | 0.029 | 0.027 | 173.0 | 0.0097 | 0.0044 |
| Rough Terrain Forklifts | 100 | 0.04 | 1.24 | 0.60 | 0.0019 | 0.011 | 0.010 | 204.6 | 0.0114 | 0.0052 |
| Rubber Tired Dozers | 175 | 0.10 | 1.17 | 0.77 | 0.0016 | 0.042 | 0.039 | 173.5 | 0.0097 | 0.0044 |
| Rubber Tired Loaders | 175 | 0.06 | 1.03 | 0.30 | 0.0015 | 0.015 | 0.014 | 163.3 | 0.0091 | 0.0042 |
| Scrapers | 600 | 0.06 | 0.50 | 0.47 | 0.0017 | 0.019 | 0.017 | 180.3 | 0.0101 | 0.0046 |
| Skid Steer Loaders | 75 | 0.04 | 1.12 | 0.58 | 0.0017 | 0.014 | 0.013 | 183.3 | 0.0102 | 0.0047 |
| Tractors/Loaders/Backhoes | 75 | 0.55 | 1.84 | 4.30 | 0.0017 | 0.353 | 0.325 | 185.7 | 0.0104 | 0.0047 |
| | 100 | 0.05 | 1.08 | 0.53 | 0.0015 | 0.013 | 0.012 | 163.0 | 0.0091 | 0.0042 |
| | 175 | 0.04 | 0.94 | 0.26 | 0.0015 | 0.013 | 0.012 | 159.0 | 0.0089 | 0.0041 |
| Trenchers | 75 | 0.41 | 2.08 | 3.48 | 0.0022 | 0.238 | 0.219 | 244.2 | 0.0136 | 0.0062 |
| Aerial Lifts | 75 | 0.03 | 0.92 | 0.47 | 0.0014 | 0.011 | 0.011 | 151.8 | 0.0085 | 0.0039 |
| | 100 | 0.02 | 0.74 | 0.33 | 0.0012 | 0.003 | 0.003 | 124.6 | 0.0070 | 0.0032 |
| Concrete/Industrial Saws | 25 | 0.30 | 1.25 | 2.31 | 0.0039 | 0.086 | 0.080 | 303.6 | 0.0172 | 0.0078 |
| | 50 | 0.17 | 2.03 | 1.57 | 0.0035 | 0.023 | 0.021 | 274.0 | 0.0157 | 0.0072 |
| Plate Compactors | 25 | 0.08 | 0.48 | 0.57 | 0.0012 | 0.022 | 0.020 | 78.2 | 0.0045 | 0.0020 |
| Light Commercial - Pumps | 25 | 0.18 | 0.97 | 1.38 | 0.0026 | 0.055 | 0.050 | 184.9 | 0.0106 | 0.0048 |
| Non-Rental Compressor | 100 | 0.03 | 0.90 | 0.40 | 0.0012 | 0.028 | 0.026 | 134.3 | 0.0075 | 0.0034 |
| Non-Rental Generator | 50 | 0.13 | 1.52 | 0.97 | 0.0014 | 0.032 | 0.029 | 148.0 | 0.0083 | 0.0038 |

Source: OFFROAD 2017.

Table C-36 2030 Construction Equipment Emission Factors (grams/hp-hr)

| Equipment | HP | VOC | CO | NO _x | SO ₂ | PM ₁₀ | PM _{2.5} | CO ₂ | CH ₄ | N ₂ O |
|---------------------------------------|-----|------|------|-----------------|-----------------|------------------|-------------------|-----------------|-----------------|------------------|
| Agricultural - Construction Equipment | 100 | 0.16 | 1.24 | 0.94 | 0.0003 | 0.081 | 0.074 | 28.1 | 0.0112 | 0.0051 |
| Agricultural - Others | 600 | 0.07 | 0.38 | 0.56 | 0.0002 | 0.024 | 0.022 | 18.7 | 0.0074 | 0.0034 |
| Bore/Drill Rigs | 175 | 0.05 | 1.27 | 0.33 | 0.0021 | 0.016 | 0.015 | 227.8 | 0.0127 | 0.0058 |
| Cranes | 300 | 0.05 | 0.28 | 0.40 | 0.0010 | 0.017 | 0.016 | 111.2 | 0.0062 | 0.0028 |
| Excavators | 175 | 0.04 | 0.99 | 0.23 | 0.0016 | 0.011 | 0.010 | 168.3 | 0.0094 | 0.0043 |
| Graders | 300 | 0.06 | 0.34 | 0.43 | 0.0014 | 0.015 | 0.014 | 154.7 | 0.0086 | 0.0039 |
| Off-Highway Trucks | 600 | 0.04 | 0.28 | 0.19 | 0.0012 | 0.007 | 0.006 | 126.7 | 0.0071 | 0.0032 |
| Other Construction Equipment | 175 | 0.07 | 1.14 | 0.59 | 0.0018 | 0.031 | 0.028 | 190.1 | 0.0106 | 0.0048 |
| | 600 | 0.04 | 0.33 | 0.27 | 0.0013 | 0.010 | 0.010 | 140.6 | 0.0079 | 0.0036 |
| Pavers | 175 | 0.06 | 1.13 | 0.41 | 0.0018 | 0.020 | 0.019 | 198.0 | 0.0111 | 0.0050 |
| Paving Equipment | 50 | 0.10 | 1.03 | 0.86 | 0.0013 | 0.025 | 0.023 | 144.2 | 0.0081 | 0.0037 |
| | 175 | 0.05 | 0.92 | 0.36 | 0.0015 | 0.020 | 0.018 | 157.3 | 0.0088 | 0.0040 |
| Rollers | 100 | 0.06 | 1.12 | 0.71 | 0.0016 | 0.027 | 0.025 | 173.0 | 0.0097 | 0.0044 |
| Rough Terrain Forklifts | 100 | 0.04 | 1.24 | 0.60 | 0.0019 | 0.010 | 0.009 | 204.6 | 0.0114 | 0.0052 |
| Rubber Tired Dozers | 175 | 0.10 | 1.17 | 0.70 | 0.0016 | 0.041 | 0.038 | 173.5 | 0.0097 | 0.0044 |
| Rubber Tired Loaders | 175 | 0.06 | 1.03 | 0.28 | 0.0015 | 0.014 | 0.013 | 163.3 | 0.0091 | 0.0042 |
| Scrapers | 600 | 0.06 | 0.50 | 0.44 | 0.0017 | 0.018 | 0.017 | 180.3 | 0.0101 | 0.0046 |
| Skid Steer Loaders | 75 | 0.04 | 1.12 | 0.57 | 0.0017 | 0.013 | 0.012 | 183.3 | 0.0102 | 0.0047 |
| Tractors/Loaders/Backhoes | 75 | 0.53 | 1.80 | 4.18 | 0.0017 | 0.348 | 0.320 | 185.7 | 0.0104 | 0.0047 |
| | 100 | 0.05 | 1.08 | 0.52 | 0.0015 | 0.012 | 0.011 | 163.0 | 0.0091 | 0.0042 |
| | 175 | 0.04 | 0.94 | 0.24 | 0.0015 | 0.012 | 0.011 | 159.0 | 0.0089 | 0.0041 |
| Trenchers | 75 | 0.38 | 2.03 | 3.19 | 0.0022 | 0.227 | 0.209 | 244.2 | 0.0136 | 0.0062 |
| Aerial Lifts | 75 | 0.03 | 0.92 | 0.46 | 0.0014 | 0.011 | 0.010 | 151.8 | 0.0085 | 0.0039 |
| | 100 | 0.02 | 0.74 | 0.33 | 0.0012 | 0.003 | 0.003 | 124.6 | 0.0070 | 0.0032 |
| Concrete/Industrial Saws | 25 | 0.30 | 1.24 | 2.29 | 0.0038 | 0.086 | 0.079 | 300.6 | 0.0168 | 0.0077 |
| | 50 | 0.16 | 2.02 | 1.55 | 0.0035 | 0.020 | 0.018 | 273.2 | 0.0157 | 0.0072 |
| Plate Compactors | 25 | 0.08 | 0.48 | 0.57 | 0.0012 | 0.022 | 0.020 | 78.2 | 0.0045 | 0.0020 |
| Light Commercial - Pumps | 25 | 0.18 | 0.97 | 1.38 | 0.0026 | 0.054 | 0.050 | 184.9 | 0.0106 | 0.0048 |
| Non-Rental Compressor | 100 | 0.03 | 0.90 | 0.40 | 0.0012 | 0.028 | 0.026 | 134.3 | 0.0075 | 0.0034 |
| Non-Rental Generator | 50 | 0.13 | 1.52 | 0.97 | 0.0014 | 0.032 | 0.029 | 148.0 | 0.0083 | 0.0038 |

Source: OFFROAD 2017.

Table C-37 2031 Construction Equipment Emission Factors (grams/hp-hr)

| Equipment | HP | VOC | CO | NO _x | SO ₂ | PM ₁₀ | PM _{2.5} | CO ₂ | CH ₄ | N ₂ O |
|---------------------------------------|-----|------|------|-----------------|-----------------|------------------|-------------------|-----------------|-----------------|------------------|
| Agricultural - Construction Equipment | 100 | 0.15 | 1.23 | 0.87 | 0.0003 | 0.075 | 0.069 | 28.1 | 0.0112 | 0.0051 |
| Agricultural - Others | 600 | 0.07 | 0.37 | 0.52 | 0.0002 | 0.023 | 0.021 | 18.7 | 0.0074 | 0.0034 |
| Bore/Drill Rigs | 175 | 0.05 | 1.27 | 0.31 | 0.0021 | 0.015 | 0.014 | 227.8 | 0.0127 | 0.0058 |
| Cranes | 300 | 0.04 | 0.28 | 0.38 | 0.0010 | 0.016 | 0.015 | 111.2 | 0.0062 | 0.0028 |
| Excavators | 175 | 0.04 | 0.98 | 0.22 | 0.0016 | 0.011 | 0.010 | 168.3 | 0.0094 | 0.0043 |
| Graders | 300 | 0.05 | 0.34 | 0.38 | 0.0014 | 0.013 | 0.012 | 154.7 | 0.0086 | 0.0039 |
| Off-Highway Trucks | 600 | 0.04 | 0.27 | 0.17 | 0.0012 | 0.007 | 0.006 | 126.7 | 0.0071 | 0.0032 |
| Other Construction Equipment | 175 | 0.07 | 1.14 | 0.54 | 0.0018 | 0.029 | 0.027 | 190.1 | 0.0106 | 0.0048 |
| | 600 | 0.04 | 0.33 | 0.25 | 0.0013 | 0.010 | 0.009 | 140.6 | 0.0079 | 0.0036 |
| Pavers | 175 | 0.05 | 1.13 | 0.37 | 0.0018 | 0.019 | 0.017 | 198.1 | 0.0111 | 0.0050 |
| Paving Equipment | 50 | 0.08 | 1.01 | 0.84 | 0.0013 | 0.022 | 0.020 | 144.2 | 0.0081 | 0.0037 |
| | 175 | 0.05 | 0.91 | 0.31 | 0.0015 | 0.018 | 0.016 | 157.1 | 0.0088 | 0.0040 |
| Rollers | 100 | 0.06 | 1.11 | 0.69 | 0.0016 | 0.026 | 0.024 | 173.0 | 0.0097 | 0.0044 |
| Rough Terrain Forklifts | 100 | 0.04 | 1.24 | 0.59 | 0.0019 | 0.010 | 0.009 | 204.6 | 0.0114 | 0.0052 |
| Rubber Tired Dozers | 175 | 0.10 | 1.17 | 0.65 | 0.0016 | 0.040 | 0.037 | 173.5 | 0.0097 | 0.0044 |
| Rubber Tired Loaders | 175 | 0.05 | 1.03 | 0.26 | 0.0015 | 0.013 | 0.012 | 163.3 | 0.0091 | 0.0042 |
| Scrapers | 600 | 0.06 | 0.49 | 0.41 | 0.0017 | 0.017 | 0.016 | 180.3 | 0.0101 | 0.0046 |
| Skid Steer Loaders | 75 | 0.04 | 1.12 | 0.56 | 0.0017 | 0.012 | 0.011 | 183.3 | 0.0102 | 0.0047 |
| Tractors/Loaders/Backhoes | 75 | 0.53 | 1.80 | 4.18 | 0.0017 | 0.348 | 0.320 | 185.7 | 0.0104 | 0.0047 |
| | 100 | 0.05 | 1.08 | 0.50 | 0.0015 | 0.011 | 0.010 | 163.0 | 0.0091 | 0.0042 |
| | 175 | 0.04 | 0.94 | 0.23 | 0.0015 | 0.011 | 0.011 | 159.0 | 0.0089 | 0.0041 |
| Trenchers | 75 | 0.37 | 1.99 | 3.08 | 0.0022 | 0.223 | 0.205 | 244.2 | 0.0136 | 0.0062 |
| Aerial Lifts | 75 | 0.03 | 0.92 | 0.46 | 0.0014 | 0.011 | 0.010 | 151.8 | 0.0085 | 0.0039 |
| | 100 | 0.02 | 0.74 | 0.32 | 0.0012 | 0.003 | 0.003 | 124.6 | 0.0070 | 0.0032 |
| Concrete/Industrial Saws | 25 | 0.30 | 1.23 | 2.27 | 0.0038 | 0.085 | 0.078 | 297.8 | 0.0164 | 0.0075 |
| | 50 | 0.16 | 2.02 | 1.54 | 0.0035 | 0.017 | 0.016 | 273.7 | 0.0157 | 0.0072 |
| Plate Compactors | 25 | 0.08 | 0.48 | 0.57 | 0.0012 | 0.022 | 0.020 | 78.2 | 0.0045 | 0.0020 |
| Light Commercial - Pumps | 25 | 0.18 | 0.97 | 1.38 | 0.0026 | 0.054 | 0.049 | 184.9 | 0.0106 | 0.0048 |
| Non-Rental Compressor | 100 | 0.03 | 0.90 | 0.39 | 0.0012 | 0.027 | 0.025 | 134.3 | 0.0075 | 0.0034 |
| Non-Rental Generator | 50 | 0.13 | 1.52 | 0.97 | 0.0014 | 0.032 | 0.029 | 148.0 | 0.0083 | 0.0038 |

Source: OFFROAD 2017.

Table C-38 2032 Construction Equipment Emission Factors (grams/hp-hr)

| Equipment | HP | VOC | CO | NO_x | SO₂ | PM₁₀ | PM_{2.5} | CO₂ | CH₄ | N₂O |
|---------------------------------------|-----------|------------|-----------|-----------------------|-----------------------|------------------------|-------------------------|-----------------------|-----------------------|-----------------------|
| Agricultural - Construction Equipment | 100 | 0.14 | 1.23 | 0.80 | 0.0003 | 0.070 | 0.065 | 28.1 | 0.0112 | 0.0051 |
| Agricultural - Others | 600 | 0.07 | 0.36 | 0.49 | 0.0002 | 0.021 | 0.020 | 18.7 | 0.0074 | 0.0034 |
| Bore/Drill Rigs | 175 | 0.05 | 1.27 | 0.30 | 0.0021 | 0.015 | 0.013 | 227.8 | 0.0127 | 0.0058 |
| Cranes | 300 | 0.04 | 0.28 | 0.35 | 0.0010 | 0.015 | 0.014 | 111.2 | 0.0062 | 0.0028 |
| Excavators | 175 | 0.04 | 0.98 | 0.20 | 0.0016 | 0.010 | 0.009 | 168.3 | 0.0094 | 0.0043 |
| Graders | 300 | 0.05 | 0.34 | 0.34 | 0.0014 | 0.012 | 0.011 | 154.7 | 0.0086 | 0.0039 |
| Off-Highway Trucks | 600 | 0.04 | 0.27 | 0.16 | 0.0012 | 0.006 | 0.006 | 126.7 | 0.0071 | 0.0032 |
| Other Construction Equipment | 175 | 0.07 | 1.14 | 0.50 | 0.0018 | 0.027 | 0.025 | 190.1 | 0.0106 | 0.0048 |
| | 600 | 0.04 | 0.33 | 0.24 | 0.0013 | 0.009 | 0.009 | 140.6 | 0.0079 | 0.0036 |
| Pavers | 175 | 0.05 | 1.13 | 0.35 | 0.0018 | 0.018 | 0.017 | 198.1 | 0.0111 | 0.0050 |
| Paving Equipment | 50 | 0.08 | 1.00 | 0.84 | 0.0013 | 0.020 | 0.019 | 144.2 | 0.0081 | 0.0037 |
| | 175 | 0.05 | 0.91 | 0.30 | 0.0015 | 0.018 | 0.016 | 157.3 | 0.0088 | 0.0040 |
| Rollers | 100 | 0.06 | 1.11 | 0.67 | 0.0016 | 0.025 | 0.023 | 173.0 | 0.0097 | 0.0044 |
| Rough Terrain Forklifts | 100 | 0.04 | 1.24 | 0.58 | 0.0019 | 0.009 | 0.009 | 204.6 | 0.0114 | 0.0052 |
| Rubber Tired Dozers | 175 | 0.09 | 1.16 | 0.61 | 0.0016 | 0.039 | 0.036 | 173.5 | 0.0097 | 0.0044 |
| Rubber Tired Loaders | 175 | 0.05 | 1.03 | 0.24 | 0.0015 | 0.013 | 0.012 | 163.3 | 0.0091 | 0.0042 |
| Scrapers | 600 | 0.06 | 0.49 | 0.39 | 0.0017 | 0.017 | 0.015 | 180.3 | 0.0101 | 0.0046 |
| Skid Steer Loaders | 75 | 0.04 | 1.12 | 0.55 | 0.0017 | 0.011 | 0.010 | 183.3 | 0.0102 | 0.0047 |
| Tractors/Loaders/Backhoes | 75 | 0.52 | 1.75 | 3.96 | 0.0017 | 0.348 | 0.320 | 185.7 | 0.0104 | 0.0047 |
| | 100 | 0.05 | 1.08 | 0.50 | 0.0015 | 0.011 | 0.010 | 163.0 | 0.0091 | 0.0042 |
| | 175 | 0.04 | 0.94 | 0.22 | 0.0015 | 0.011 | 0.010 | 159.0 | 0.0089 | 0.0041 |
| Trenchers | 75 | 0.37 | 1.99 | 3.07 | 0.0022 | 0.223 | 0.205 | 244.2 | 0.0136 | 0.0062 |
| Aerial Lifts | 75 | 0.03 | 0.92 | 0.45 | 0.0014 | 0.010 | 0.010 | 151.8 | 0.0085 | 0.0039 |
| | 100 | 0.02 | 0.74 | 0.32 | 0.0012 | 0.003 | 0.003 | 124.6 | 0.0070 | 0.0032 |
| Concrete/Industrial Saws | 25 | 0.30 | 1.23 | 2.27 | 0.0038 | 0.085 | 0.078 | 298.2 | 0.0165 | 0.0075 |
| | 50 | 0.15 | 2.01 | 1.52 | 0.0035 | 0.015 | 0.014 | 273.0 | 0.0157 | 0.0071 |
| Plate Compactors | 25 | 0.08 | 0.48 | 0.57 | 0.0012 | 0.022 | 0.020 | 78.2 | 0.0045 | 0.0020 |
| Light Commercial - Pumps | 25 | 0.18 | 0.97 | 1.38 | 0.0026 | 0.053 | 0.049 | 184.9 | 0.0106 | 0.0048 |
| Non-Rental Compressor | 100 | 0.03 | 0.90 | 0.37 | 0.0012 | 0.026 | 0.024 | 134.3 | 0.0075 | 0.0034 |
| Non-Rental Generator | 50 | 0.13 | 1.52 | 0.97 | 0.0014 | 0.032 | 0.029 | 148.0 | 0.0083 | 0.0038 |

Source: OFFROAD 2017.

Table C-39 2033 Construction Equipment Emission Factors (grams/hp-hr)

| Equipment | HP | VOC | CO | NO _x | SO ₂ | PM ₁₀ | PM _{2.5} | CO ₂ | CH ₄ | N ₂ O |
|---------------------------------------|-----|------|------|-----------------|-----------------|------------------|-------------------|-----------------|-----------------|------------------|
| Agricultural - Construction Equipment | 100 | 0.13 | 1.22 | 0.74 | 0.0003 | 0.065 | 0.060 | 28.1 | 0.0112 | 0.0051 |
| Agricultural - Others | 600 | 0.07 | 0.35 | 0.46 | 0.0002 | 0.020 | 0.018 | 18.7 | 0.0074 | 0.0034 |
| Bore/Drill Rigs | 175 | 0.04 | 1.27 | 0.28 | 0.0021 | 0.013 | 0.012 | 227.8 | 0.0127 | 0.0058 |
| Cranes | 300 | 0.04 | 0.28 | 0.33 | 0.0010 | 0.014 | 0.013 | 111.2 | 0.0062 | 0.0028 |
| Excavators | 175 | 0.04 | 0.98 | 0.19 | 0.0016 | 0.009 | 0.009 | 168.3 | 0.0094 | 0.0043 |
| Graders | 300 | 0.05 | 0.34 | 0.31 | 0.0014 | 0.011 | 0.010 | 154.7 | 0.0086 | 0.0039 |
| Off-Highway Trucks | 600 | 0.04 | 0.27 | 0.15 | 0.0012 | 0.006 | 0.006 | 126.7 | 0.0071 | 0.0032 |
| Other Construction Equipment | 175 | 0.07 | 1.14 | 0.48 | 0.0018 | 0.025 | 0.023 | 190.1 | 0.0106 | 0.0048 |
| | 600 | 0.03 | 0.33 | 0.22 | 0.0013 | 0.009 | 0.008 | 140.6 | 0.0079 | 0.0036 |
| Pavers | 175 | 0.05 | 1.13 | 0.33 | 0.0018 | 0.017 | 0.016 | 198.1 | 0.0111 | 0.0050 |
| Paving Equipment | 50 | 0.08 | 1.00 | 0.83 | 0.0013 | 0.018 | 0.016 | 144.2 | 0.0081 | 0.0037 |
| | 175 | 0.05 | 0.91 | 0.29 | 0.0015 | 0.017 | 0.015 | 157.3 | 0.0088 | 0.0040 |
| Rollers | 100 | 0.06 | 1.11 | 0.65 | 0.0016 | 0.023 | 0.021 | 173.0 | 0.0097 | 0.0044 |
| Rough Terrain Forklifts | 100 | 0.04 | 1.24 | 0.58 | 0.0019 | 0.009 | 0.008 | 204.6 | 0.0114 | 0.0052 |
| Rubber Tired Dozers | 175 | 0.09 | 1.16 | 0.61 | 0.0016 | 0.039 | 0.036 | 173.5 | 0.0097 | 0.0044 |
| Rubber Tired Loaders | 175 | 0.05 | 1.03 | 0.22 | 0.0015 | 0.012 | 0.011 | 163.3 | 0.0091 | 0.0042 |
| Scrapers | 600 | 0.06 | 0.49 | 0.37 | 0.0017 | 0.015 | 0.014 | 180.3 | 0.0101 | 0.0046 |
| Skid Steer Loaders | 75 | 0.04 | 1.12 | 0.54 | 0.0017 | 0.010 | 0.009 | 183.3 | 0.0102 | 0.0047 |
| Tractors/Loaders/Backhoes | 75 | 0.51 | 1.73 | 3.84 | 0.0017 | 0.349 | 0.321 | 185.7 | 0.0104 | 0.0047 |
| | 100 | 0.05 | 1.08 | 0.49 | 0.0015 | 0.010 | 0.009 | 163.0 | 0.0091 | 0.0042 |
| | 175 | 0.04 | 0.94 | 0.21 | 0.0015 | 0.010 | 0.009 | 159.0 | 0.0089 | 0.0041 |
| Trenchers | 75 | 0.37 | 1.99 | 3.07 | 0.0022 | 0.224 | 0.206 | 244.2 | 0.0136 | 0.0062 |
| Aerial Lifts | 75 | 0.03 | 0.92 | 0.44 | 0.0014 | 0.009 | 0.008 | 151.8 | 0.0085 | 0.0039 |
| | 100 | 0.02 | 0.74 | 0.32 | 0.0012 | 0.003 | 0.003 | 124.6 | 0.0070 | 0.0032 |
| Concrete/Industrial Saws | 25 | 0.30 | 1.23 | 2.28 | 0.0038 | 0.085 | 0.078 | 298.6 | 0.0168 | 0.0077 |
| | 50 | 0.15 | 2.01 | 1.51 | 0.0035 | 0.013 | 0.012 | 273.5 | 0.0157 | 0.0072 |
| Plate Compactors | 25 | 0.08 | 0.48 | 0.57 | 0.0012 | 0.022 | 0.020 | 78.2 | 0.0045 | 0.0020 |
| Light Commercial - Pumps | 25 | 0.18 | 0.97 | 1.38 | 0.0026 | 0.053 | 0.049 | 184.9 | 0.0106 | 0.0048 |
| Non-Rental Compressor | 100 | 0.03 | 0.90 | 0.32 | 0.0012 | 0.024 | 0.022 | 134.3 | 0.0075 | 0.0034 |
| Non-Rental Generator | 50 | 0.13 | 1.52 | 0.82 | 0.0014 | 0.010 | 0.009 | 148.0 | 0.0083 | 0.0038 |

Source: OFFROAD 2017.

Table C-40 2034 Construction Equipment Emission Factors (grams/hp-hr)

| Equipment | HP | VOC | CO | NO _x | SO ₂ | PM ₁₀ | PM _{2.5} | CO ₂ | CH ₄ | N ₂ O |
|---------------------------------------|-----|------|------|-----------------|-----------------|------------------|-------------------|-----------------|-----------------|------------------|
| Agricultural - Construction Equipment | 100 | 0.13 | 1.22 | 0.69 | 0.0003 | 0.061 | 0.056 | 28.1 | 0.0112 | 0.0051 |
| Agricultural - Others | 600 | 0.06 | 0.35 | 0.43 | 0.0002 | 0.019 | 0.017 | 18.7 | 0.0074 | 0.0034 |
| Bore/Drill Rigs | 175 | 0.04 | 1.27 | 0.27 | 0.0021 | 0.012 | 0.011 | 227.8 | 0.0127 | 0.0058 |
| Cranes | 300 | 0.04 | 0.27 | 0.32 | 0.0010 | 0.014 | 0.013 | 111.2 | 0.0062 | 0.0028 |
| Excavators | 175 | 0.04 | 0.98 | 0.18 | 0.0016 | 0.009 | 0.008 | 168.3 | 0.0094 | 0.0043 |
| Graders | 300 | 0.05 | 0.34 | 0.28 | 0.0014 | 0.010 | 0.009 | 154.7 | 0.0086 | 0.0039 |
| Off-Highway Trucks | 600 | 0.04 | 0.27 | 0.15 | 0.0012 | 0.006 | 0.005 | 126.7 | 0.0071 | 0.0032 |
| Other Construction Equipment | 175 | 0.06 | 1.14 | 0.47 | 0.0018 | 0.023 | 0.021 | 190.1 | 0.0106 | 0.0048 |
| | 600 | 0.03 | 0.33 | 0.20 | 0.0013 | 0.008 | 0.007 | 140.6 | 0.0079 | 0.0036 |
| Pavers | 175 | 0.05 | 1.13 | 0.30 | 0.0018 | 0.015 | 0.014 | 198.1 | 0.0111 | 0.0050 |
| Paving Equipment | 50 | 0.07 | 1.00 | 0.82 | 0.0013 | 0.015 | 0.014 | 144.2 | 0.0081 | 0.0037 |
| | 175 | 0.04 | 0.91 | 0.28 | 0.0015 | 0.016 | 0.014 | 157.3 | 0.0088 | 0.0040 |
| Rollers | 100 | 0.06 | 1.11 | 0.64 | 0.0016 | 0.022 | 0.020 | 173.0 | 0.0097 | 0.0044 |
| Rough Terrain Forklifts | 100 | 0.04 | 1.24 | 0.57 | 0.0019 | 0.009 | 0.008 | 204.6 | 0.0114 | 0.0052 |
| Rubber Tired Dozers | 175 | 0.09 | 1.16 | 0.60 | 0.0016 | 0.037 | 0.034 | 173.5 | 0.0097 | 0.0044 |
| Rubber Tired Loaders | 175 | 0.05 | 1.03 | 0.21 | 0.0015 | 0.011 | 0.010 | 163.3 | 0.0091 | 0.0042 |
| Scrapers | 600 | 0.05 | 0.48 | 0.34 | 0.0017 | 0.014 | 0.013 | 180.3 | 0.0101 | 0.0046 |
| Skid Steer Loaders | 75 | 0.04 | 1.12 | 0.53 | 0.0017 | 0.009 | 0.009 | 183.3 | 0.0102 | 0.0047 |
| Tractors/Loaders/Backhoes | 75 | 0.51 | 1.72 | 3.75 | 0.0017 | 0.349 | 0.321 | 185.7 | 0.0104 | 0.0047 |
| | 100 | 0.05 | 1.08 | 0.48 | 0.0015 | 0.009 | 0.008 | 163.0 | 0.0091 | 0.0042 |
| | 175 | 0.04 | 0.94 | 0.20 | 0.0015 | 0.009 | 0.009 | 159.0 | 0.0089 | 0.0041 |
| Trenchers | 75 | 0.37 | 1.98 | 3.01 | 0.0022 | 0.214 | 0.197 | 244.2 | 0.0136 | 0.0062 |
| Aerial Lifts | 75 | 0.03 | 0.92 | 0.44 | 0.0014 | 0.008 | 0.007 | 151.8 | 0.0085 | 0.0039 |
| | 100 | 0.02 | 0.74 | 0.32 | 0.0012 | 0.003 | 0.003 | 124.6 | 0.0070 | 0.0032 |
| Concrete/Industrial Saws | 25 | 0.30 | 1.24 | 2.30 | 0.0038 | 0.086 | 0.079 | 302.1 | 0.0175 | 0.0080 |
| | 50 | 0.15 | 2.01 | 1.51 | 0.0035 | 0.011 | 0.011 | 274.1 | 0.0157 | 0.0072 |
| Plate Compactors | 25 | 0.08 | 0.48 | 0.57 | 0.0012 | 0.022 | 0.020 | 78.2 | 0.0045 | 0.0020 |
| Light Commercial - Pumps | 25 | 0.18 | 0.97 | 1.38 | 0.0026 | 0.053 | 0.049 | 184.9 | 0.0106 | 0.0048 |
| Non-Rental Compressor | 100 | 0.03 | 0.90 | 0.29 | 0.0012 | 0.022 | 0.021 | 134.3 | 0.0075 | 0.0034 |
| Non-Rental Generator | 50 | 0.13 | 1.52 | 0.82 | 0.0014 | 0.006 | 0.005 | 148.0 | 0.0083 | 0.0038 |

Source: OFFROAD 2017.

Table C-41 2035 Construction Equipment Emission Factors (grams/hp-hr)

| Equipment | HP | VOC | CO | NO _x | SO ₂ | PM ₁₀ | PM _{2.5} | CO ₂ | CH ₄ | N ₂ O |
|---------------------------------------|-----|------|------|-----------------|-----------------|------------------|-------------------|-----------------|-----------------|------------------|
| Agricultural - Construction Equipment | 100 | 0.12 | 1.22 | 0.64 | 0.0003 | 0.056 | 0.052 | 28.1 | 0.0112 | 0.0051 |
| Agricultural - Others | 600 | 0.06 | 0.34 | 0.40 | 0.0002 | 0.018 | 0.016 | 18.7 | 0.0074 | 0.0034 |
| Bore/Drill Rigs | 175 | 0.04 | 1.27 | 0.27 | 0.0021 | 0.011 | 0.011 | 227.8 | 0.0127 | 0.0058 |
| Cranes | 300 | 0.04 | 0.27 | 0.30 | 0.0010 | 0.013 | 0.012 | 111.2 | 0.0062 | 0.0028 |
| Excavators | 175 | 0.04 | 0.98 | 0.17 | 0.0016 | 0.008 | 0.007 | 168.3 | 0.0094 | 0.0043 |
| Graders | 300 | 0.05 | 0.34 | 0.24 | 0.0014 | 0.009 | 0.008 | 154.7 | 0.0086 | 0.0039 |
| Off-Highway Trucks | 600 | 0.04 | 0.27 | 0.14 | 0.0012 | 0.005 | 0.005 | 126.7 | 0.0071 | 0.0032 |
| Other Construction Equipment | 175 | 0.06 | 1.14 | 0.45 | 0.0018 | 0.022 | 0.020 | 190.1 | 0.0106 | 0.0048 |
| | 600 | 0.03 | 0.32 | 0.19 | 0.0013 | 0.007 | 0.007 | 140.6 | 0.0079 | 0.0036 |
| Pavers | 175 | 0.05 | 1.13 | 0.29 | 0.0018 | 0.014 | 0.013 | 198.1 | 0.0111 | 0.0050 |
| Paving Equipment | 50 | 0.07 | 0.99 | 0.80 | 0.0013 | 0.011 | 0.010 | 144.2 | 0.0081 | 0.0037 |
| | 175 | 0.04 | 0.91 | 0.27 | 0.0015 | 0.015 | 0.014 | 157.3 | 0.0088 | 0.0040 |
| Rollers | 100 | 0.06 | 1.11 | 0.63 | 0.0016 | 0.021 | 0.019 | 173.0 | 0.0097 | 0.0044 |
| Rough Terrain Forklifts | 100 | 0.04 | 1.24 | 0.57 | 0.0019 | 0.009 | 0.008 | 204.6 | 0.0114 | 0.0052 |
| Rubber Tired Dozers | 175 | 0.09 | 1.16 | 0.57 | 0.0016 | 0.034 | 0.031 | 173.5 | 0.0097 | 0.0044 |
| Rubber Tired Loaders | 175 | 0.05 | 1.03 | 0.20 | 0.0015 | 0.010 | 0.009 | 163.3 | 0.0091 | 0.0042 |
| Scrapers | 600 | 0.05 | 0.48 | 0.32 | 0.0017 | 0.013 | 0.012 | 180.3 | 0.0101 | 0.0046 |
| Skid Steer Loaders | 75 | 0.04 | 1.12 | 0.52 | 0.0017 | 0.009 | 0.008 | 183.3 | 0.0102 | 0.0047 |
| Tractors/Loaders/Backhoes | 75 | 0.50 | 1.71 | 3.68 | 0.0017 | 0.349 | 0.321 | 185.7 | 0.0104 | 0.0047 |
| | 100 | 0.05 | 1.08 | 0.48 | 0.0015 | 0.008 | 0.007 | 163.0 | 0.0091 | 0.0042 |
| | 175 | 0.04 | 0.94 | 0.19 | 0.0015 | 0.009 | 0.008 | 159.0 | 0.0089 | 0.0041 |
| Trenchers | 75 | 0.36 | 1.95 | 2.90 | 0.0022 | 0.213 | 0.196 | 244.2 | 0.0136 | 0.0062 |
| Aerial Lifts | 75 | 0.03 | 0.92 | 0.43 | 0.0014 | 0.007 | 0.006 | 151.8 | 0.0085 | 0.0039 |
| | 100 | 0.02 | 0.74 | 0.32 | 0.0012 | 0.003 | 0.003 | 124.6 | 0.0070 | 0.0032 |
| Concrete/Industrial Saws | 25 | 0.30 | 1.23 | 2.28 | 0.0038 | 0.085 | 0.078 | 299.4 | 0.0176 | 0.0080 |
| | 50 | 0.15 | 2.01 | 1.50 | 0.0035 | 0.010 | 0.009 | 274.3 | 0.0157 | 0.0072 |
| Plate Compactors | 25 | 0.08 | 0.48 | 0.57 | 0.0012 | 0.022 | 0.020 | 78.2 | 0.0045 | 0.0020 |
| Light Commercial - Pumps | 25 | 0.18 | 0.97 | 1.37 | 0.0026 | 0.053 | 0.049 | 184.9 | 0.0106 | 0.0048 |
| Non-Rental Compressor | 100 | 0.03 | 0.90 | 0.24 | 0.0012 | 0.020 | 0.019 | 134.3 | 0.0075 | 0.0034 |
| Non-Rental Generator | 50 | 0.13 | 1.52 | 0.82 | 0.0014 | 0.006 | 0.005 | 148.0 | 0.0083 | 0.0038 |

Source: OFFROAD 2017.

1.5.3 Construction Schedules

Tables C-42 through C-45 provide the construction schedules for the proposed project and Alternative 4 and a table summarizing the project elements (including a description of each project, project location, and approximate areas). The construction schedules indicate that construction will begin in 2021 and be completed in 2035. Notably, the construction schedules are intended to provide a reasonable and conservative representation of project-related construction activities for emissions estimation purposes based on information available at the time of the analysis.

Table C-42: Demolition by Phase – Proposed Project

| Phase | Map ID # | Facility | Approximate Area (SF) ^a | Current Use | Disposition of Facility/Use |
|-----------------|----------|--|------------------------------------|--|--|
| Phase 1a | | | | | |
| 1a | A | Airport Administration Building | 132,000 | Airport Administration Offices | Building to be demolished. Function to be moved to a new building constructed on the west side of airport as part of the proposed project. |
| 1a | C | Facilities Management Department (FMD) Administration Building | 10,000 | FMD administrative offices | Building to be demolished. Function moved to new support facilities complex developed on the north side to be developed separate from the proposed project. |
| 1a | D | Triturator & Wash Rack | 3,500 | Lavatory waste trituration and vehicle washing | Buildings to be demolished. Function relocated to a smaller consolidated facility within the south side support facilities area. |
| 1a | E | United Cargo | 17,000 | Aircraft belly cargo handling | Building to be demolished. Function relocated to the consolidated Airline Facility Support Building on the south side (east of the new T1) to be developed separate from the proposed project. |
| 1a | F | Southwest Cargo | 32,000 | Aircraft belly cargo handling | Building to be demolished. Function relocated to the consolidated Airline Facility Support Building on the south side (east of the new T1) to be developed separate from the proposed project. |
| 1a | G | Air Freight (Southwest, Alaska, Hawaiian, Delta, jetBlue) | 30,000 | Aircraft belly cargo handling | Building to be demolished. Function relocated to the consolidated Airline Support Building on the south side (east of the new T1) to be developed separate from the proposed project. |
| 1a | H | United Airlines Hangar and Terminal Building (a.k.a. the ASIG building or Menzies Aviation Maintenance) ^b | 9,000 | Fueling administration and support facility | Building to be demolished. Function relocated to the consolidated Airline Support Building on the south side (east of the new T1) to be developed separate from the proposed project. |
| 1a | I | American Airlines Maintenance | 12,000 | Airline maintenance facility | Building to be demolished. Function relocated to the consolidated Airline Support Building on the south side (east of the new T1) to be developed separate from the proposed project. |
| 1a | J | FMD Workshop; Paint Shop & Procurement | 29,000 | FMD maintenance workshop | Building to be demolished. Function moved to new support facilities complex on the north side to be developed separate from the proposed project. |
| 1a | K | FMD Maintenance Shops | 25,000 | FMD maintenance workshop | Building to be demolished. Function moved to new support facilities complex on the north side to be developed separate from the proposed project. |

Table C-42: Demolition by Phase – Proposed Project

| Phase | Map ID # | Facility | Approximate Area (SF) ^a | Current Use | Disposition of Facility/Use |
|--|----------|--|------------------------------------|---|--|
| 1a | L | Terminal 1 (Gates 1, 1A, & 2) | 36,000 | Passenger terminal | Partial structure to be demolished to make way for construction of initial phase of new Terminal 1 (East). |
| 1a | M | On-Airport Roadways | 590,000 | Arrivals/departure entry roadway | Airport roads and associated features to be demolished for construction of new roadway and parking improvements in Phase 1a. |
| 1a | N | Administration Building Parking Lot & Access Roads | 390,000 | Airport administration parking and access roads | Surface parking, airport roads, and associated features to be demolished for construction of new roadway improvements in Phase 1a. |
| 1a | O | Taxiway B | 300,000 | Taxiway B | Taxiway pavement to be demolished and replaced in conjunction with new T1 improvements in Phase 1a. |
| 1a | P | Employee/Public Parking Lots | 1,003,000 | Employee and public parking | Surface parking lot and associated features to be demolished in conjunction with new T1 improvements in Phase 1a. |
| 1a | Q | Terminal 1 Parking Lot | 270,000 | Terminal 1 surface parking lot | Surface parking lot and associated features to be demolished for construction of new roadway and parking improvements in Phase 1a. |
| 1a | R | Aircraft Apron | 1,415,000 | Aircraft apron | Aircraft apron pavement to be demolished and replaced in conjunction with initial phase of new T1. |
| Phase 1a - Buildings Total | | | 335,500 | | |
| Phase 1a - Surface Elements Total | | | 3,968,000 | | |
| Phase 1a - Total | | | 4,303,500 | | |
| Phase 1b | | | | | |
| 1b | S | Terminal 1 | 300,000 | Passenger terminal | Building to be demolished and replaced with remainder of new T1. |
| 1b | T | Terminal 1 Parking Lot | 300,000 | Surface parking lot | Surface parking lot and associated features to be demolished for construction of remainder of new T1 Parking Structure (East) |
| 1b | U | Aircraft Apron | 410,000 | Aircraft apron | Aircraft apron pavement to be demolished and replaced in conjunction with remaining phase of new T1. |
| 1b | V | Employee Parking Lot | 490,000 | Employee Parking Lot | Surface parking lot and associated features to be demolished for construction of RON area and nearby taxiway improvements. |
| 1b | W | Taxiway B | 300,000 | Taxiway B | Taxiway pavement to be demolished and replaced in conjunction with construction of new RON area nearby. |
| Phase 1b - Buildings Total | | | 300,000 | | |
| Phase 1b - Surface Elements Total | | | 1,500,000 | | |
| Phase 1b - Total | | | 1,800,000 | | |

Table C-42: Demolition by Phase – Proposed Project

| Phase | Map ID # | Facility | Approximate Area (SF) ^a | Current Use | Disposition of Facility/Use |
|--|----------|---------------------|------------------------------------|---------------------------------|---|
| Phase 2a | | | | | |
| 2a | X | Aircraft Apron | 440,000 | Aircraft apron | Aircraft apron pavement to be demolished and replaced in conjunction with construction of new concourse (stinger) at T2-West. |
| 2a | Y | NTC Parking Lot | 250,000 | Public and employee parking lot | Surface parking lot and associated features to be replaced with parking improvements in Phase 2a. |
| 2a | Z | On-Airport Roadways | 35,000 | On-airport roadways | Airport roads and associated features to be demolished and replaced with roadway improvements in Phase 2a. |
| Phase 2a - Buildings Total | | | 0 | | |
| Phase 2a - Surface Elements Total | | | 725,000 | | |
| Phase 2a - Total | | | 725,000 | | |
| Phase 2b | | | | | |
| 2b | AA | Terminal 2 East | 350,000 | Passenger terminal | Building to be demolished and replaced with new apron area and new concourse between the new T1 and existing T2-East |
| 2b | AB | Aircraft Apron | 540,000 | Aircraft apron | Aircraft apron pavement to be demolished and replaced with new apron area and new concourse between the new T1 and existing T2-East |
| Phase 2b - Buildings Total | | | 350,000 | | |
| Phase 2b - Surface Elements Total | | | 540,000 | | |
| Phase 2b - Total | | | 890,000 | | |
| Project Total (Phases 1 and 2) [demolition] | | | | | |
| Project Total - Buildings | | | 985,500 | | |
| Project Total - Surface Elements | | | 6,733,000 | | |
| Grand Total | | | 7,718,500 | | |

Table C-43: New Construction by Phase – Proposed Project

| Phase | Map ID # | Facility Type | Approximate Area (square feet) | Building Height (feet above ground level) | Building Stories |
|--|----------|--------------------------------------|--------------------------------|---|------------------|
| Sub-Phase 1a | | | | | |
| 1a | 1 | Terminal 1 - 22 Gates | 810,000 | 90 ^a | 3 |
| 1a | 3 | Terminal 1 Parking Structure - East | 1,500,000 | 60 ^b | 5 |
| 1a | 4 | Airport Administration Building | 150,000 | 95 | 6 |
| 1a | 5 | Existing CUP Capacity Expansion | 12,000 | 45 (Existing) | 1 (Existing) |
| 1a | 6 | Aircraft Apron | 1,230,000 | - | - |
| 1a | 7 | Taxiway A | 385,000 | - | - |
| 1a | 8 | Taxiway B | 360,000 | - | - |
| 1a | 9 | Terminal Area Roads-On Grade | 310,000 | - | - |
| 1a | 10 | Terminal Area Roads-Structure | 170,000 | - | - |
| 1a | 11 | Airport Access Road-On Grade | 165,000 | - | - |
| 1a | 12 | Airport Access Road-Structure | 9,300 | - | - |
| 1a | 18 | Aircraft Overnight Parking | 230,000 | - | - |
| Phase 1a - Buildings Total | | | 2,472,000 | | |
| Phase 1a - Surface Elements Total | | | 2,859,300 | | |
| Phase 1a - Total | | | 5,331,300 | | |
| Phase 1b | | | | | |
| 1b | 13 | Terminal 1 - 8 Gates | 400,000 | 90 ^a | 3 |
| 1b | 14 | Terminal 1 Parking Structure - West | 1,280,000 | 60 ^b | 5 |
| 1b | 15 | Aircraft Apron | 260,000 | - | - |
| 1b | 16 | Taxiway A | 380,000 | - | - |
| 1b | 17 | Taxiway B | 290,000 | - | - |
| 1b | 19 | Terminal Area Road-On Grade | 20,000 | - | - |
| Phase 1b - Buildings Total | | | 1,680,000 | | |
| Phase 1b - Surface Elements Total | | | 950,000 | | |
| Phase 1b - Total | | | 2,630,000 | | |
| Phase 2a | | | | | |
| 2a | 20 | Terminal T2-West (Stinger) - 7 Gates | 450,000 | 65 | 3 |
| 2a | 21 | Commercial Development Opportunity | 400,000 | 90 | 10 |
| 2a | 22 | Aircraft Apron | 310,000 | - | - |
| 2a | 23 | Terminal Area Road-Structure | 20,000 | - | - |

Table C-43: New Construction by Phase – Proposed Project

| Phase | Map ID # | Facility Type | Approximate Area (square feet) | Building Height (feet above ground level) | Building Stories |
|--|----------|--------------------------------------|--------------------------------|---|------------------|
| 2a | 24 | Terminal Area Road-On Grade | 60,000 | - | - |
| 2a | 25 | Surface Parking Lot | 130,000 | - | - |
| Phase 2a - Buildings Total | | | 850,000 | | |
| Phase 2a - Surface Elements Total | | | 520,000 | | |
| Phase 2a – Total | | | 1,370,000 | | |
| Phase 2b | | | | | |
| 2b | 26 | Terminal T2-East Connector - 7 Gates | 250,000 | 65 | 3 |
| 2b | 27 | Aircraft Apron | 560,000 | - | - |
| Phase 2b - Buildings Total | | | 250,000 | | |
| Phase 2b - Surface Elements Total | | | 560,000 | | |
| Phase 2b - Total | | | 810,000 | | |
| Project Total (Phases 1 and 2) [new construction] | | | | | |
| <i>Project Total - Buildings</i> | | | <i>5,252,000</i> | | |
| <i>Project Total - Surface Elements</i> | | | <i>4,889,300</i> | | |
| <i>Grand Total</i> | | | <i>10,141,300</i> | | |

Table C-44: Demolition by Phase – Alternative 4

| Phase | Map ID # | Facility | Approximate Area (SF) ^a | Current Use | Disposition of Facility/Use |
|-----------------------------|----------|---|------------------------------------|---|--|
| Phase 1a (2021-2024) | | | | | |
| 1a | A | Airport Administration Building | 132,000 | Airport Administration Offices | Building to be demolished. Function to be moved to a new building constructed on the west side of airport as part of the proposed project. |
| 1a | C | Facilities Maintenance Division (FMD) Administration Building | 10,000 | FMD administrative offices | Building to be demolished. Function moved to new support facilities complex developed on the north side to be developed separate from the proposed project. |
| 1a | D | Triturator and Wash Rack | 3,500 | Lavatory waste trituration and vehicle washing | Buildings to be demolished. Function relocated to a smaller consolidated facility within the south side support facilities area. |
| 1a | E | United Cargo | 17,000 | Aircraft belly cargo handling | Building to be demolished. Function relocated to the consolidated Airline Facility Support Building on the south side (east of the new T1) to be developed separate from the proposed project. |
| 1a | F | Southwest Cargo | 32,000 | Aircraft belly cargo handling | Building to be demolished. Function relocated to the consolidated Airline Facility Support Building on the south side (east of the new T1) to be developed separate from the proposed project. |
| 1a | G | Air Freight (Southwest, Alaska, Hawaiian, Delta, jetBlue) | 30,000 | Aircraft belly cargo handling | Building to be demolished. Function relocated to the consolidated Airline Support Building on the south side (east of the new T1) to be developed separate from the proposed project. |
| 1a | H | Menzies Aviation Maintenance | 9,000 | Fueling administration and support facility | Building to be demolished. Function relocated to the consolidated Airline Support Building on the south side (east of the new T1) to be developed separate from the proposed project. |
| 1a | I | American Airlines Maintenance | 12,000 | Airline maintenance facility | Building to be demolished. Function relocated to the consolidated Airline Support Building on the south side (east of the new T1) to be developed separate from the proposed project. |
| 1a | J | FMD Workshop; Paint Shop and Procurement | 29,000 | FMD maintenance workshop | Building to be demolished. Function moved to new support facilities complex on the north side to be developed separate from the proposed project. |
| 1a | K | FMD Maintenance Shops | 25,000 | FMD maintenance workshop | Building to be demolished. Function moved to new support facilities complex on the north side to be developed separate from the proposed project. |
| 1a | L | Terminal 1 (Gates 1, 1A, and 2) | 36,000 | Passenger terminal | Partial structure to be demolished to make way for construction of initial phase of new Terminal 1 (East). |
| 1a | M | On-Airport Roadways | 590,000 | Arrivals/departure entry roadway | Airport roads and associated features to be demolished for construction of new roadway and parking improvements in Phase 1a. |
| 1a | N | Administration Building Parking Lot and Access Roads | 390,000 | Airport administration parking and access roads | Surface parking, airport roads, and associated features to be demolished for construction of new roadway improvements in Phase 1a. |

Table C-44: Demolition by Phase – Alternative 4

| Phase | Map ID # | Facility | Approximate Area (SF) ^a | Current Use | Disposition of Facility/Use |
|---|----------|------------------------------|------------------------------------|--------------------------------|--|
| 1a | O | Taxiway B | 585,000 | Taxiway B | Taxiway pavement to be demolished and replaced in conjunction with new T1 improvements in Phase 1a. |
| 1a | P | Employee/Public Parking Lots | 1,493,000 | Employee and public parking | Surface parking lot and associated features to be demolished in conjunction with new T1 improvements in Phase 1a. |
| 1a | Q | Terminal 1 Parking Lot | 470,000 | Terminal 1 surface parking lot | Surface parking lot and associated features to be demolished for construction of new roadway and parking improvements in Phase 1a. |
| 1a | R | Aircraft Apron | 1,265,000 | Aircraft apron | Aircraft apron pavement to be demolished and replaced in conjunction with initial phase of new T1. |
| Phase 1a - Buildings Total | | | 335,500 | | |
| Phase 1a - Surface Elements Total | | | 4,793,000 | | |
| Phase 1a - Total | | | 5,128,500 | | |
| Phase 1b (2024-2026) | | | | | |
| 1b | S | Terminal 1 | 300,000 | Passenger terminal | Building to be demolished and replaced with remainder of new T1. |
| 1b | T | Terminal 1 Parking Lot | 100,000 | Surface parking lot | Surface parking lot and associated features to be demolished for construction of remainder of new T1 Parking Structure (East) |
| 1b | U | Aircraft Apron | 580,000 | Aircraft apron | Aircraft apron pavement to be demolished and replaced in conjunction with remaining phase of new T1. |
| Phase 1b - Buildings Total | | | 300,000 | | |
| Phase 1b - Surface Elements Total | | | 680,000 | | |
| Phase 1b - Total | | | 980,000 | | |
| Project Total (Phase 1) [demolition] | | | | | |
| Buildings | | | 635,500 | | |
| Surface Elements | | | 5,473,000 | | |
| Grand Total | | | 6,108,500 | | |

Table C-45: New Construction by Phase – Alternative 4

| Phase | Map ID # | Facility Type | Approximate Area (square feet) | Building Height (feet above ground level) | Building Stories |
|---|----------|-------------------------------------|--------------------------------|---|------------------|
| Phase 1a (2021-2024) | | | | | |
| 1a | 1 | Terminal 1 - 19 Gates | 835,000 | 90 ^a | 3 |
| 1a | 3 | Terminal 1 Parking Plaza | 2,250,000 | 60 ^b | 5 |
| 1a | 4 | Airport Administration Building | 150,000 | 84 | 5 |
| 1a | 5 | Existing CUP Capacity Expansion/TES | 12,000 | 45 (Existing) | 1 (Existing) |
| 1a | 6 | Aircraft Apron | 1,120,000 | - | - |
| 1a | 7 | Taxiway A | 506,000 | - | - |
| 1a | 8 | Taxiway B | 640,000 | - | - |
| 1a | 9 | Terminal Area Roads-On Grade | 310,000 | - | - |
| 1a | 10 | Terminal Area Roads-Structure | 170,000 | - | - |
| 1a | 11 | Airport Access Road-On Grade | 165,000 | - | - |
| 1a | 12 | Airport Access Road-Structure | 9,300 | - | - |
| 1b | 18 | Aircraft Overnight Parking | 230,000 | - | - |
| Phase 1a - Buildings Total | | | 3,247,000 | | |
| Phase 1a - Surface Elements Total | | | 3,150,300 | | |
| Phase 1a - Total | | | 6,397,300 | | |
| Phase 1b (2024-2026) | | | | | |
| 1b | 13 | Terminal 1 - 11 Gates | 375,000 | 65 | 3 |
| 1b | 14 | Aircraft Apron | 285,000 | - | - |
| 1b | 15 | Taxiway A | 269,000 | - | - |
| 1b | 17 | Terminal Area Road-On Grade | 20,000 | - | - |
| 1b | 18 | Parking Lot | 100,000 | | |
| Phase 1b - Buildings Total | | | 375,000 | | |
| Phase 1b - Surface Elements Total | | | 674,000 | | |
| Phase 1b - Total | | | 1,049,000 | | |
| Project Total (Phase 1) [new construction] | | | | | |
| Buildings | | | 3,622,000 | | |
| Surface Elements | | | 3,824,300 | | |
| Grand Total | | | 7,446,300 | | |

1.5.4 Hours of Construction

Tables C-46 and C-47 provide lists of the construction equipment types and total number of operating hours by equipment type during each major phase of project development (i.e., Phases 1a, 1b, 2a, and 2b). These data were used to estimate construction-related air pollutant, pollutant precursor, and GHG emissions for the proposed project and Alternative 4.

The types of construction activities and equipment/vehicle activity data (e.g., equipment mixes/operating times) were estimated using the Transportation Research Board's (TRB's) Airport Construction Emissions Inventory Tool (ACEIT). The ACEIT was developed by the TRB to better ensure how construction equipment is characterized and to more consistently represent the level of activity data that is used in the preparation of airport-related assessments. According to documentation prepared by the TRB for ACEIT, the activity data (hours of use) that is output by the tool was developed for each type of equipment based on expert engineering judgement and experience with airport construction projects.

Table C-46: Hours of Construction – Proposed Project

Proposed Project - Phase 1A (2021-2024)

| Equipment | Hours of Operation |
|------------------------------------|--------------------|
| 40 Ton Crane | 2,043 |
| 90 Ton Crane | 13,243 |
| Air Compressor | 1,059 |
| Asphalt Paver | 892 |
| Backhoe | 13,132 |
| Caisson Drilling Rig | 750 |
| Chain Saw | 881 |
| Chipper/Stump Grinder | 881 |
| Concrete Pump | 947 |
| Concrete Ready Mix Trucks | 6,117 |
| Concrete Saws | 1,059 |
| Concrete Truck | 8,785 |
| Curb/Gutter Paver | 1,090 |
| Distributing Tanker | 433 |
| Dozer | 10,329 |
| Dump Truck | 16,969 |
| Dump Truck (12 cy) | 9,998 |
| Excavator | 11,335 |
| Flatbed Truck | 6,540 |
| Fork Truck | 114,284 |
| Forklift | 1,500 |
| Generator | 13,938 |
| Grader | 354 |
| High Lift | 32,476 |
| Hydroseeder | 319 |
| Loader | 4,538 |
| Man Lift | 97,440 |
| Man Lift (Fascia Construction) | 912 |
| Material Deliveries | 2,305 |
| Off-Road Truck | 319 |
| Other General Equipment | 14,908 |
| Pickup Truck | 36,494 |
| Pumps | 2,544 |
| Roller | 4,241 |
| Rubber Tired Loader | 1,059 |
| Scraper | 1,323 |
| Skid Steer Loader | 2,536 |
| Slip Form Paver | 1,059 |
| Surfacing Equipment (Grooving) | 1,567 |
| Survey Crew Trucks | 389 |
| Tool Truck | 25,865 |
| Tractor Trailer- Material Delivery | 30,880 |
| Tractor Trailer- Steel Deliveries | 2,796 |
| Tractor Trailers Temp Fac. | 160 |
| Tractors/Loader/Backhoe | 13,825 |
| Trencher | 1,995 |
| Trowel Machine | 1,884 |
| Vibratory Compactor | 2,181 |
| Water Truck | 23,040 |

Proposed Project - Phase 1B (2024-2026)

| Equipment | Hours of Operation |
|------------------------------------|--------------------|
| 40 Ton Crane | 1,498 |
| 90 Ton Crane | 6,828 |
| Air Compressor | 351 |
| Asphalt Paver | 554 |
| Backhoe | 6,406 |
| Caisson Drilling Rig | 640 |
| Chain Saw | 274 |
| Chipper/Stump Grinder | 274 |
| Concrete Pump | 640 |
| Concrete Ready Mix Trucks | 4,320 |
| Concrete Saws | 351 |
| Concrete Truck | 1,911 |
| Curb/Gutter Paver | 33 |
| Distributing Tanker | 77 |
| Dozer | 3,347 |
| Dump Truck | 8,507 |
| Dump Truck (12 cy) | 3,316 |
| Excavator | 6,390 |
| Flatbed Truck | 2,169 |
| Fork Truck | 48,331 |
| Forklift | 1,280 |
| Generator | 7,600 |
| Grader | 110 |
| High Lift | 14,406 |
| Hydroseeder | 99 |
| Loader | 9,300 |
| Man Lift | 40,000 |
| Man Lift (Fascia Construction) | 320 |
| Material Deliveries | 1,120 |
| Off-Road Truck | 99 |
| Other General Equipment | 3,640 |
| Pickup Truck | 12,985 |
| Pumps | 2,011 |
| Roller | 1,160 |
| Rubber Tired Loader | 351 |
| Scraper | 439 |
| Skid Steer Loader | 309 |
| Slip Form Paver | 351 |
| Surfacing Equipment (Grooving) | 520 |
| Survey Crew Trucks | 183 |
| Tool Truck | 11,291 |
| Tractor Trailer- Material Delivery | 14,634 |
| Tractor Trailer- Steel Deliveries | 1,812 |
| Tractor Trailers Temp Fac. | 78 |
| Tractors/Loader/Backhoe | 380 |
| Trencher | 1,702 |
| Trowel Machine | 1,440 |
| Vibratory Compactor | 67 |
| Water Truck | 11,520 |

Proposed Project - Phase 2A (2027-2030)

| Equipment | Hours of Operation |
|------------------------------------|--------------------|
| 40 Ton crane | 109 |
| 90 Ton Crane | 1,013 |
| Air Compressor | 144 |
| Asphalt Paver | 54 |
| Backhoe | 6,891 |
| Caisson Drilling Rig | 20 |
| Chain Saw | 132 |
| Chipper/Stump Grinder | 3,012 |
| Concrete Pump | 1,013 |
| Concrete Ready Mix Trucks | 4,162 |
| Concrete Saws | 144 |
| Concrete Truck | 922 |
| Curb/Gutter Paver | 2 |
| Distributing Tanker | 92 |
| Dozer | 1,749 |
| Dump Truck | 381 |
| Dump Truck (12 cy) | 1,364 |
| Excavator | 1,529 |
| Flatbed Truck | 903 |
| Fork Truck | 64,198 |
| Generator | 4,820 |
| Grader | 48 |
| High Lift | 5,924 |
| Hydroseeder | 44 |
| Loader | 467 |
| Man Lift | 64,680 |
| Man Lift (Fascia Construction) | 360 |
| Material Deliveries | 436 |
| Off-Road Truck | 64 |
| Other General Equipment | 5,960 |
| Pickup Truck | 3,826 |
| Pumps | 40 |
| Roller | 846 |
| Rubber Tired Loader | 144 |
| Scraper | 180 |
| Skid Steer Loader | 97 |
| Slip Form Paver | 354 |
| Surfacing Equipment (Grooving) | 214 |
| Survey Crew Trucks | 473 |
| Tool Truck | 20,514 |
| Tractor Trailer- Material Delivery | 23,871 |
| Tractor Trailer- Steel Deliveries | 1,586 |
| Tractor Trailers Temp Fac. | 501 |
| Tractors/Loader/Backhoe | 98 |
| Trowel Machine | 302 |
| Vibratory Compactor | 4 |
| Water Truck | 8,640 |

Proposed Project - Phase 2B (2031-2035)

| Equipment | Hours of Operation |
|------------------------------------|--------------------|
| 90 Ton Crane | 2,668 |
| Air Compressor | 207 |
| Asphalt Paver | 78 |
| Backhoe | 2,668 |
| Chain Saw | 158 |
| Chipper/Stump Grinder | 158 |
| Concrete Pump | 100 |
| Concrete Ready Mix Trucks | 500 |
| Concrete Saws | 207 |
| Concrete Truck | 1,071 |
| Distributing Tanker | 166 |
| Dozer | 1,602 |
| Dump Truck | 8,912 |
| Dump Truck (12 cy) | 1,955 |
| Excavator | 4,972 |
| Flatbed Truck | 1,279 |
| Fork Truck | 28,335 |
| Generator | 6,700 |
| Grader | 64 |
| High Lift | 7,668 |
| Hydroseeder | 57 |
| Loader | 58 |
| Man Lift | 25,000 |
| Man Lift (Fascia Construction) | 200 |
| Material Deliveries | 500 |
| Off-Road Truck | 57 |
| Other General Equipment | 2,158 |
| Pickup Truck | 9,356 |
| Pumps | 53 |
| Roller | 659 |
| Rubber Tired Loader | 207 |
| Scraper | 259 |
| Skid Steer Loader | 131 |
| Slip Form Paver | 207 |
| Surfacing Equipment (Grooving) | 306 |
| Survey Crew Trucks | 83 |
| Tool Truck | 6,185 |
| Tractor Trailer- Material Delivery | 6,883 |
| Tractor Trailer- Steel Deliveries | 333 |
| Tractor Trailers Temp Fac. | 33 |
| Tractors/Loader/Backhoe | 8,519 |
| Trowel Machine | 100 |
| Water Truck | 2,880 |

Table C-47: Hours of Construction – Alternative 4

Alt 4 - Phase 1A (2021-2024)

| Equipment | Hours of Operation |
|------------------------------------|--------------------|
| 40 Ton Crane | 2,921 |
| 90 Ton Crane | 15,010 |
| Air Compressor | 1,166 |
| Asphalt Paver | 1,180 |
| Backhoe | 14,651 |
| Caisson Drilling Rig | 1,125 |
| Chain Saw | 964 |
| Chipper/Stump Grinder | 964 |
| Concrete Pump | 1,238 |
| Concrete Ready Mix Trucks | 8,230 |
| Concrete Saws | 1,166 |
| Concrete Truck | 9,259 |
| Curb/Gutter Paver | 1,090 |
| Distributing Tanker | 400 |
| Dozer | 11,712 |
| Dump Truck | 17,384 |
| Dump Truck (12 cy) | 11,014 |
| Excavator | 12,788 |
| Flatbed Truck | 7,204 |
| Fork Truck | 118,873 |
| Forklift | 2,250 |
| Generator | 14,188 |
| Grader | 388 |
| High Lift | 34,495 |
| Hydroseeder | 349 |
| Loader | 5,699 |
| Man Lift | 99,940 |
| Man Lift (Fascia Construction) | 932 |
| Material Deliveries | 2,542 |
| Off-Road Truck | 349 |
| Other General Equipment | 15,931 |
| Pickup Truck | 39,804 |
| Pumps | 3,696 |
| Roller | 4,589 |
| Rubber Tired Loader | 1,166 |
| Scraper | 1,458 |
| Skid Steer Loader | 2,616 |
| Slip Form Paver | 1,166 |
| Surfacing Equipment (Grooving) | 1,726 |
| Survey Crew Trucks | 427 |
| Tool Truck | 27,301 |
| Tractor Trailer- Material Delivery | 33,691 |
| Tractor Trailer- Steel Deliveries | 3,579 |
| Tractor Trailers Temp Fac. | 178 |
| Tractors/Loader/Backhoe | 13,903 |
| Trencher | 2,993 |
| Trowel Machine | 2,644 |
| Vibratory Compactor | 2,181 |
| Water Truck | 25,928 |

Alt 4 - Phase 1B (2024-2026)

| Equipment | Hours of Operation |
|------------------------------------|--------------------|
| 40 Ton crane | 109 |
| 90 Ton Crane | 4,001 |
| Air Compressor | 212 |
| Asphalt Paver | 80 |
| Backhoe | 4,171 |
| Caisson Drilling Rig | 20 |
| Chain Saw | 178 |
| Chipper/Stump Grinder | 3,058 |
| Concrete Pump | 150 |
| Concrete Ready Mix Trucks | 892 |
| Concrete Saws | 212 |
| Concrete Truck | 1,305 |
| Curb/Gutter Paver | 33 |
| Distributing Tanker | 84 |
| Dozer | 2,076 |
| Dump Truck | 7,924 |
| Dump Truck (12 cy) | 2,005 |
| Excavator | 4,552 |
| Flatbed Truck | 1,323 |
| Fork Truck | 42,550 |
| Generator | 7,350 |
| Grader | 67 |
| High Lift | 11,679 |
| Hydroseeder | 60 |
| Loader | 7,761 |
| Man Lift | 37,500 |
| Man Lift (Fascia Construction) | 300 |
| Material Deliveries | 892 |
| Off-Road Truck | 80 |
| Other General Equipment | 2,433 |
| Pickup Truck | 9,176 |
| Pumps | 55 |
| Roller | 1,091 |
| Rubber Tired Loader | 212 |
| Scraper | 265 |
| Skid Steer Loader | 210 |
| Slip Form Paver | 421 |
| Surfacing Equipment (Grooving) | 314 |
| Survey Crew Trucks | 408 |
| Tool Truck | 9,278 |
| Tractor Trailer- Material Delivery | 11,634 |
| Tractor Trailer- Steel Deliveries | 499 |
| Tractor Trailers Temp Fac. | 475 |
| Tractors/Loader/Backhoe | 285 |
| Trowel Machine | 150 |
| Vibratory Compactor | 67 |
| Water Truck | 8,076 |

2.0 Dispersion Analysis

2.1 Receptors

Based on land use information, receptors were located in areas within close proximity to SDIA and where the general public could have unrestricted access for one to several hours or longer. These include, but are not limited to, the school and residential areas of Liberty Station to the west and northwest; Spanish Landing Park and the recreation area along the Navy Boat Channel to the south and west, respectively; and the military installations (U.S. Marine Corps Recruitment Depot [MCRD] San Diego and U.S. Coast Guard [USCG]) to the north and southeast, respectively. Other model receptors were placed along the SDIA property boundary approximately 1,000 feet apart as a means of the identifying areas of highest pollutant concentrations at which the public has access. A total of 67 receptors were included in the analysis. Receptors were placed at a height of 1.8 meters (typical breathing height) above ground level. **Table C-48** provides a listing of the receptor locations.

Table C-48 Receptor Descriptions

| Receptor ID | Description |
|-------------|---|
| 1-40 | Boundary Receptor |
| 41 | Carbrillo Elementary School |
| 42 | Point Loma Community Park |
| 43 | Dana Middle School |
| 44 | The Loma Club |
| 45 | Rock Academy |
| 46 | NTC Park3 |
| 47 | NTC Park1 |
| 48 | NTC Park2 |
| 49 | Boat Ramp/Dock |
| 50 | Point Loma High |
| 51 | Loma Portal Elementary School |
| 52 | Dewey Elementary |
| 53 | MCRD San Diego |
| 54 | St Charles Parish |
| 55 | IHigh Virtual Academy |
| 56 | USCG Station |
| 57 | Harbor Island Park |
| 58 | Spanish Landing Park (West) |
| 59 | Spanish Landing Park (East-1) |
| 60 | Spanish Landing Park (East-2) |
| 61 | Waterfront Park (North) |
| 62 | Waterfront Park (South) |
| 63 | San Diego School of International Studies |
| 64 | Balboa Park (North) |
| 65 | San Diego Zoo |
| 66 | Old Town Academy |
| 67 | Balboa Park (South) |

Source : KB Environmental Sciences, Inc. 2019.

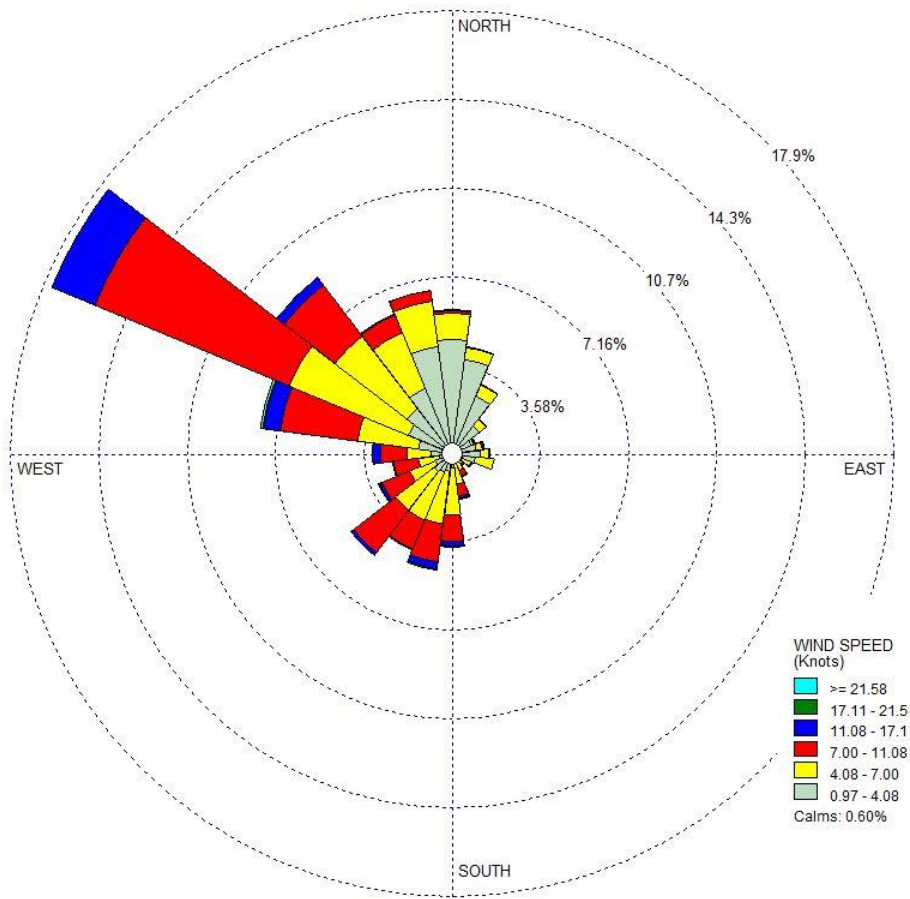
2.2 Meteorological Data

Meteorological data (i.e., wind speed, wind direction, temperature, etc.) were used in support of the air dispersion analysis. These data, obtained from the National Climatic Data Center (NCDC), were collected at weather stations located at SDIA (surface data) and Miramar, CA (upper air data). Five years of the most recent data available (2014 through 2018) were obtained and processed using U.S. EPA's AERMET Version 18081. AERMINUTE Version 15272 was used to process 1-minute wind data collected by the automatic surface observing system (ASOS) into hourly averages of wind direction and wind speed. A minimum wind speed threshold of 0.5 meters per second (m/s) was used. Land use parameters were extracted seasonally and for twelve 30-degree wind direction sectors using AERSURFACE Version 13016.

To determine which of the five years of meteorological data results in the highest predicted concentrations of air pollutants around San Diego Airport, the existing/baseline (2018) conditions at SDIA were analyzed. Because nitrogen oxides (NO_x) are the most indicative of airport activities, particularly as related to aircraft operations at which NO_x emissions are highest of the criteria pollutants from aircraft, it was selected as the assessment pollutant. Using AEDT2d, the 2018 airport operational data (including aircraft, ground support equipment, and stationary sources) were combined with the NCDC meteorological data. Five separate AEDT2d analyses were made; one for each year from 2014 to 2018. Both short-term (one hour) and long-term (annual) conditions were analyzed. Based on this analysis, the year 2016 meteorological data caused the highest one-hour NO_x concentrations. Therefore, the 2016 meteorological data represent worst-case conditions and were used in support of the atmospheric dispersion analysis for existing and future year conditions at the Airport under the proposed project, No Project Alternative, and Alternative 4.

A wind rose for the year 2016 is provided as **Figure C-3** showing a strong dominance of winds from the west-northwest.

Figure C-3 San Diego Airport Wind Rose (2016)



2.3 NO₂ Analysis

A three-tiered modeling approach based on the U.S. EPA modeling guidance document (Tyler Fox, March 1, 2011; Additional Clarification Regarding Application of Appendix W Modeling Guidance for the 1-hour NO₂ National Ambient Air Quality Standard), is recommended for modeling NO₂ concentrations. These approaches are:

- Tier 1: assumes NO_x emissions are fully converted to NO₂;
- Tier 2: utilizes the Ambient Ratio Method (ARM) or ARM2; and
- Tier 3: uses a more detailed modeling approach such as Plume Volume Molar Ratio Method (PVMRM) or the Ozone Limited Method (OLM) to further refine NO₂ predicted values.

For this analysis, the OLM Tier 3 modeling approach was used to predict NO₂ concentrations. Hourly O₃ data used for the OLM was obtained from an air quality monitor in Chula Vista (the closest air monitor to SDIA that is currently active)(06-073-0001).

2.3.1 Urban Land Use

The average population density per square kilometer (km) is 3,091 within a 3km radius around SDIA, which is greater than the 750 people/km² threshold.⁸ Thus, urban dispersion coefficients were used based on the population density procedure.

2.4 Background Concentrations

The dispersion modeling performed for the air quality analysis does not represent all pollutant sources in proximity to the Airport that contribute to total pollutant levels. Therefore, background concentrations were developed to reflect the emissions from nearby sources. When background concentrations are added to the airport dispersion modeling results, the results represent total pollutant concentrations at each receptor. Measured concentrations during the past three years (i.e., 2014 – 2016) from nearby air quality monitors were used to represent background concentrations.

Table C-49 presents the background concentrations.

⁸ 40 CFR Part 51, [EPA-HQ-OAR-2015-0310; FRL-9956-23-OAR], Revisions to the Guideline on Air Quality Models: Enhancements to the AERMOD Dispersion Modeling System and Incorporation of Approaches to Address Ozone and Fine Particulate Matter. Available: https://www3.epa.gov/ttn/scram/appendix_w/2016/AppendixW_2017.pdf

Table C-49 Background Concentrations ($\mu\text{g}/\text{m}^3$)

| Pollutant | Averaging Time | Applicable to the CAAQS | | Applicable to the NAAQS | | Location |
|-------------------|----------------|-------------------------|------------------------|-------------------------|------------------------|-------------------|
| | | Standard | Measured Concentration | Standard | Measured Concentration | |
| CO | 1-hour | 23,000 | 2,865 | 40,000 | 2,827 | Beardsley Street |
| | 8-hour | 10,000 | 2,101 | 10,000 | 1,948 | Beardsley Street |
| NO ₂ | 1-hour | 339 | 131.7 | 189 | 107.8 | Beardsley Street |
| | Annual | 57 | 24.2 | 100 | 24.2 | Beardsley Street |
| SO ₂ | 1-hour | 655 | 3.7 | 196 | 2.6 | Lloyd Smith Drive |
| | 3-hour | -- | -- | 1,300 | 1.7 | Lloyd Smith Drive |
| | 24-hour | 105 | 1.2 | -- | -- | Lloyd Smith Drive |
| PM ₁₀ | 24-hour | -- | -- | 150 | 42 | Beardsley Street |
| | Annual | 12 | 23 | -- | -- | Beardsley Street |
| PM _{2.5} | 24-hour | 50 | 35 | 35 | 22 | Beardsley Street |
| | Annual | 20 | 9.7 | 12 | 9.7 | Beardsley Street |

Notes: NAAQS = National Ambient Air Quality Standard.

^a Based on recent three-year average of measured concentrations.

Source : U.S. EPA, 2018 <https://www.epa.gov/outdoor-air-quality-data>.

Notably, the majority of the background concentrations were obtained from an air monitoring station that was located on Beardsley Street. This station was located 2.5 miles from SDIA. In 2016, the San Diego County Air Pollution Control District (SDAPCD) discontinued monitoring at this location. To be conservative and use background concentrations more representative of those in the vicinity of SDIA, measured values from the Beardsley Street monitor were used in the analysis. It is important to note that based on historical data the measured concentrations of pollutants at this station trended downward. As such, use of the data results in conservative results.

3.0 Greenhouse Gases

This section of Appendix R-C presents the overall data, assumptions, and methodology for preparing the greenhouse gas (GHG) emissions inventory in support of the GHG impacts analysis for the SDIA ADP EIR. As was prepared for the criteria air pollutant inventory, the GHG inventory was prepared for the existing/baseline year (2018) and future years (2024, 2026, 2030, and 2035) for Alternative 1 (No Project), the proposed project, and Alternative 4 using the best available data at the time of the analysis. Emissions were also calculated for the year 2050 as a long-term analysis year that coincides with the planning horizon year in the *San Diego Forward: The Regional Plan / 2015-2050*. The year 2050 emissions inventory is subject to additional uncertainty as compared to the less distant future analyses due to the influences of technological advancements in transportation, as well as the influence of evolving political and economic climates.

The GHGs inventoried were carbon dioxide (CO₂), methane (CH₄), and nitrous oxide (N₂O). As is customary for GHG emissions inventories, the results are reported in units of metric tons (MT) of carbon dioxide equivalents (CO₂e), by source, and on an annual basis. The GHG emission results were converted to CO₂e values using the Global Warming Potential (GWP) values of 1 for CO₂, 28 for CH₄, and 265 for N₂O, based on a 100-year period.⁹ GWP values are relative measures of how much heat a GHG traps in the atmosphere when compared to carbon dioxide (e.g., CH₄ is 28 times as potent a GHG than CO₂). For this purpose, estimates of CH₄ and N₂O emissions are multiplied by their respective GWP values (28 for CH₄ and 265 for N₂O) to determine the CO₂e.

3.1 Aircraft

The GHG emissions from aircraft activity is directly attributable to the level of fuel consumption by the aircraft. Estimates of fuel consumption for the existing/baseline condition (2018) and the proposed project and Stinger First Alternative for future build years (2024, 2026, 2030, 2035, and 2050) were obtained from the AEDT output that was prepared for the air quality analysis. With the exception of ground-based delay and taxi times, AEDT default time-in-mode were used to calculate fuel estimated used in the GHG analysis.

For the purpose of calculating aircraft related-GHG emissions, the AEDT fuel usage was segregated by aircraft powered by Jet A fuel (i.e., aircraft with jet or turboprop engines) and those that are powered by aviation gasoline (i.e., piston aircraft).

GHG emissions were calculated using the appropriate emission factors from the U.S. EPA’s GHG Emission Factors Hub (as of March 2018).¹⁰ **Table C-50** presents the GHG emission factors used to prepare the GHG emission estimates.

Table C-50 Aircraft Fuel GHG Emission Factors

| Fuel | CO ₂ | N ₂ O | CH ₄ | Units |
|-------|-----------------|------------------|-------------------|-----------|
| Jet A | 21.5 | 0.0007 | 0.00 ¹ | lb/gallon |
| AvGas | 18.3 | 0.0002 | 0.02 | lb/gallon |

Source: U.S. EPA, Center for Corporate Climate Leadership GHG Emission Factors Hub, March 2018. For additional information see the FAA’s Air Quality Handbook, Version 3.

3.2 Stationary Sources

Similar to the criteria air pollutant inventory, stationary sources GHG emissions were based on existing and proposed annual fuel usage and/or throughputs. GHGs emission factors were derived from U.S. EPA’s GHG Emission Factors Hub.

⁹ Intergovernmental Panel on Climate Change (IPCC), Fifth Assessment Report, 2014.

¹⁰ U.S. EPA, GHG Emission Factors Hub (March 2018), <https://www.epa.gov/climateleadership/center-corporate-climate-leadership-ghg-emission-factors-hub>.

3.3 Motor Vehicles

GHGs for motor vehicles were calculated using the same methodology and data used to develop the criteria pollutant emissions inventory. Vehicle miles traveled (VMT) were calculated for airport-related motor vehicles operating on the internal roadway network, terminal building curbsides, and off-airport roadways. Vehicle parameters (e.g., vehicle type, speed, fuel type, etc.) were captured within the EMFAC2017 model. The vehicle and fuel mix data are provided in Tables C-15 and C-16. Emission factors are provided in Tables C-17 and C-18, and daily traffic volumes are presented in Tables C-19 through C-24 of this Appendix.

The following equation was used to obtain annual GHG emissions for motor vehicles:

$$\text{Motor Vehicle Emissions (metric tons of CO}_2\text{e/year)} = \text{Emission Factor (g/mile)} \times \text{vehicle miles travelled per day} \times (365 \text{ days/year}) \times (1 \text{ pound}/453.59 \text{ grams}) \times (1 \text{ ton}/2,000 \text{ pounds}) \times (1 \text{ metric ton}/1.102 \text{ ton}) \times \text{global warming potential (GWP)}$$

3.4 Other Sources

As for the criteria pollutants, emissions of GHGs were prepared using CAPCOA's CalEEMod. For GHGs, CalEEMod provides estimate of emissions due to electricity usage, water usage and solid waste disposal.

For the existing condition and Alternative 1 (No Project), the total square footage of all of the buildings at the airport were used for input to CalEEMod. These are:

- Administrative Building/ Former Commuter Terminal – 132,000 square feet (sf)
- Terminal 1 – 336,000 sf
- Terminal 2 (East) – 350,000 sf
- Terminal 2 (West) – 889,000 sf

The proposed project was also modeled using CalEEMod and were based on the information and square footages provided in Section 1.5.3 of this Appendix.

The amount of water used and wastewater generated by the project has GHG emissions associated with it. These emissions are a result of the energy used to supply, distribute, and treat the water and wastewater. CalEEMod was used to quantify the energy and associated GHG emissions attributable to water and wastewater use.

Municipal solid waste is the amount of material that is disposed of by land filling, recycling, or composting. CalEEMod was used to estimate the GHG emissions associated with waste disposal. The model uses annual waste disposal rates from the California Department of Resources Recycling and Recovery (CalRecycle) data for individual land uses.

3.5 Construction

GHG emissions were estimated for construction activities categorized as off-road (e.g., graders, excavators, paving equipment) and for on-road vehicles associated with construction (e.g., laborer/worker) trips commuting to and from the worksite and haul trucks. The same methodology

and data used to develop the criteria pollutant emission inventory was used for the GHG emissions inventory. Construction equipment data including equipment type, horsepower and load factors are presented in Table C-26 of the Air Quality section of this Appendix.

GHG emissions including CO₂, CH₄, and N₂O were evaluated for the construction period of 2021 through 2035. Emissions factors for on-road vehicles and off-road construction equipment were developed using CARB's EMFAC2017 and OFFROAD2017, respectively.

EMFAC2017 emission factors associated with commuter vehicles, hauling, delivery and pickup trucks for the construction period are presented in Table C-25 of this Appendix. OFFROAD2017 emission factors for off-road construction equipment are presented in Table C-27 through C-41 of the Air Quality section of this Appendix.

The following equation was used to obtain annual GHG emission for off-road construction equipment:

$$\text{Construction Equipment Emissions (metric tons of CO}_2\text{e/year)} = \text{Emission Factor (grams/hp-hour)} \times \text{Horsepower (hp)} \times \text{hours per year} \times \text{Load Factor} \times (1 \text{ pound}/453.59 \text{ grams}) \times (1 \text{ ton}/2,000 \text{ pounds}) \times (1 \text{ metric ton}/1.102 \text{ ton}) \times \text{global warming potential (GWP)}$$

R-C2 – Carbon Monoxide Hot Spots Analysis Data

Maximum CO Concentrations at Roadway Intersections

Existing Conditions (2018)

| ID | Intersection | Traffic CO Conc. (ppm) | | Max. Conc. (ppm) | | Significant? | |
|----|-----------------------------------|------------------------|--------|------------------|--------|--------------|--------|
| | | 1-Hour | 8-Hour | 1-Hour | 8-Hour | 1-Hour | 8-Hour |
| 7 | San Diego Ave & Washington | 0.40 | 0.28 | 2.00 | 1.68 | No | No |
| 10 | Kettner Blvd & Sassafras St | 0.30 | 0.21 | 1.90 | 1.61 | No | No |
| 16 | Laurel Dr & Kettner Blvd | 0.40 | 0.28 | 2.00 | 1.68 | No | No |
| 20 | Hawthorn St & Kettner Blvd | 0.30 | 0.21 | 1.90 | 1.61 | No | No |
| 21 | Hawthorn St & India St | 0.30 | 0.21 | 1.90 | 1.61 | No | No |
| 22 | Hawthorn St & Columbia St | 0.30 | 0.21 | 1.90 | 1.61 | No | No |
| 23 | Hawthorn St & State St | 0.40 | 0.28 | 2.00 | 1.68 | No | No |
| 24 | I-5 NB Off-Ramp/Brandt & Hawthorn | 0.10 | 0.07 | 1.70 | 1.47 | No | No |
| 27 | Grape St & Kettner Blvd | 0.30 | 0.21 | 1.90 | 1.61 | No | No |
| 28 | Grape St & India St | 0.40 | 0.28 | 2.00 | 1.68 | No | No |
| 29 | Grape St & Columbia St | 0.40 | 0.28 | 2.00 | 1.68 | No | No |
| 30 | Grape St & State St | 0.30 | 0.21 | 1.90 | 1.61 | No | No |

Notes:

Traffic CO concentration from CAL3QHC model output.

Maximum CO concentration is traffic CO plus background concentration.

2050 Plus Project

| ID | Intersection | Traffic CO Conc. (ppm) | | Max. Conc. (ppm) | | Significant? | |
|----|-----------------------------------|------------------------|--------|------------------|--------|--------------|--------|
| | | 1-Hour | 8-Hour | 1-Hour | 8-Hour | 1-Hour | 8-Hour |
| 7 | San Diego Ave & Washington | 0.20 | 0.14 | 1.80 | 1.54 | No | No |
| 10 | Kettner Blvd & Sassafras St | 0.20 | 0.14 | 1.80 | 1.54 | No | No |
| 16 | Laurel Dr & Kettner Blvd | 0.40 | 0.28 | 2.00 | 1.68 | No | No |
| 20 | Hawthorn St & Kettner Blvd | 0.20 | 0.14 | 1.80 | 1.54 | No | No |
| 21 | Hawthorn St & India St | 0.20 | 0.14 | 1.80 | 1.54 | No | No |
| 22 | Hawthorn St & Columbia St | 0.30 | 0.21 | 1.90 | 1.61 | No | No |
| 23 | Hawthorn St & State St | 0.30 | 0.21 | 1.90 | 1.61 | No | No |
| 24 | I-5 NB Off-Ramp/Brandt & Hawthorn | 0.00 | 0.00 | 1.60 | 1.40 | No | No |
| 27 | Grape St & Kettner Blvd | 0.30 | 0.21 | 1.90 | 1.61 | No | No |
| 28 | Grape St & India St | 0.20 | 0.14 | 1.80 | 1.54 | No | No |
| 29 | Grape St & Columbia St | 0.30 | 0.21 | 1.90 | 1.61 | No | No |
| 30 | Grape St & State St | 0.20 | 0.14 | 1.80 | 1.54 | No | No |

Notes:

Traffic CO concentration from CAL3QHC model output.

Maximum CO concentration is traffic CO plus background concentration.

| | | | |
|---------------------|-------------|--------------------------------|--|
| Background (1-hour) | 1.60 ppm | 1,833 $\mu\text{g}/\text{m}^3$ | $C_{\text{ppm}} = C_{\mu\text{g}/\text{m}^3} \times 0.02445/\text{MW}$ |
| Background (8-hour) | 1.40 ppm | 1,604 $\mu\text{g}/\text{m}^3$ | CO MW: 28.01 g/mol |
| Persistence Factor | 0.7 (Urban) | | |

Ambient Air Quality Standards

| Standard | CO Conc. (ppm) | |
|----------|----------------|--------|
| | 1-Hour | 8-Hour |
| CAAQS | 20 | 9 |
| NAAQS | 35 | 9 |

Intersection 7 (San Diego Ave & Washington)

Existing Conditions (2018)

| PM Peak Hour | | | | | | Freeflow Traffic Input Data | | | Queue Traffic Data | | | | | | # Lanes | Green time length s | | |
|--------------|-----------------------------|------|--------------|--------|-----------|-----------------------------|---------------------|------------------------|--------------------|---------------------|-------------------------------|---------------------------|-----------------------|-----------------------------|---------|---------------------|--------------------------------|--|
| Direction | Description | ID | Synchro Link | Volume | Speed mph | Link Height m | Mixing Zone Width m | Emission Factor g/v-mi | Link Height m | Mixing Zone Width m | Average signal cycle length s | Average red time length s | Clearance lost time s | Idle Emission Factor g/v-hr | | | Saturation Flow Rate v/hr/lane | |
| N | North-Freeflow Approach | N-FA | | 301 | 35 | 0 | 15 | 1.321 | | | | | | | | | | |
| N | North-Through Traffic Queue | N-TQ | NBT | 152 | 3 | | | | 0 | 9 | 84 | 55.9 | 2 | 10.666 | 1,695 | 3 | 28.1 | |
| N | North-Freeflow Departure | N-FD | | 862 | 35 | 0 | 15 | 1.321 | | | | | | | | 3 | | |
| N | North-Left Turn Queue | N-LQ | NBL | 106 | 3 | | | | 0 | 3 | 84 | 55.9 | 2 | 10.666 | 1,777 | 1 | 28.1 | |
| N | North-Right Turn Queue | N-RQ | NBR | 43 | 3 | | | | 0 | 3 | 84 | 55.9 | 2 | 10.666 | 1,731 | 1 | 28.1 | |
| S | South-Freeflow Approach | S-FA | | 0 | 35 | 0 | 6 | 1.321 | | | | | | | | 0 | | |
| S | South-Through Traffic Queue | S-TQ | SBT | 0 | 3 | | | | 0 | 0 | 0 | 0 | 2 | 10.666 | 0 | 0 | 0 | |
| S | South-Freeflow Departure | S-FD | | 0 | 35 | 0 | 6 | 1.321 | | | | | | | | 0 | | |
| S | South-Left Turn Queue | S-LQ | SBL | 0 | 3 | | | | 0 | 0 | 0 | 0 | 2 | 10.666 | 0 | 0 | 0 | |
| S | South-Right Turn Queue | S-RQ | SBR | 0 | 3 | | | | 0 | 0 | 0 | 0 | 2 | 10.666 | 0 | 0 | 0 | |
| W | West-Freeflow Approach | W-FA | | 897 | 35 | 0 | 12 | 1.321 | | | | | | | | 2 | | |
| W | West-Through Traffic Queue | W-TQ | WBT | 449 | 3 | | | | 0 | 6 | 84 | 37.9 | 2 | 10.666 | 1,770 | 2 | 46.1 | |
| W | West-Freeflow Departure | W-FD | | 555 | 35 | 0 | 12 | 1.321 | | | | | | | | 2 | | |
| W | West-Left Turn Queue | W-LQ | WBL | 0 | 3 | | | | 0 | 0 | 0 | 0 | 2 | 10.666 | 0 | 0 | 0 | |
| W | West-Right Turn Queue | W-RQ | WBR | 448 | 3 | | | | 0 | 3 | 84 | 37.9 | 2 | 10.666 | 1,583 | 1 | 46.1 | |
| E | East-Freeflow Approach | E-FA | | 1,507 | 35 | 0 | 12 | 1.321 | | | | | | | | 2 | | |
| E | East-Through Traffic Queue | E-TQ | EBT | 1,245 | 3 | | | | 0 | 6 | 84 | 56 | 2 | 10.666 | 1,770 | 2 | 28 | |
| E | East-Freeflow Departure | E-FD | | 1,288 | 35 | 0 | 12 | 1.321 | | | | | | | | 2 | | |
| E | East-Left Turn Queue | E-LQ | EBL | 262 | 3 | | | | 0 | 6 | 84 | 70.9 | 2 | 10.666 | 1,721 | 2 | 13.1 | |
| E | East-Right Turn Queue | E-RQ | EBR | 0 | 3 | | | | 0 | 0 | 0 | 0 | 2 | 10.666 | 0 | 0 | 0 | |
| | | | | Total | 2,705 | | | | | | | | | | | | | |

2050 Plus Project

| PM Peak Hour | | | | | | Freeflow Traffic Input Data | | | Queue Traffic Data | | | | | | # Lanes | Green time length s | |
|--------------|-----------------------------|------|--------------|--------|-----------|-----------------------------|---------------------|------------------------|--------------------|---------------------|-------------------------------|---------------------------|-----------------------|-----------------------------|---------|---------------------|--------------------------------|
| Direction | Description | ID | Synchro Link | Volume | Speed mph | Link Height m | Mixing Zone Width m | Emission Factor g/v-mi | Link Height m | Mixing Zone Width m | Average signal cycle length s | Average red time length s | Clearance lost time s | Idle Emission Factor g/v-hr | | | Saturation Flow Rate v/hr/lane |
| N | North-Freeflow Approach | N-FA | | 794 | 35 | 0 | 15 | 0.511 | | | | | | | | | |
| N | North-Through Traffic Queue | N-TQ | NBT | 319 | 3 | | | | 0 | 9 | 84 | 58 | 2 | 6.134 | 1,695 | 3 | 26 |
| N | North-Freeflow Departure | N-FD | | 1,907 | 35 | 0 | 15 | 0.511 | | | | | | | | 3 | |
| N | North-Left Turn Queue | N-LQ | NBL | 67 | 3 | | | | 0 | 3 | 84 | 58 | 2 | 6.134 | 1,791 | 1 | 26 |
| N | North-Right Turn Queue | N-RQ | NBR | 408 | 3 | | | | 0 | 3 | 84 | 58 | 2 | 6.134 | 1,657 | 1 | 26 |
| S | South-Freeflow Approach | S-FA | | 0 | 35 | 0 | 6 | 0.511 | | | | | | | | 0 | |
| S | South-Through Traffic Queue | S-TQ | SBT | 0 | 3 | | | | 0 | 0 | 0 | -42.6 | 2 | 6.134 | 0 | 0 | 42.6 |
| S | South-Freeflow Departure | S-FD | | 0 | 35 | 0 | 6 | 0.511 | | | | | | | | 0 | |
| S | South-Left Turn Queue | S-LQ | SBL | 0 | 3 | | | | 0 | 0 | 0 | -42.6 | 2 | 6.134 | 0 | 0 | 42.6 |
| S | South-Right Turn Queue | S-RQ | SBR | 0 | 3 | | | | 0 | 0 | 0 | -42.6 | 2 | 6.134 | 0 | 0 | 42.6 |
| W | West-Freeflow Approach | W-FA | | 2,038 | 35 | 0 | 12 | 0.511 | | | | | | | | 2 | |
| W | West-Through Traffic Queue | W-TQ | WBT | 625 | 3 | | | | 0 | 6 | 84 | 35.8 | 2 | 6.134 | 1,770 | 2 | 48.2 |
| W | West-Freeflow Departure | W-FD | | 692 | 35 | 0 | 12 | 0.511 | | | | | | | | 2 | |
| W | West-Left Turn Queue | W-LQ | WBL | 0 | 3 | | | | 0 | 0 | 84 | 59.4 | 2 | 6.134 | 0 | 0 | 24.6 |
| W | West-Right Turn Queue | W-RQ | WBR | 1,413 | 3 | | | | 0 | 3 | 84 | 35.8 | 2 | 6.134 | 1,583 | 1 | 48.2 |
| E | East-Freeflow Approach | E-FA | | 2,284 | 35 | 0 | 12 | 0.511 | | | | | | | | 2 | |
| E | East-Through Traffic Queue | E-TQ | EBT | 2,109 | 3 | | | | 0 | 6 | 84 | 51 | 2 | 6.134 | 1,770 | 2 | 33 |
| E | East-Freeflow Departure | E-FD | | 2,517 | 35 | 0 | 12 | 0.511 | | | | | | | | 2 | |
| E | East-Left Turn Queue | E-LQ | EBL | 175 | 3 | | | | 0 | 6 | 84 | 73.4 | 2 | 6.134 | 1,721 | 2 | 10.6 |
| E | East-Right Turn Queue | E-RQ | EBR | 0 | 3 | | | | 0 | 0 | 84 | 51 | 2 | 6.134 | 0 | 0 | 33 |

Data in black obtained from traffic reports
 Data in blue are calculated values

Mixing zone width for freeflow traffic = road width + 6 meters
 Mixing zone width for queue traffic = road width

Lane width 3 m

Direction Legend
 N = Northbound
 S = Southbound
 W = Westbound
 E = Eastbound

Intersection 10 (Kettner Blvd & Sassafras St)

Existing Conditions (2018)

| PM Peak Hour | | | | | | Freeflow Traffic Input Data | | | Queue Traffic Data | | | | | | # Lanes | Green time length s |
|--------------|-----------------------------|------|--------------|--------|-----------|-----------------------------|---------------------|------------------------|--------------------|---------------------|-------------------------------|---------------------------|-----------------------|-----------------------------|---------|---------------------|
| Direction | Description | ID | Synchro Link | Volume | Speed mph | Link Height m | Mixing Zone Width m | Emission Factor g/v-mi | Link Height m | Mixing Zone Width m | Average signal cycle length s | Average red time length s | Clearance lost time s | Idle Emission Factor g/v-hr | | |
| N | North-Freeflow Approach | N-FA | | 0 | 35 | 0 | 6 | 1.321 | | | | | | | | |
| N | North-Through Traffic Queue | N-TQ | NBT | 0 | 3 | | | | 0 | 0 | 0 | 0 | 2 | 10.666 | 0 | 0 |
| N | North-Freeflow Departure | N-FD | | 0 | 35 | 0 | 6 | 1.321 | | | | | | | | |
| N | North-Left Turn Queue | N-LQ | NBL | 0 | 3 | | | | 0 | 0 | 0 | 0 | 2 | 10.666 | 0 | 0 |
| N | North-Right Turn Queue | N-RQ | NBR | 0 | 3 | | | | 0 | 0 | 0 | 0 | 2 | 10.666 | 0 | 0 |
| S | South-Freeflow Approach | S-FA | | 2,116 | 35 | 0 | 15 | 1.321 | | | | | | | | 3 |
| S | South-Through Traffic Queue | S-TQ | SBT | 1,535 | 3 | | | | 0 | 9 | 87.6 | 27.6 | 2 | 10.666 | 1,695 | 3 |
| S | South-Freeflow Departure | S-FD | | 1,806 | 35 | 0 | 15 | 1.321 | | | | | | | | 3 |
| S | South-Left Turn Queue | S-LQ | SBL | 240 | 3 | | | | 0 | 3 | 87.6 | 27.6 | 2 | 10.666 | 1,774 | 1 |
| S | South-Right Turn Queue | S-RQ | SBR | 341 | 3 | | | | 0 | 3 | 87.6 | 27.6 | 2 | 10.666 | 1,701 | 1 |
| W | West-Freeflow Approach | W-FA | | 211 | 35 | 0 | 12 | 1.321 | | | | | | | | 2 |
| W | West-Through Traffic Queue | W-TQ | WBT | 157 | 3 | | | | 0 | 6 | 87.6 | 61.4 | 2 | 10.666 | 1,610 | 2 |
| W | West-Freeflow Departure | W-FD | | 498 | 35 | 0 | 12 | 1.321 | | | | | | | | 2 |
| W | West-Left Turn Queue | W-LQ | WBL | 54 | 3 | | | | 0 | 3 | 87.6 | 61.4 | 2 | 10.666 | 690 | 1 |
| W | West-Right Turn Queue | W-RQ | WBR | 0 | 3 | | | | 0 | 0 | 0 | -26.2 | 2 | 10.666 | 0 | 0 |
| E | East-Freeflow Approach | E-FA | | 445 | 35 | 0 | 9 | 1.321 | | | | | | | | 1 |
| E | East-Through Traffic Queue | E-TQ | EBT | 228 | 3 | | | | 0 | 3 | 87.6 | 61.4 | 2 | 10.666 | 1,863 | 1 |
| E | East-Freeflow Departure | E-FD | | 468 | 35 | 0 | 9 | 1.321 | | | | | | | | 1 |
| E | East-Left Turn Queue | E-LQ | EBL | 0 | 3 | | | | 0 | 0 | 0 | 0 | 2 | 10.666 | 0 | 0 |
| E | East-Right Turn Queue | E-RQ | EBR | 217 | 3 | | | | 0 | 3 | 87.6 | 61.4 | 2 | 10.666 | 1,583 | 1 |
| Total | | | | 2,772 | | | | | | | | | | | | |

2050 Plus Project

| PM Peak Hour | | | | | | Freeflow Traffic Input Data | | | Queue Traffic Data | | | | | | # Lanes | Green time length s |
|--------------|-----------------------------|------|--------------|--------|-----------|-----------------------------|---------------------|------------------------|--------------------|---------------------|-------------------------------|---------------------------|-----------------------|-----------------------------|---------|---------------------|
| Direction | Description | ID | Synchro Link | Volume | Speed mph | Link Height m | Mixing Zone Width m | Emission Factor g/v-mi | Link Height m | Mixing Zone Width m | Average signal cycle length s | Average red time length s | Clearance lost time s | Idle Emission Factor g/v-hr | | |
| N | North-Freeflow Approach | N-FA | | 0 | 35 | 0 | 6 | 0.511 | | | | | | | | |
| N | North-Through Traffic Queue | N-TQ | NBT | 0 | 3 | | | | 0 | 0 | 0 | 0 | 2 | 6.134 | 0 | 0 |
| N | North-Freeflow Departure | N-FD | | 0 | 35 | 0 | 6 | 0.511 | | | | | | | | |
| N | North-Left Turn Queue | N-LQ | NBL | 0 | 3 | | | | 0 | 0 | 0 | 0 | 2 | 6.134 | 0 | 0 |
| N | North-Right Turn Queue | N-RQ | NBR | 0 | 3 | | | | 0 | 0 | 0 | 0 | 2 | 6.134 | 0 | 0 |
| S | South-Freeflow Approach | S-FA | | 3,501 | 35 | 0 | 15 | 0.511 | | | | | | | | 3 |
| S | South-Through Traffic Queue | S-TQ | SBT | 2,688 | 3 | | | | 0 | 9 | 82.7 | 15 | 2 | 6.134 | 1,695 | 3 |
| S | South-Freeflow Departure | S-FD | | 3,209 | 35 | 0 | 15 | 0.511 | | | | | | | | 3 |
| S | South-Left Turn Queue | S-LQ | SBL | 298 | 3 | | | | 0 | 3 | 82.7 | 15 | 2 | 6.134 | 1,793 | 1 |
| S | South-Right Turn Queue | S-RQ | SBR | 515 | 3 | | | | 0 | 3 | 82.7 | 15 | 2 | 6.134 | 1,829 | 1 |
| W | West-Freeflow Approach | W-FA | | 443 | 35 | 0 | 12 | 0.511 | | | | | | | | 2 |
| W | West-Through Traffic Queue | W-TQ | WBT | 323 | 3 | | | | 0 | 6 | 82.7 | 60.4 | 2 | 6.134 | 1,610 | 2 |
| W | West-Freeflow Departure | W-FD | | 838 | 35 | 0 | 12 | 0.511 | | | | | | | | 2 |
| W | West-Left Turn Queue | W-LQ | WBL | 120 | 3 | | | | 0 | 3 | 82.7 | 60.4 | 2 | 6.134 | 1,349 | 1 |
| W | West-Right Turn Queue | W-RQ | WBR | 0 | 3 | | | | 0 | 0 | 0 | 0 | 2 | 6.134 | 0 | 0 |
| E | East-Freeflow Approach | E-FA | | 789 | 35 | 0 | 9 | 0.511 | | | | | | | | 1 |
| E | East-Through Traffic Queue | E-TQ | EBT | 388 | 3 | | | | 0 | 3 | 82.7 | 60.4 | 2 | 6.134 | 1,863 | 1 |
| E | East-Freeflow Departure | E-FD | | 686 | 35 | 0 | 9 | 0.511 | | | | | | | | 1 |
| E | East-Left Turn Queue | E-LQ | EBL | 0 | 3 | | | | 0 | 0 | 0 | 0 | 2 | 6.134 | 0 | 0 |
| E | East-Right Turn Queue | E-RQ | EBR | 401 | 3 | | | | 0 | 3 | 82.7 | 60.4 | 2 | 6.134 | 1,583 | 1 |

Data in black obtained from traffic reports
 Data in blue are calculated values

Mixing zone width for freeflow traffic = road width + 6 meters
 Mixing zone width for queue traffic = road width

Lane width 3 m

Direction Legend
 N = Northbound
 S = Southbound
 W = Westbound
 E = Eastbound

Intersection 16 (Laurel Dr & Kettner Blvd)

Existing Conditions (2018)

| PM Peak Hour | | | | | | Freeflow Traffic Input Data | | | Queue Traffic Data | | | | | | | # Lanes | Green time length s | |
|--------------|-----------------------------|------|--------------|--------|-----------|-----------------------------|---------------------|------------------------|--------------------|---------------------|-------------------------------|---------------------------|-----------------------|-----------------------------|--------------------------------|---------|---------------------|------|
| Direction | Description | ID | Synchro Link | Volume | Speed mph | Link Height m | Mixing Zone Width m | Emission Factor g/v-mi | Link Height m | Mixing Zone Width m | Average signal cycle length s | Average red time length s | Clearance lost time s | Idle Emission Factor g/v-hr | Saturation Flow Rate v/hr/lane | | | |
| N | North-Freeflow Approach | N-FA | | 0 | 35 | 0 | 6 | 1.321 | | | | | | | | | 0 | |
| N | North-Through Traffic Queue | N-TQ | NBT | 0 | 3 | | | | 0 | 0 | 0 | 0 | 2 | 10.666 | 0 | | 0 | |
| N | North-Freeflow Departure | N-FD | | 0 | 35 | 0 | 6 | 1.321 | | | | | | | | | 0 | |
| N | North-Left Turn Queue | N-LQ | NBL | 0 | 3 | | | | 0 | 0 | 0 | 0 | 2 | 10.666 | 0 | | 0 | |
| N | North-Right Turn Queue | N-RQ | NBR | 0 | 3 | | | | 0 | 0 | 0 | 0 | 2 | 10.666 | 0 | | 0 | |
| S | South-Freeflow Approach | S-FA | | 1,366 | 35 | 0 | 15 | 1.321 | | | | | | | | | 3 | |
| S | South-Through Traffic Queue | S-TQ | SBT | 571 | 3 | | | | 0 | 9 | 140 | 91.6 | 2 | 10.666 | 1,863 | | 3 | 48.4 |
| S | South-Freeflow Departure | S-FD | | 710 | 35 | 0 | 15 | 1.321 | | | | | | | | | 3 | |
| S | South-Left Turn Queue | S-LQ | SBL | 329 | 3 | | | | 0 | 0 | 140 | 91.6 | 2 | 10.666 | 1,774 | | 0 | 48.4 |
| S | South-Right Turn Queue | S-RQ | SBR | 466 | 3 | | | | 0 | 3 | 140 | 91.6 | 2 | 10.666 | 1,583 | | 1 | 48.4 |
| W | West-Freeflow Approach | W-FA | | 208 | 35 | 0 | 12 | 1.321 | | | | | | | | | 2 | |
| W | West-Through Traffic Queue | W-TQ | WBT | 165 | 3 | | | | 0 | 6 | 140 | 89 | 2 | 10.666 | 1,770 | | 2 | 51 |
| W | West-Freeflow Departure | W-FD | | 631 | 35 | 0 | 12 | 1.321 | | | | | | | | | 2 | |
| W | West-Left Turn Queue | W-LQ | WBL | 43 | 3 | | | | 0 | 3 | 140 | 115.4 | 2 | 10.666 | 1,774 | | 1 | 24.6 |
| W | West-Right Turn Queue | W-RQ | WBR | 0 | 3 | | | | 0 | 0 | 0 | 0 | 2 | 10.666 | 0 | | 0 | |
| E | East-Freeflow Approach | E-FA | | 1,257 | 35 | 0 | 12 | 1.321 | | | | | | | | | 2 | |
| E | East-Through Traffic Queue | E-TQ | EBT | 1,161 | 3 | | | | 0 | 6 | 140 | 60.4 | 2 | 10.666 | 1,770 | | 2 | 79.6 |
| E | East-Freeflow Departure | E-FD | | 1,490 | 35 | 0 | 12 | 1.321 | | | | | | | | | 2 | |
| E | East-Left Turn Queue | E-LQ | EBL | 0 | 3 | | | | 0 | 0 | 0 | 0 | 2 | 10.666 | 0 | | 0 | |
| E | East-Right Turn Queue | E-RQ | EBR | 96 | 3 | | | | 0 | 0 | 140 | 60.4 | 2 | 10.666 | 1,815 | | 0 | 79.6 |
| Total | | | | 2,831 | | | | | | | | | | | | | | |

2050 Plus Project

0.511008526

| PM Peak Hour | | | | | | Freeflow Traffic Input Data | | | Queue Traffic Data | | | | | | | # Lanes | Green time length s | |
|--------------|-----------------------------|------|--------------|--------|-----------|-----------------------------|---------------------|------------------------|--------------------|---------------------|-------------------------------|---------------------------|-----------------------|-----------------------------|--------------------------------|---------|---------------------|------|
| Direction | Description | ID | Synchro Link | Volume | Speed mph | Link Height m | Mixing Zone Width m | Emission Factor g/v-mi | Link Height m | Mixing Zone Width m | Average signal cycle length s | Average red time length s | Clearance lost time s | Idle Emission Factor g/v-hr | Saturation Flow Rate v/hr/lane | | | |
| N | North-Freeflow Approach | N-FA | | 0 | 35 | 0 | 6 | 0.511 | | | | | | | | | 0 | |
| N | North-Through Traffic Queue | N-TQ | NBT | 0 | 3 | | | | 0 | 0 | 0 | 0 | 2 | 6.134 | 0 | | 0 | |
| N | North-Freeflow Departure | N-FD | | 0 | 35 | 0 | 6 | 0.511 | | | | | | | | | 0 | |
| N | North-Left Turn Queue | N-LQ | NBL | 0 | 3 | | | | 0 | 0 | 0 | 0 | 2 | 6.134 | 0 | | 0 | |
| N | North-Right Turn Queue | N-RQ | NBR | 0 | 3 | | | | 0 | 0 | 0 | 0 | 2 | 6.134 | 0 | | 0 | |
| S | South-Freeflow Approach | S-FA | | 3,081 | 35 | 0 | 15 | 0.511 | | | | | | | | | 3 | |
| S | South-Through Traffic Queue | S-TQ | SBT | 1,561 | 3 | | | | 0 | 9 | 199.5 | 156.9 | 2 | 6.134 | 1,863 | | 3 | 42.6 |
| S | South-Freeflow Departure | S-FD | | 1,883 | 35 | 0 | 15 | 0.511 | | | | | | | | | 3 | |
| S | South-Left Turn Queue | S-LQ | SBL | 519 | 3 | | | | 0 | 0 | 199.5 | 156.9 | 2 | 6.134 | 1,793 | | 0 | 42.6 |
| S | South-Right Turn Queue | S-RQ | SBR | 1,001 | 3 | | | | 0 | 3 | 199.5 | 156.9 | 2 | 6.134 | 1,583 | | 1 | 42.6 |
| W | West-Freeflow Approach | W-FA | | 330 | 35 | 0 | 12 | 0.511 | | | | | | | | | 2 | |
| W | West-Through Traffic Queue | W-TQ | WBT | 239 | 3 | | | | 0 | 6 | 199.5 | 121.5 | 2 | 6.134 | 1,770 | | 2 | 78 |
| W | West-Freeflow Departure | W-FD | | 1,240 | 35 | 0 | 12 | 0.511 | | | | | | | | | 2 | |
| W | West-Left Turn Queue | W-LQ | WBL | 91 | 3 | | | | 0 | 3 | 199.5 | 174.9 | 2 | 6.134 | 1,774 | | 1 | 24.6 |
| W | West-Right Turn Queue | W-RQ | WBR | 0 | 3 | | | | 0 | 0 | 0 | 0 | 2 | 6.134 | 0 | | 0 | |
| E | East-Freeflow Approach | E-FA | | 2,064 | 35 | 0 | 12 | 0.511 | | | | | | | | | 2 | |
| E | East-Through Traffic Queue | E-TQ | EBT | 1,833 | 3 | | | | 0 | 6 | 199.5 | 114.1 | 2 | 6.134 | 1,770 | | 2 | 85.4 |
| E | East-Freeflow Departure | E-FD | | 2,352 | 35 | 0 | 12 | 0.511 | | | | | | | | | 2 | |
| E | East-Left Turn Queue | E-LQ | EBL | 0 | 3 | | | | 0 | 0 | 0 | 0 | 2 | 6.134 | 0 | | 0 | |
| E | East-Right Turn Queue | E-RQ | EBR | 231 | 3 | | | | 0 | 0 | 199.5 | 114.1 | 2 | 6.134 | 1,802 | | 0 | 85.4 |

Data in black obtained from traffic reports
Data in blue are calculated values

Mixing zone width for freeflow traffic = road width + 6 meters
Mixing zone width for queue traffic = road width

Lane width 3 m

Direction Legend
N = Northbound
S = Southbound
W = Westbound
E = Eastbound

Intersection 20 (Hawthorn St & Kettner Blvd)

Existing Conditions (2018)

| AM Peak Hour | | | | | | Freeflow Traffic Input Data | | | Queue Traffic Data | | | | | | # Lanes | Green time length s | | |
|--------------|-----------------------------|------|--------------|--------|-----------|-----------------------------|---------------------|------------------------|--------------------|---------------------|-------------------------------|---------------------------|-----------------------|-----------------------------|---------|---------------------|--------------------------------|--|
| Direction | Description | ID | Synchro Link | Volume | Speed mph | Link Height m | Mixing Zone Width m | Emission Factor g/v-mi | Link Height m | Mixing Zone Width m | Average signal cycle length s | Average red time length s | Clearance lost time s | Idle Emission Factor g/v-hr | | | Saturation Flow Rate v/hr/lane | |
| N | North-Freeflow Approach | N-FA | | 0 | 35 | 0 | 6 | 1.321 | | | | | | | | | 0 | |
| N | North-Through Traffic Queue | N-TQ | NBT | 0 | 3 | | | | 0 | 0 | 0 | 0 | 2 | 10.666 | 0 | 0 | 0 | |
| N | North-Freeflow Departure | N-FD | | 0 | 35 | 0 | 6 | 1.321 | | | | | | | | | 0 | |
| N | North-Left Turn Queue | N-LQ | NBL | 0 | 3 | | | | 0 | 0 | 0 | 0 | 2 | 10.666 | 0 | 0 | 0 | |
| N | North-Right Turn Queue | N-RQ | NBR | 0 | 3 | | | | 0 | 0 | 0 | 0 | 2 | 10.666 | 0 | 0 | 0 | |
| S | South-Freeflow Approach | S-FA | | 204 | 35 | 0 | 12 | 1.321 | | | | | | | | | 2 | |
| S | South-Through Traffic Queue | S-TQ | SBT | 154 | 3 | | | | 0 | 0 | 110 | 88.2 | 2 | 10.666 | 1,695 | 2 | 21.8 | |
| S | South-Freeflow Departure | S-FD | | 416 | 35 | 0 | 15 | 1.321 | | | | | | | | | 3 | |
| S | South-Left Turn Queue | S-LQ | SBL | 0 | 3 | | | | 0 | 0 | 0 | 0 | 2 | 10.666 | 0 | 0 | 0 | |
| S | South-Right Turn Queue | S-RQ | SBR | 50 | 3 | | | | 0 | 0 | 110 | 88.2 | 2 | 10.666 | 1,456 | 0 | 21.8 | |
| W | West-Freeflow Approach | W-FA | | 2,144 | 35 | 0 | 15 | 1.321 | | | | | | | | | 3 | |
| W | West-Through Traffic Queue | W-TQ | WBT | 1,882 | 3 | | | | 0 | 0 | 110 | 31.9 | 2 | 10.666 | 1,695 | 3 | 78.1 | |
| W | West-Freeflow Departure | W-FD | | 1,932 | 35 | 0 | 15 | 1.321 | | | | | | | | | 3 | |
| W | West-Left Turn Queue | W-LQ | WBL | 262 | 3 | | | | 0 | 0 | 110 | 31.9 | 2 | 10.666 | 1,833 | 0 | 78.1 | |
| W | West-Right Turn Queue | W-RQ | WBR | 0 | 3 | | | | 0 | 0 | 0 | 0 | 2 | 10.666 | 0 | 0 | 0 | |
| E | East-Freeflow Approach | E-FA | | 0 | 35 | 0 | 6 | 1.321 | | | | | | | | | 0 | |
| E | East-Through Traffic Queue | E-TQ | EBT | 0 | 3 | | | | 0 | 0 | 0 | 0 | 2 | 10.666 | 0 | 0 | 0 | |
| E | East-Freeflow Departure | E-FD | | 0 | 35 | 0 | 6 | 1.321 | | | | | | | | | 0 | |
| E | East-Left Turn Queue | E-LQ | EBL | 0 | 3 | | | | 0 | 0 | 0 | 0 | 2 | 10.666 | 0 | 0 | 0 | |
| E | East-Right Turn Queue | E-RQ | EBR | 0 | 3 | | | | 0 | 0 | 0 | 0 | 2 | 10.666 | 0 | 0 | 0 | |
| | | | | Total | 2,348 | | | | | | | | | | | | | |

2050 Plus Project

| AM Peak Hour | | | | | | Freeflow Traffic Input Data | | | Queue Traffic Data | | | | | | # Lanes | Green time length s | | |
|--------------|-----------------------------|------|--------------|--------|-----------|-----------------------------|---------------------|------------------------|--------------------|---------------------|-------------------------------|---------------------------|-----------------------|-----------------------------|---------|---------------------|--------------------------------|--|
| Direction | Description | ID | Synchro Link | Volume | Speed mph | Link Height m | Mixing Zone Width m | Emission Factor g/v-mi | Link Height m | Mixing Zone Width m | Average signal cycle length s | Average red time length s | Clearance lost time s | Idle Emission Factor g/v-hr | | | Saturation Flow Rate v/hr/lane | |
| N | North-Freeflow Approach | N-FA | | 0 | 35 | 0 | 6 | 0.511 | | | | | | | | | 0 | |
| N | North-Through Traffic Queue | N-TQ | NBT | 0 | 3 | | | | 0 | 0 | 0 | 0 | 2 | 6.134 | 0 | 0 | 0 | |
| N | North-Freeflow Departure | N-FD | | 0 | 35 | 0 | 6 | 0.511 | | | | | | | | | 0 | |
| N | North-Left Turn Queue | N-LQ | NBL | 0 | 3 | | | | 0 | 0 | 0 | 0 | 2 | 6.134 | 0 | 0 | 0 | |
| N | North-Right Turn Queue | N-RQ | NBR | 0 | 3 | | | | 0 | 0 | 0 | 0 | 2 | 6.134 | 0 | 0 | 0 | |
| S | South-Freeflow Approach | S-FA | | 536 | 35 | 0 | 12 | 0.511 | | | | | | | | | 2 | |
| S | South-Through Traffic Queue | S-TQ | SBT | 430 | 3 | | | | 0 | 0 | 110 | 91 | 2 | 6.134 | 1,695 | 2 | 19 | |
| S | South-Freeflow Departure | S-FD | | 968 | 35 | 0 | 12 | 0.511 | | | | | | | | | 2 | |
| S | South-Left Turn Queue | S-LQ | SBL | 0 | 3 | | | | 0 | 0 | 0 | 0 | 2 | 6.134 | 0 | 0 | 0 | |
| S | South-Right Turn Queue | S-RQ | SBR | 106 | 3 | | | | 0 | 0 | 110 | 91 | 2 | 6.134 | 1,334 | 0 | 19 | |
| W | West-Freeflow Approach | W-FA | | 3,799 | 35 | 0 | 15 | 0.511 | | | | | | | | | 3 | |
| W | West-Through Traffic Queue | W-TQ | WBT | 3,261 | 3 | | | | 0 | 0 | 110 | 29.1 | 2 | 6.134 | 1,695 | 3 | 80.9 | |
| W | West-Freeflow Departure | W-FD | | 3,367 | 35 | 0 | 15 | 0.511 | | | | | | | | | 3 | |
| W | West-Left Turn Queue | W-LQ | WBL | 538 | 3 | | | | 0 | 0 | 110 | 29.1 | 2 | 6.134 | 1,842 | 0 | 80.9 | |
| W | West-Right Turn Queue | W-RQ | WBR | 0 | 3 | | | | 0 | 0 | 0 | 0 | 2 | 6.134 | 0 | 0 | 0 | |
| E | East-Freeflow Approach | E-FA | | 0 | 35 | 0 | 6 | 0.511 | | | | | | | | | 0 | |
| E | East-Through Traffic Queue | E-TQ | EBT | 0 | 3 | | | | 0 | 0 | 0 | 0 | 2 | 6.134 | 0 | 0 | 0 | |
| E | East-Freeflow Departure | E-FD | | 0 | 35 | 0 | 6 | 0.511 | | | | | | | | | 0 | |
| E | East-Left Turn Queue | E-LQ | EBL | 0 | 3 | | | | 0 | 0 | 0 | 0 | 2 | 6.134 | 0 | 0 | 0 | |
| E | East-Right Turn Queue | E-RQ | EBR | 0 | 3 | | | | 0 | 0 | 0 | 0 | 2 | 6.134 | 0 | 0 | 0 | |

Data in black obtained from traffic reports

Data in blue are calculated values

Mixing zone width for freeflow traffic = road width + 6 meters

Mixing zone width for queue traffic = road width

Lane width

3 m

Direction Legend

N = Northbound

S = Southbound

W = Westbound

E = Eastbound

Intersection 21 (Hawthorn St & India St)

Existing Conditions (2018)

| AM Peak Hour | | | | | | Freeflow Traffic Input Data | | | Queue Traffic Data | | | | | | | # Lanes | Green time length s | | |
|--------------|-----------------------------|------|--------------|--------|-----------|-----------------------------|---------------------|------------------------|--------------------|---------------------|-------------------------------|---------------------------|-----------------------|-----------------------------|--------------------------------|---------|---------------------|------|--|
| Direction | Description | ID | Synchro Link | Volume | Speed mph | Link Height m | Mixing Zone Width m | Emission Factor g/v-mi | Link Height m | Mixing Zone Width m | Average signal cycle length s | Average red time length s | Clearance lost time s | Idle Emission Factor g/v-hr | Saturation Flow Rate v/hr/lane | | | | |
| N | North-Freeflow Approach | N-FA | | 157 | 35 | 0 | 12 | 1.321 | | | | | | | | | 2 | | |
| N | North-Through Traffic Queue | N-TQ | NBT | 90 | 3 | | | | 0 | 0 | 110 | 87.5 | 2 | 10.666 | 1,770 | | 2 | 22.5 | |
| N | North-Freeflow Departure | N-FD | | 204 | 35 | 0 | 12 | 1.321 | | | | | | | | | 2 | | |
| N | North-Left Turn Queue | N-LQ | NBL | 67 | 3 | | | | 0 | 0 | 110 | 87.5 | 2 | 10.666 | 1,791 | | 0 | 22.5 | |
| N | North-Right Turn Queue | N-RQ | NBR | 0 | 3 | | | | 0 | 0 | 0 | 0 | 2 | 10.666 | 0 | | 0 | 0 | |
| S | South-Freeflow Approach | S-FA | | 0 | 35 | 0 | 6 | 1.321 | | | | | | | | | 0 | | |
| S | South-Through Traffic Queue | S-TQ | SBT | 0 | 3 | | | | 0 | 0 | 0 | 0 | 2 | 10.666 | 0 | | 0 | 0 | |
| S | South-Freeflow Departure | S-FD | | 0 | 35 | 0 | 6 | 1.321 | | | | | | | | | 0 | | |
| S | South-Left Turn Queue | S-LQ | SBL | 0 | 3 | | | | 0 | 0 | 0 | 0 | 2 | 10.666 | 0 | | 0 | 0 | |
| S | South-Right Turn Queue | S-RQ | SBR | 0 | 3 | | | | 0 | 0 | 0 | 0 | 2 | 10.666 | 0 | | 0 | 0 | |
| W | West-Freeflow Approach | W-FA | | 2,164 | 35 | 0 | 15 | 1.321 | | | | | | | | | 3 | | |
| W | West-Through Traffic Queue | W-TQ | WBT | 2,050 | 3 | | | | 0 | 0 | 110 | 32.9 | 2 | 10.666 | 1,695 | | 3 | 77.1 | |
| W | West-Freeflow Departure | W-FD | | 2,117 | 35 | 0 | 15 | 1.321 | | | | | | | | | 3 | | |
| W | West-Left Turn Queue | W-LQ | WBL | 0 | 3 | | | | 0 | 0 | 0 | 0 | 2 | 10.666 | 0 | | 0 | 0 | |
| W | West-Right Turn Queue | W-RQ | WBR | 114 | 3 | | | | 0 | 0 | 110 | 32.9 | 2 | 10.666 | 1,801 | | 0 | 77.1 | |
| E | East-Freeflow Approach | E-FA | | 0 | 35 | 0 | 6 | 1.321 | | | | | | | | | 0 | | |
| E | East-Through Traffic Queue | E-TQ | EBT | 0 | 3 | | | | 0 | 0 | 0 | 0 | 2 | 10.666 | 0 | | 0 | 0 | |
| E | East-Freeflow Departure | E-FD | | 0 | 35 | 0 | 6 | 1.321 | | | | | | | | | 0 | | |
| E | East-Left Turn Queue | E-LQ | EBL | 0 | 3 | | | | 0 | 0 | 0 | 0 | 2 | 10.666 | 0 | | 0 | 0 | |
| E | East-Right Turn Queue | E-RQ | EBR | 0 | 3 | | | | 0 | 0 | 0 | 0 | 2 | 10.666 | 0 | | 0 | 0 | |
| Total | | | | 2,321 | | | | | | | | | | | | | | | |

2050 Plus Project

| AM Peak Hour | | | | | | Freeflow Traffic Input Data | | | Queue Traffic Data | | | | | | | # Lanes | Green time length s | |
|--------------|-----------------------------|------|--------------|--------|-----------|-----------------------------|---------------------|------------------------|--------------------|---------------------|-------------------------------|---------------------------|-----------------------|-----------------------------|--------------------------------|---------|---------------------|------|
| Direction | Description | ID | Synchro Link | Volume | Speed mph | Link Height m | Mixing Zone Width m | Emission Factor g/v-mi | Link Height m | Mixing Zone Width m | Average signal cycle length s | Average red time length s | Clearance lost time s | Idle Emission Factor g/v-hr | Saturation Flow Rate v/hr/lane | | | |
| N | North-Freeflow Approach | N-FA | | 286 | 35 | 0 | 15 | 0.511 | | | | | | | | | 3 | |
| N | North-Through Traffic Queue | N-TQ | NBT | 179 | 3 | | | | 0 | 0 | 110 | 91 | 2 | 6.134 | 1,770 | | 3 | 19 |
| N | North-Freeflow Departure | N-FD | | 409 | 35 | 0 | 15 | 0.511 | | | | | | | | | 3 | |
| N | North-Left Turn Queue | N-LQ | NBL | 107 | 3 | | | | 0 | 0 | 110 | 91 | 2 | 6.134 | 1,784 | | 0 | 19 |
| N | North-Right Turn Queue | N-RQ | NBR | 0 | 3 | | | | 0 | 0 | 0 | 0 | 2 | 6.134 | 0 | | 0 | 0 |
| S | South-Freeflow Approach | S-FA | | 0 | 35 | 0 | 6 | 0.511 | | | | | | | | | 0 | |
| S | South-Through Traffic Queue | S-TQ | SBT | 0 | 3 | | | | 0 | 0 | 0 | 0 | 2 | 6.134 | 0 | | 0 | 0 |
| S | South-Freeflow Departure | S-FD | | 0 | 35 | 0 | 6 | 0.511 | | | | | | | | | 0 | |
| S | South-Left Turn Queue | S-LQ | SBL | 0 | 3 | | | | 0 | 0 | 0 | 0 | 2 | 6.134 | 0 | | 0 | 0 |
| S | South-Right Turn Queue | S-RQ | SBR | 0 | 3 | | | | 0 | 0 | 0 | 0 | 2 | 6.134 | 0 | | 0 | 0 |
| W | West-Freeflow Approach | W-FA | | 3,870 | 35 | 0 | 15 | 0.511 | | | | | | | | | 3 | |
| W | West-Through Traffic Queue | W-TQ | WBT | 3,640 | 3 | | | | 0 | 0 | 110 | 29.4 | 2 | 6.134 | 1,695 | | 3 | 80.6 |
| W | West-Freeflow Departure | W-FD | | 3,747 | 35 | 0 | 15 | 0.511 | | | | | | | | | 3 | |
| W | West-Left Turn Queue | W-LQ | WBL | 0 | 3 | | | | 0 | 0 | 0 | 0 | 2 | 6.134 | 0 | | 0 | 0 |
| W | West-Right Turn Queue | W-RQ | WBR | 230 | 3 | | | | 0 | 0 | 110 | 29.4 | 2 | 6.134 | 1,817 | | 0 | 80.6 |
| E | East-Freeflow Approach | E-FA | | 0 | 35 | 0 | 6 | 0.511 | | | | | | | | | 0 | |
| E | East-Through Traffic Queue | E-TQ | EBT | 0 | 3 | | | | 0 | 0 | 0 | 0 | 2 | 6.134 | 0 | | 0 | 0 |
| E | East-Freeflow Departure | E-FD | | 0 | 35 | 0 | 6 | 0.511 | | | | | | | | | 0 | |
| E | East-Left Turn Queue | E-LQ | EBL | 0 | 3 | | | | 0 | 0 | 0 | 0 | 2 | 6.134 | 0 | | 0 | 0 |
| E | East-Right Turn Queue | E-RQ | EBR | 0 | 3 | | | | 0 | 0 | 0 | 0 | 2 | 6.134 | 0 | | 0 | 0 |

Data in black obtained from traffic reports

Data in blue are calculated values

Mixing zone width for freeflow traffic = road width + 6 meters

Mixing zone width for queue traffic = road width

Lane width

3 m

Direction Legend

N = Northbound

S = Southbound

W = Westbound

E = Eastbound

Intersection 22 (Hawthorn St & Columbia St)

Existing Conditions (2018)

| AM Peak Hour | | | | | | Freeflow Traffic Input Data | | | Queue Traffic Data | | | | | | # Lanes | Green time length s | | | |
|--------------|-----------------------------|------|--------------|--------|-----------|-----------------------------|---------------------|------------------------|--------------------|---------------------|-------------------------------|---------------------------|-----------------------|-----------------------------|---------|---------------------|--------------------------------|------|--|
| Direction | Description | ID | Synchro Link | Volume | Speed mph | Link Height m | Mixing Zone Width m | Emission Factor g/v-mi | Link Height m | Mixing Zone Width m | Average signal cycle length s | Average red time length s | Clearance lost time s | Idle Emission Factor g/v-hr | | | Saturation Flow Rate v/hr/lane | | |
| N | North-Freeflow Approach | N-FA | | 0 | 35 | 0 | 6 | 1.321 | | | | | | | | | 0 | | |
| N | North-Through Traffic Queue | N-TQ | NBT | 0 | 3 | | | | 0 | 0 | 0 | 0 | 2 | 10.666 | 0 | | 0 | 0 | |
| N | North-Freeflow Departure | N-FD | | 0 | 35 | 0 | 6 | 1.321 | | | | | | | | | 0 | | |
| N | North-Left Turn Queue | N-LQ | NBL | 0 | 3 | | | | 0 | 0 | 0 | 0 | 2 | 10.666 | 0 | | 0 | 0 | |
| N | North-Right Turn Queue | N-RQ | NBR | 0 | 3 | | | | 0 | 0 | 0 | 0 | 2 | 10.666 | 0 | | 0 | 0 | |
| S | South-Freeflow Approach | S-FA | | 247 | 35 | 0 | 12 | 1.321 | | | | | | | | | 2 | | |
| S | South-Through Traffic Queue | S-TQ | SBT | 209 | 3 | | | | 0 | 0 | 110 | 87.3 | 2 | 10.666 | 1,770 | | 2 | 22.7 | |
| S | South-Freeflow Departure | S-FD | | 508 | 35 | 0 | 12 | 1.321 | | | | | | | | | 2 | | |
| S | South-Left Turn Queue | S-LQ | SBL | 0 | 3 | | | | 0 | 0 | 0 | 0 | 2 | 10.666 | 0 | | 0 | 0 | |
| S | South-Right Turn Queue | S-RQ | SBR | 38 | 3 | | | | 0 | 0 | 110 | 87.3 | 2 | 10.666 | 1,468 | | 1 | 22.7 | |
| W | West-Freeflow Approach | W-FA | | 2,428 | 35 | 0 | 15 | 1.321 | | | | | | | | | 3 | | |
| W | West-Through Traffic Queue | W-TQ | WBT | 2,129 | 3 | | | | 0 | 0 | 110 | 32.9 | 2 | 10.666 | 1,695 | | 3 | 77.1 | |
| W | West-Freeflow Departure | W-FD | | 2,167 | 35 | 0 | 15 | 1.321 | | | | | | | | | 3 | | |
| W | West-Left Turn Queue | W-LQ | WBL | 299 | 3 | | | | 0 | 0 | 110 | 32.9 | 2 | 10.666 | 1,833 | | 0 | 77.1 | |
| W | West-Right Turn Queue | W-RQ | WBR | 0 | 3 | | | | 0 | 0 | 0 | 0 | 2 | 10.666 | 0 | | 0 | 0 | |
| E | East-Freeflow Approach | E-FA | | 0 | 35 | 0 | 6 | 1.321 | | | | | | | | | 0 | | |
| E | East-Through Traffic Queue | E-TQ | EBT | 0 | 3 | | | | 0 | 0 | 0 | 0 | 2 | 10.666 | 0 | | 0 | 0 | |
| E | East-Freeflow Departure | E-FD | | 0 | 35 | 0 | 6 | 1.321 | | | | | | | | | 0 | | |
| E | East-Left Turn Queue | E-LQ | EBL | 0 | 3 | | | | 0 | 0 | 0 | 0 | 2 | 10.666 | 0 | | 0 | 0 | |
| E | East-Right Turn Queue | E-RQ | EBR | 0 | 3 | | | | 0 | 0 | 0 | 0 | 2 | 10.666 | 0 | | 0 | 0 | |
| Total | | | | 2,675 | | | | | | | | | | | | | | | |

2050 Plus Project

| AM Peak Hour | | | | | | Freeflow Traffic Input Data | | | Queue Traffic Data | | | | | | # Lanes | Green time length s | | |
|--------------|-----------------------------|------|--------------|--------|-----------|-----------------------------|---------------------|------------------------|--------------------|---------------------|-------------------------------|---------------------------|-----------------------|-----------------------------|---------|---------------------|--------------------------------|------|
| Direction | Description | ID | Synchro Link | Volume | Speed mph | Link Height m | Mixing Zone Width m | Emission Factor g/v-mi | Link Height m | Mixing Zone Width m | Average signal cycle length s | Average red time length s | Clearance lost time s | Idle Emission Factor g/v-hr | | | Saturation Flow Rate v/hr/lane | |
| N | North-Freeflow Approach | N-FA | | 0 | 35 | 0 | 6 | 0.511 | | | | | | | | | 0 | |
| N | North-Through Traffic Queue | N-TQ | NBT | 0 | 3 | | | | 0 | 0 | 0 | 0 | 2 | 6.134 | 0 | | 0 | 0 |
| N | North-Freeflow Departure | N-FD | | 0 | 35 | 0 | 6 | 0.511 | | | | | | | | | 0 | |
| N | North-Left Turn Queue | N-LQ | NBL | 0 | 3 | | | | 0 | 0 | 0 | 0 | 2 | 6.134 | 0 | | 0 | 0 |
| N | North-Right Turn Queue | N-RQ | NBR | 0 | 3 | | | | 0 | 0 | 0 | 0 | 2 | 6.134 | 0 | | 0 | 0 |
| S | South-Freeflow Approach | S-FA | | 515 | 35 | 0 | 12 | 0.511 | | | | | | | | | 2 | |
| S | South-Through Traffic Queue | S-TQ | SBT | 440 | 3 | | | | 0 | 0 | 110 | 91 | 2 | 6.134 | 1,770 | | 2 | 19 |
| S | South-Freeflow Departure | S-FD | | 972 | 35 | 0 | 12 | 0.511 | | | | | | | | | 2 | |
| S | South-Left Turn Queue | S-LQ | SBL | 0 | 3 | | | | 0 | 0 | 0 | 0 | 2 | 6.134 | 0 | | 0 | 0 |
| S | South-Right Turn Queue | S-RQ | SBR | 75 | 3 | | | | 0 | 0 | 110 | 91 | 2 | 6.134 | 1,446 | | 1 | 19 |
| W | West-Freeflow Approach | W-FA | | 4,408 | 35 | 0 | 15 | 0.511 | | | | | | | | | 3 | |
| W | West-Through Traffic Queue | W-TQ | WBT | 3,876 | 3 | | | | 0 | 0 | 110 | 29.2 | 2 | 6.134 | 1,695 | | 3 | 80.8 |
| W | West-Freeflow Departure | W-FD | | 3,951 | 35 | 0 | 15 | 0.511 | | | | | | | | | 3 | |
| W | West-Left Turn Queue | W-LQ | WBL | 532 | 3 | | | | 0 | 0 | 110 | 29.2 | 2 | 6.134 | 1,842 | | 0 | 80.8 |
| W | West-Right Turn Queue | W-RQ | WBR | 0 | 3 | | | | 0 | 0 | 0 | 0 | 2 | 6.134 | 0 | | 0 | 0 |
| E | East-Freeflow Approach | E-FA | | 0 | 35 | 0 | 6 | 0.511 | | | | | | | | | 0 | |
| E | East-Through Traffic Queue | E-TQ | EBT | 0 | 3 | | | | 0 | 0 | 0 | 0 | 2 | 6.134 | 0 | | 0 | 0 |
| E | East-Freeflow Departure | E-FD | | 0 | 35 | 0 | 6 | 0.511 | | | | | | | | | 0 | |
| E | East-Left Turn Queue | E-LQ | EBL | 0 | 3 | | | | 0 | 0 | 0 | 0 | 2 | 6.134 | 0 | | 0 | 0 |
| E | East-Right Turn Queue | E-RQ | EBR | 0 | 3 | | | | 0 | 0 | 0 | 0 | 2 | 6.134 | 0 | | 0 | 0 |

Data in black obtained from traffic reports
 Data in blue are calculated values

Mixing zone width for freeflow traffic = road width + 6 meters
 Mixing zone width for queue traffic = road width

Lane width 3 m

Direction Legend
 N = Northbound
 S = Southbound
 W = Westbound
 E = Eastbound

Intersection 23 (Hawthorn St & State St)

Existing Conditions (2018)

| AM Peak Hour | | | | | | Freeflow Traffic Input Data | | | Queue Traffic Data | | | | | | # Lanes | Green time length s | | |
|--------------|-----------------------------|------|--------------|--------|-----------|-----------------------------|---------------------|------------------------|--------------------|---------------------|-------------------------------|---------------------------|-----------------------|-----------------------------|---------|---------------------|--------------------------------|------|
| Direction | Description | ID | Synchro Link | Volume | Speed mph | Link Height m | Mixing Zone Width m | Emission Factor g/v-mi | Link Height m | Mixing Zone Width m | Average signal cycle length s | Average red time length s | Clearance lost time s | Idle Emission Factor g/v-hr | | | Saturation Flow Rate v/hr/lane | |
| N | North-Freeflow Approach | N-FA | | 66 | 35 | 0 | 12 | 1.321 | | | | | | | | | 2 | |
| N | North-Through Traffic Queue | N-TQ | NBT | 35 | 3 | | | | 0 | 0 | 110 | 90.5 | 2 | 10.666 | 1,770 | | 2 | 19.5 |
| N | North-Freeflow Departure | N-FD | | 124 | 35 | 0 | 12 | 1.321 | | | | | | | | | 2 | |
| N | North-Left Turn Queue | N-LQ | NBL | 31 | 3 | | | | 0 | 0 | 110 | 90.5 | 2 | 10.666 | 1,784 | | 0 | 19.5 |
| N | North-Right Turn Queue | N-RQ | NBR | 0 | 3 | | | | 0 | 0 | 0 | 0 | 2 | 10.666 | 0 | | 0 | 0 |
| S | South-Freeflow Approach | S-FA | | 0 | 35 | 0 | 6 | 1.321 | | | | | | | | | 0 | |
| S | South-Through Traffic Queue | S-TQ | SBT | 0 | 3 | | | | 0 | 0 | 0 | 0 | 2 | 10.666 | 0 | | 0 | 0 |
| S | South-Freeflow Departure | S-FD | | 0 | 35 | 0 | 6 | 1.321 | | | | | | | | | 0 | |
| S | South-Left Turn Queue | S-LQ | SBL | 0 | 3 | | | | 0 | 0 | 0 | 0 | 2 | 10.666 | 0 | | 0 | 0 |
| S | South-Right Turn Queue | S-RQ | SBR | 0 | 3 | | | | 0 | 0 | 0 | 0 | 2 | 10.666 | 0 | | 0 | 0 |
| W | West-Freeflow Approach | W-FA | | 2,502 | 35 | 0 | 15 | 1.321 | | | | | | | | | 3 | |
| W | West-Through Traffic Queue | W-TQ | WBT | 2,413 | 3 | | | | 0 | 0 | 110 | 29.9 | 2 | 10.666 | 1,695 | | 3 | 80.1 |
| W | West-Freeflow Departure | W-FD | | 2,444 | 35 | 0 | 15 | 1.321 | | | | | | | | | 3 | |
| W | West-Left Turn Queue | W-LQ | WBL | 0 | 3 | | | | 0 | 0 | 0 | 0 | 2 | 10.666 | 0 | | 0 | 0 |
| W | West-Right Turn Queue | W-RQ | WBR | 89 | 3 | | | | 0 | 0 | 110 | 29.9 | 2 | 10.666 | 1,828 | | 0 | 80.1 |
| E | East-Freeflow Approach | E-FA | | 0 | 35 | 0 | 6 | 1.321 | | | | | | | | | 0 | |
| E | East-Through Traffic Queue | E-TQ | EBT | 0 | 3 | | | | 0 | 0 | 0 | 0 | 2 | 10.666 | 0 | | 0 | 0 |
| E | East-Freeflow Departure | E-FD | | 0 | 35 | 0 | 6 | 1.321 | | | | | | | | | 0 | |
| E | East-Left Turn Queue | E-LQ | EBL | 0 | 3 | | | | 0 | 0 | 0 | 0 | 2 | 10.666 | 0 | | 0 | 0 |
| E | East-Right Turn Queue | E-RQ | EBR | 0 | 3 | | | | 0 | 0 | 0 | 0 | 2 | 10.666 | 0 | | 0 | 0 |
| Total | | | | 2,568 | | | | | | | | | | | | | | |

2050 Plus Project

| AM Peak Hour | | | | | | Freeflow Traffic Input Data | | | Queue Traffic Data | | | | | | # Lanes | Green time length s | | |
|--------------|-----------------------------|------|--------------|--------|-----------|-----------------------------|---------------------|------------------------|--------------------|---------------------|-------------------------------|---------------------------|-----------------------|-----------------------------|---------|---------------------|--------------------------------|------|
| Direction | Description | ID | Synchro Link | Volume | Speed mph | Link Height m | Mixing Zone Width m | Emission Factor g/v-mi | Link Height m | Mixing Zone Width m | Average signal cycle length s | Average red time length s | Clearance lost time s | Idle Emission Factor g/v-hr | | | Saturation Flow Rate v/hr/lane | |
| N | North-Freeflow Approach | N-FA | | 321 | 35 | 0 | 12 | 0.511 | | | | | | | | | 2 | |
| N | North-Through Traffic Queue | N-TQ | NBT | 153 | 3 | | | | 0 | 0 | 110 | 91 | 2 | 6.134 | 1,770 | | 2 | 19 |
| N | North-Freeflow Departure | N-FD | | 274 | 35 | 0 | 12 | 0.511 | | | | | | | | | 2 | |
| N | North-Left Turn Queue | N-LQ | NBL | 168 | 3 | | | | 0 | 0 | 110 | 91 | 2 | 6.134 | 1,774 | | 0 | 19 |
| N | North-Right Turn Queue | N-RQ | NBR | 0 | 3 | | | | 0 | 0 | 0 | 0 | 2 | 6.134 | 0 | | 0 | 0 |
| S | South-Freeflow Approach | S-FA | | 0 | 35 | 0 | 6 | 0.511 | | | | | | | | | 0 | |
| S | South-Through Traffic Queue | S-TQ | SBT | 0 | 3 | | | | 0 | 0 | 0 | 0 | 2 | 6.134 | 0 | | 0 | 0 |
| S | South-Freeflow Departure | S-FD | | 0 | 35 | 0 | 6 | 0.511 | | | | | | | | | 0 | |
| S | South-Left Turn Queue | S-LQ | SBL | 0 | 3 | | | | 0 | 0 | 0 | 0 | 2 | 6.134 | 0 | | 0 | 0 |
| S | South-Right Turn Queue | S-RQ | SBR | 0 | 3 | | | | 0 | 0 | 0 | 0 | 2 | 6.134 | 0 | | 0 | 0 |
| W | West-Freeflow Approach | W-FA | | 4,418 | 35 | 0 | 15 | 0.511 | | | | | | | | | 3 | |
| W | West-Through Traffic Queue | W-TQ | WBT | 4,297 | 3 | | | | 0 | 0 | 110 | 29.4 | 2 | 6.134 | 1,695 | | 3 | 80.6 |
| W | West-Freeflow Departure | W-FD | | 4,465 | 35 | 0 | 15 | 0.511 | | | | | | | | | 3 | |
| W | West-Left Turn Queue | W-LQ | WBL | 0 | 3 | | | | 0 | 0 | 0 | 0 | 2 | 6.134 | 0 | | 0 | 0 |
| W | West-Right Turn Queue | W-RQ | WBR | 121 | 3 | | | | 0 | 0 | 110 | 29.4 | 2 | 6.134 | 1,844 | | 0 | 80.6 |
| E | East-Freeflow Approach | E-FA | | 0 | 35 | 0 | 6 | 0.511 | | | | | | | | | 0 | |
| E | East-Through Traffic Queue | E-TQ | EBT | 0 | 3 | | | | 0 | 0 | 0 | 0 | 2 | 6.134 | 0 | | 0 | 0 |
| E | East-Freeflow Departure | E-FD | | 0 | 35 | 0 | 6 | 0.511 | | | | | | | | | 0 | |
| E | East-Left Turn Queue | E-LQ | EBL | 0 | 3 | | | | 0 | 0 | 0 | 0 | 2 | 6.134 | 0 | | 0 | 0 |
| E | East-Right Turn Queue | E-RQ | EBR | 0 | 3 | | | | 0 | 0 | 0 | 0 | 2 | 6.134 | 0 | | 0 | 0 |

Data in black obtained from traffic reports
 Data in blue are calculated values

Mixing zone width for freeflow traffic = road width + 6 meters
 Mixing zone width for queue traffic = road width

Lane width 3 m

Direction Legend
 N = Northbound
 S = Southbound
 W = Westbound
 E = Eastbound

Intersection 24 (I-5 NB Off-Ramp/Brandt & Hawthorn)

Existing Conditions (2018)

| PM Peak Hour | | | | | | Freeflow Traffic Input Data | | | Queue Traffic Data | | | | | | # Lanes | Green time length s |
|--------------|--------------------------------|------|--------------|--------|-----------|-----------------------------|---------------------|------------------------|--------------------|---------------------|-------------------------------|---------------------------|-----------------------|-----------------------------|---------|---------------------|
| Direction | Description | ID | Synchro Link | Volume | Speed mph | Link Height m | Mixing Zone Width m | Emission Factor g/v-mi | Link Height m | Mixing Zone Width m | Average signal cycle length s | Average red time length s | Clearance lost time s | Idle Emission Factor g/v-hr | | |
| N | North-Freeflow Approach | N-FA | | 106 | 35 | 0 | 9 | 1.321 | | | | | | | | 1 |
| N | | N-TQ | NBT | 103 | 3 | | | | | | | | | | | 1 |
| N | | N-FD | | 596 | 35 | 0 | 9 | 1.321 | | | | | | | | 1 |
| N | | N-LQ | NBL | 3 | 3 | | | | | | | | | | | 1 |
| N | | N-RQ | NBR | 0 | 3 | | | | | | | | | | | 0 |
| S | n/a | n/a | | | 35 | 0 | 6 | 1.321 | | | | | | | | 0 |
| S | n/a | S-TQ | SBT | 0 | 3 | | | | | | | | | | | 0 |
| S | n/a | S-FD | | | 35 | 0 | 6 | 1.321 | | | | | | | | 0 |
| S | n/a | S-LQ | SBL | 0 | 3 | | | | | | | | | | | 0 |
| S | Brant to I-5 NB | S-FA | SBR | 25 | 35 | 0 | 9 | 1.321 | | | | | | | | 1 |
| W | Hawthorn Approach | W-FA | | 722 | 35 | 0 | 12 | 1.321 | | | | | | | | 2 |
| W | Hawthorn Through Traffic Queue | W-TQ | WBT | 154 | 3 | | | | | | | | | | | 2 |
| W | Hawthorn Departure | W-FD | | 154 | 35 | 0 | 12 | 1.321 | | | | | | | | 2 |
| W | n/a | W-LQ | WBL | 0 | 3 | | | | | | | | | | | 0 |
| W | Hawthorn to I-5 NB | W-RT | WBR | 568 | 35 | 0 | 9 | 1.321 | | | | | | | | 1 |
| E | n/a | E-FA | | | 35 | 0 | 6 | 1.321 | | | | | | | | 0 |
| E | n/a | E-TQ | EBT | 0 | 3 | | | | | | | | | | | 0 |
| E | n/a | E-FD | | | 35 | 0 | 6 | 1.321 | | | | | | | | 0 |
| E | n/a | E-LQ | EBL | 0 | 3 | | | | | | | | | | | 0 |
| E | n/a | E-RQ | EBR | 0 | 3 | | | | | | | | | | | 0 |
| Total | | | | 853 | | | | | | | | | | | | |

2050 Plus Project

| PM Peak Hour | | | | | | Freeflow Traffic Input Data | | | Queue Traffic Data | | | | | | # Lanes | Green time length s |
|--------------|--------------------------------|------|--------------|--------|-----------|-----------------------------|---------------------|------------------------|--------------------|---------------------|-------------------------------|---------------------------|-----------------------|-----------------------------|---------|---------------------|
| Direction | Description | ID | Synchro Link | Volume | Speed mph | Link Height m | Mixing Zone Width m | Emission Factor g/v-mi | Link Height m | Mixing Zone Width m | Average signal cycle length s | Average red time length s | Clearance lost time s | Idle Emission Factor g/v-hr | | |
| N | North-Freeflow Approach | N-FA | | 242 | 35 | 0 | 9 | 0.511 | | | | | | | | 1 |
| N | | N-TQ | NBT | 236 | 3 | | | | | | | | | | | 1 |
| N | | N-FD | | 959 | 35 | 0 | 9 | 0.511 | | | | | | | | 1 |
| N | | N-LQ | NBL | 6 | 3 | | | | | | | | | | | 1 |
| N | | N-RQ | NBR | 0 | 3 | | | | | | | | | | | 0 |
| S | n/a | n/a | | | 35 | 0 | 6 | 0.511 | | | | | | | | 0 |
| S | n/a | S-TQ | SBT | 0 | 3 | | | | | | | | | | | 0 |
| S | n/a | S-FD | | | 35 | 0 | 6 | 0.511 | | | | | | | | 0 |
| S | n/a | S-LQ | SBL | 0 | 3 | | | | | | | | | | | 0 |
| S | Brant to I-5 NB | S-FA | SBR | 54 | 35 | 0 | 9 | 0.511 | | | | | | | | 1 |
| W | Hawthorn Approach | W-FA | | 1,097 | 35 | 0 | 12 | 0.511 | | | | | | | | 2 |
| W | Hawthorn Through Traffic Queue | W-TQ | WBT | 198 | 3 | | | | | | | | | | | 2 |
| W | Hawthorn Departure | W-FD | | 198 | 35 | 0 | 12 | 0.511 | | | | | | | | 2 |
| W | n/a | W-LQ | WBL | 0 | 3 | | | | | | | | | | | 0 |
| W | Hawthorn to I-5 NB | W-RT | WBR | 899 | 35 | 0 | 9 | 0.511 | | | | | | | | 1 |
| E | n/a | E-FA | | | 35 | 0 | 6 | 1.321 | | | | | | | | 0 |
| E | n/a | E-TQ | EBT | 0 | 3 | | | | | | | | | | | 0 |
| E | n/a | E-FD | | | 35 | 0 | 6 | 0.511 | | | | | | | | 0 |
| E | n/a | E-LQ | EBL | 0 | 3 | | | | | | | | | | | 0 |
| E | n/a | E-RQ | EBR | 0 | 3 | | | | | | | | | | | 0 |

Data in black obtained from traffic reports

Data in blue are calculated values

Mixing zone width for freeflow traffic = road width + 6 meters

Mixing zone width for queue traffic = road width

Lane width

3 m

Direction Legend

N = Northbound

S = Southbound

W = Westbound

E = Eastbound

Intersection 27 (Grape St & Kettner Blvd)

Existing Conditions (2018)

| PM Peak Hour | | | | | | Freeflow Traffic Input Data | | | Queue Traffic Data | | | | | | # Lanes | Green time length s | | | |
|--------------|-----------------------------|------|--------------|--------|-----------|-----------------------------|---------------------|------------------------|--------------------|---------------------|-------------------------------|---------------------------|-----------------------|-----------------------------|---------|---------------------|--------------------------------|------|--|
| Direction | Description | ID | Synchro Link | Volume | Speed mph | Link Height m | Mixing Zone Width m | Emission Factor g/v-mi | Link Height m | Mixing Zone Width m | Average signal cycle length s | Average red time length s | Clearance lost time s | Idle Emission Factor g/v-hr | | | Saturation Flow Rate v/hr/lane | | |
| N | North-Freeflow Approach | N-FA | | 0 | 35 | 0 | 6 | 1.321 | | | | | | | | | 0 | | |
| N | North-Through Traffic Queue | N-TQ | NBT | 0 | 3 | | | | 0 | 0 | 0 | 0 | 2 | 10.666 | 0 | | 0 | 0 | |
| N | North-Freeflow Departure | N-FD | | 0 | 35 | 0 | 6 | 1.321 | | | | | | | | | 0 | | |
| N | North-Left Turn Queue | N-LQ | NBL | 0 | 3 | | | | 0 | 0 | 0 | 0 | 2 | 10.666 | 0 | | 0 | 0 | |
| N | North-Right Turn Queue | N-RQ | NBR | 0 | 3 | | | | 0 | 0 | 0 | 0 | 2 | 10.666 | 0 | | 0 | 0 | |
| S | South-Freeflow Approach | S-FA | | 699 | 35 | 0 | 15 | 1.321 | | | | | | | | | 3 | | |
| S | South-Through Traffic Queue | S-TQ | SBT | 485 | 3 | | | | 0 | 9 | 110 | 73.9 | 2 | 10.666 | 1,695 | | 3 | 36.1 | |
| S | South-Freeflow Departure | S-FD | | 534 | 35 | 0 | 15 | 1.321 | | | | | | | | | 3 | | |
| S | South-Left Turn Queue | S-LQ | SBL | 214 | 3 | | | | 0 | 3 | 110 | 73.9 | 2 | 10.666 | 1,789 | | 1 | 36.1 | |
| S | South-Right Turn Queue | S-RQ | SBR | 0 | 3 | | | | 0 | 0 | 0 | 0 | 2 | 10.666 | 0 | | 0 | 0 | |
| W | West-Freeflow Approach | W-FA | | 0 | 35 | 0 | 6 | 1.321 | | | | | | | | | 0 | | |
| W | West-Through Traffic Queue | W-TQ | WBT | 0 | 3 | | | | 0 | 0 | 0 | 0 | 2 | 10.666 | 0 | | 0 | 0 | |
| W | West-Freeflow Departure | W-FD | | 0 | 35 | 0 | 6 | 1.321 | | | | | | | | | 0 | | |
| W | West-Left Turn Queue | W-LQ | WBL | 0 | 3 | | | | 0 | 0 | 0 | 0 | 2 | 10.666 | 0 | | 0 | 0 | |
| W | West-Right Turn Queue | W-RQ | WBR | 0 | 3 | | | | 0 | 0 | 0 | 0 | 2 | 10.666 | 0 | | 0 | 0 | |
| E | East-Freeflow Approach | E-FA | | 1,620 | 35 | 0 | 15 | 1.321 | | | | | | | | | 3 | | |
| E | East-Through Traffic Queue | E-TQ | EBT | 1,571 | 3 | | | | 0 | 9 | 110 | 45.9 | 2 | 10.666 | 1,695 | | 3 | 64.1 | |
| E | East-Freeflow Departure | E-FD | | 1,785 | 35 | 0 | 15 | 1.321 | | | | | | | | | 3 | | |
| E | East-Left Turn Queue | E-LQ | EBL | 0 | 3 | | | | 0 | 0 | 0 | 0 | 2 | 10.666 | 0 | | 0 | 0 | |
| E | East-Right Turn Queue | E-RQ | EBR | 49 | 3 | | | | 0 | 3 | 110 | 45.9 | 2 | 10.666 | 1,825 | | 1 | 64.1 | |
| Total | | | | 2,319 | | | | | | | | | | | | | | | |

2050 Plus Project

| PM Peak Hour | | | | | | Freeflow Traffic Input Data | | | Queue Traffic Data | | | | | | # Lanes | Green time length s | | |
|--------------|-----------------------------|------|--------------|--------|-----------|-----------------------------|---------------------|------------------------|--------------------|---------------------|-------------------------------|---------------------------|-----------------------|-----------------------------|---------|---------------------|--------------------------------|------|
| Direction | Description | ID | Synchro Link | Volume | Speed mph | Link Height m | Mixing Zone Width m | Emission Factor g/v-mi | Link Height m | Mixing Zone Width m | Average signal cycle length s | Average red time length s | Clearance lost time s | Idle Emission Factor g/v-hr | | | Saturation Flow Rate v/hr/lane | |
| N | North-Freeflow Approach | N-FA | | 0 | 35 | 0 | 6 | 0.511 | | | | | | | | | 0 | |
| N | North-Through Traffic Queue | N-TQ | NBT | 0 | 3 | | | | 0 | 0 | 0 | 0 | 2 | 6.134 | 0 | | 0 | 0 |
| N | North-Freeflow Departure | N-FD | | 0 | 35 | 0 | 6 | 0.511 | | | | | | | | | 0 | |
| N | North-Left Turn Queue | N-LQ | NBL | 0 | 3 | | | | 0 | 0 | 0 | 0 | 2 | 6.134 | 0 | | 0 | 0 |
| N | North-Right Turn Queue | N-RQ | NBR | 0 | 3 | | | | 0 | 0 | 0 | 0 | 2 | 6.134 | 0 | | 0 | 0 |
| S | South-Freeflow Approach | S-FA | | 1,700 | 35 | 0 | 15 | 0.511 | | | | | | | | | 3 | |
| S | South-Through Traffic Queue | S-TQ | SBT | 1,227 | 3 | | | | 0 | 9 | 110 | 77.3 | 2 | 6.134 | 1,695 | | 3 | 32.7 |
| S | South-Freeflow Departure | S-FD | | 1,336 | 35 | 0 | 15 | 0.511 | | | | | | | | | 3 | |
| S | South-Left Turn Queue | S-LQ | SBL | 473 | 3 | | | | 0 | 3 | 110 | 77.3 | 2 | 6.134 | 1,806 | | 1 | 32.7 |
| S | South-Right Turn Queue | S-RQ | SBR | 0 | 3 | | | | 0 | 0 | 0 | 0 | 2 | 6.134 | 0 | | 0 | 0 |
| W | West-Freeflow Approach | W-FA | | 0 | 35 | 0 | 6 | 0.511 | | | | | | | | | 0 | |
| W | West-Through Traffic Queue | W-TQ | WBT | 0 | 3 | | | | 0 | 0 | 0 | 0 | 2 | 6.134 | 0 | | 0 | 0 |
| W | West-Freeflow Departure | W-FD | | 0 | 35 | 0 | 6 | 0.511 | | | | | | | | | 0 | |
| W | West-Left Turn Queue | W-LQ | WBL | 0 | 3 | | | | 0 | 0 | 0 | 0 | 2 | 6.134 | 0 | | 0 | 0 |
| W | West-Right Turn Queue | W-RQ | WBR | 0 | 3 | | | | 0 | 0 | 0 | 0 | 2 | 6.134 | 0 | | 0 | 0 |
| E | East-Freeflow Approach | E-FA | | 3,376 | 35 | 0 | 15 | 0.511 | | | | | | | | | 3 | |
| E | East-Through Traffic Queue | E-TQ | EBT | 3,267 | 3 | | | | 0 | 9 | 110 | 42.5 | 2 | 6.134 | 1,695 | | 3 | 67.5 |
| E | East-Freeflow Departure | E-FD | | 3,740 | 35 | 0 | 15 | 0.511 | | | | | | | | | 3 | |
| E | East-Left Turn Queue | E-LQ | EBL | 0 | 3 | | | | 0 | 0 | 0 | 0 | 2 | 6.134 | 0 | | 0 | 0 |
| E | East-Right Turn Queue | E-RQ | EBR | 109 | 3 | | | | 0 | 3 | 110 | 42.5 | 2 | 6.134 | 1,829 | | 1 | 67.5 |

Data in black obtained from traffic reports
 Data in blue are calculated values

Mixing zone width for freeflow traffic = road width + 6 meters
 Mixing zone width for queue traffic = road width

Lane width 3 m

Direction Legend
 N = Northbound
 S = Southbound
 W = Westbound
 E = Eastbound

Intersection 28 (Grape St & India St)

Existing Conditions (2018)

| PM Peak Hour | | | | | | Freeflow Traffic Input Data | | | Queue Traffic Data | | | | | | # Lanes | Green time length s | | | |
|--------------|-----------------------------|------|--------------|--------|-----------|-----------------------------|---------------------|------------------------|--------------------|---------------------|-------------------------------|---------------------------|-----------------------|-----------------------------|---------|---------------------|--------------------------------|------|--|
| Direction | Description | ID | Synchro Link | Volume | Speed mph | Link Height m | Mixing Zone Width m | Emission Factor g/v-mi | Link Height m | Mixing Zone Width m | Average signal cycle length s | Average red time length s | Clearance lost time s | Idle Emission Factor g/v-hr | | | Saturation Flow Rate v/hr/lane | | |
| N | North-Freeflow Approach | N-FA | | 386 | 35 | 0 | 12 | 1.321 | | | | | | | | | 2 | | |
| N | North-Through Traffic Queue | N-TQ | NBT | 204 | 3 | | | | 0 | 0 | 110 | 72.9 | 2 | 10.666 | 1,770 | | 2 | 37.1 | |
| N | North-Freeflow Departure | N-FD | | 278 | 35 | 0 | 12 | 1.321 | | | | | | | | | 2 | | |
| N | North-Left Turn Queue | N-LQ | NBL | 0 | 3 | | | | 0 | 0 | 0 | 0 | 2 | 10.666 | 0 | | 0 | 0 | |
| N | North-Right Turn Queue | N-RQ | NBR | 182 | 3 | | | | 0 | 0 | 110 | 72.9 | 2 | 10.666 | 1,442 | | 0 | 37.1 | |
| S | South-Freeflow Approach | S-FA | | 0 | 35 | 0 | 12 | 1.321 | | | | | | | | | 2 | | |
| S | South-Through Traffic Queue | S-TQ | SBT | 0 | 3 | | | | 0 | 0 | 0 | 0 | 2 | 10.666 | 0 | | 2 | 0 | |
| S | South-Freeflow Departure | S-FD | | 0 | 35 | 0 | 12 | 1.321 | | | | | | | | | 2 | | |
| S | South-Left Turn Queue | S-LQ | SBL | 0 | 3 | | | | 0 | 0 | 0 | 0 | 2 | 10.666 | 0 | | 0.5 | 0 | |
| S | South-Right Turn Queue | S-RQ | SBR | 0 | 3 | | | | 0 | 0 | 0 | 0 | 2 | 10.666 | 0 | | 1.5 | 0 | |
| W | West-Freeflow Approach | W-FA | | 0 | 35 | 0 | 12 | 1.321 | | | | | | | | | 2 | | |
| W | West-Through Traffic Queue | W-TQ | WBT | 0 | 3 | | | | 0 | 0 | 0 | 0 | 2 | 10.666 | 0 | | 2 | 0 | |
| W | West-Freeflow Departure | W-FD | | 0 | 35 | 0 | 12 | 1.321 | | | | | | | | | 2 | | |
| W | West-Left Turn Queue | W-LQ | WBL | 0 | 3 | | | | 0 | 0 | 0 | 0 | 2 | 10.666 | 0 | | 1 | 0 | |
| W | West-Right Turn Queue | W-RQ | WBR | 0 | 3 | | | | 0 | 0 | 0 | 0 | 2 | 10.666 | 0 | | 0 | 0 | |
| E | East-Freeflow Approach | E-FA | | 1,786 | 35 | 0 | 15 | 1.321 | | | | | | | | | 3 | | |
| E | East-Through Traffic Queue | E-TQ | EBT | 1,712 | 3 | | | | 0 | 0 | 110 | 46.9 | 2 | 10.666 | 1,695 | | 3 | 63.1 | |
| E | East-Freeflow Departure | E-FD | | 1,894 | 35 | 0 | 15 | 1.321 | | | | | | | | | 3 | | |
| E | East-Left Turn Queue | E-LQ | EBL | 74 | 3 | | | | 0 | 0 | 110 | 46.9 | 2 | 10.666 | 1,853 | | 0 | 63.1 | |
| E | East-Right Turn Queue | E-RQ | EBR | 0 | 3 | | | | 0 | 0 | 0 | 0 | 2 | 10.666 | 0 | | 0 | 0 | |
| | | | | Total | 2,172 | | | | | | | | | | | | | | |

2050 Plus Project

| PM Peak Hour | | | | | | Freeflow Traffic Input Data | | | Queue Traffic Data | | | | | | # Lanes | Green time length s | | |
|--------------|-----------------------------|------|--------------|--------|-----------|-----------------------------|---------------------|------------------------|--------------------|---------------------|-------------------------------|---------------------------|-----------------------|-----------------------------|---------|---------------------|--------------------------------|------|
| Direction | Description | ID | Synchro Link | Volume | Speed mph | Link Height m | Mixing Zone Width m | Emission Factor g/v-mi | Link Height m | Mixing Zone Width m | Average signal cycle length s | Average red time length s | Clearance lost time s | Idle Emission Factor g/v-hr | | | Saturation Flow Rate v/hr/lane | |
| N | North-Freeflow Approach | N-FA | | 488 | 35 | 0 | 12 | 0.511 | | | | | | | | | 2 | |
| N | North-Through Traffic Queue | N-TQ | NBT | 281 | 3 | | | | 0 | 0 | 110 | 89.5 | 2 | 6.134 | 1,770 | | 2 | 20.5 |
| N | North-Freeflow Departure | N-FD | | 473 | 35 | 0 | 12 | 0.511 | | | | | | | | | 2 | |
| N | North-Left Turn Queue | N-LQ | NBL | 0 | 3 | | | | 0 | 0 | 0 | 0 | 2 | 6.134 | 0 | | 0 | 0 |
| N | North-Right Turn Queue | N-RQ | NBR | 207 | 3 | | | | 0 | 0 | 110 | 89.5 | 2 | 6.134 | 1,328 | | 0 | 20.5 |
| S | South-Freeflow Approach | S-FA | | 0 | 35 | 0 | 12 | 0.511 | | | | | | | | | 2 | |
| S | South-Through Traffic Queue | S-TQ | SBT | 0 | 3 | | | | 0 | 0 | 0 | 0 | 2 | 6.134 | 0 | | 2 | 0 |
| S | South-Freeflow Departure | S-FD | | 0 | 35 | 0 | 12 | 0.511 | | | | | | | | | 2 | |
| S | South-Left Turn Queue | S-LQ | SBL | 0 | 3 | | | | 0 | 0 | 0 | 0 | 2 | 6.134 | 0 | | 0.5 | 0 |
| S | South-Right Turn Queue | S-RQ | SBR | 0 | 3 | | | | 0 | 0 | 0 | 0 | 2 | 6.134 | 0 | | 1.5 | 0 |
| W | West-Freeflow Approach | W-FA | | 0 | 35 | 0 | 12 | 0.511 | | | | | | | | | 2 | |
| W | West-Through Traffic Queue | W-TQ | WBT | 0 | 3 | | | | 0 | 0 | 0 | 0 | 2 | 6.134 | 0 | | 2 | 0 |
| W | West-Freeflow Departure | W-FD | | 0 | 35 | 0 | 12 | 0.511 | | | | | | | | | 2 | |
| W | West-Left Turn Queue | W-LQ | WBL | 0 | 3 | | | | 0 | 0 | 0 | 0 | 2 | 6.134 | 0 | | 1 | 0 |
| W | West-Right Turn Queue | W-RQ | WBR | 0 | 3 | | | | 0 | 0 | 0 | 0 | 2 | 6.134 | 0 | | 0 | 0 |
| E | East-Freeflow Approach | E-FA | | 4,133 | 35 | 0 | 15 | 0.511 | | | | | | | | | 3 | |
| E | East-Through Traffic Queue | E-TQ | EBT | 3,941 | 3 | | | | 0 | 0 | 110 | 30.3 | 2 | 6.134 | 1,695 | | 3 | 79.7 |
| E | East-Freeflow Departure | E-FD | | 4,148 | 35 | 0 | 15 | 0.511 | | | | | | | | | 3 | |
| E | East-Left Turn Queue | E-LQ | EBL | 192 | 3 | | | | 0 | 0 | 110 | 30.3 | 2 | 6.134 | 1,856 | | 0 | 79.7 |
| E | East-Right Turn Queue | E-RQ | EBR | 0 | 3 | | | | 0 | 0 | 0 | 0 | 2 | 6.134 | 0 | | 0 | 0 |

Data in black obtained from traffic reports
 Data in blue are calculated values

Mixing zone width for freeflow traffic = road width + 6 meters
 Mixing zone width for queue traffic = road width

Lane width 3 m

Direction Legend
 N = Northbound
 S = Southbound
 W = Westbound
 E = Eastbound

Intersection 29 (Grape St & Columbia St)

Existing Conditions (2018)

| PM Peak Hour | | | | | | Freeflow Traffic Input Data | | | Queue Traffic Data | | | | | | # Lanes | Green time length s | | |
|--------------|-----------------------------|------|--------------|--------|-----------|-----------------------------|---------------------|------------------------|--------------------|---------------------|-------------------------------|---------------------------|-----------------------|-----------------------------|---------|---------------------|--------------------------------|--|
| Direction | Description | ID | Synchro Link | Volume | Speed mph | Link Height m | Mixing Zone Width m | Emission Factor g/v-mi | Link Height m | Mixing Zone Width m | Average signal cycle length s | Average red time length s | Clearance lost time s | Idle Emission Factor g/v-hr | | | Saturation Flow Rate v/hr/lane | |
| N | North-Freeflow Approach | N-FA | | 0 | 35 | 0 | 6 | 1.321 | | | | | | | | | 0 | |
| N | North-Through Traffic Queue | N-TQ | NBT | 0 | 3 | | | | 0 | 0 | 0 | 0 | 2 | 10.666 | 0 | 0 | 0 | |
| N | North-Freeflow Departure | N-FD | | 0 | 35 | 0 | 6 | 1.321 | | | | | | | | | 0 | |
| N | North-Left Turn Queue | N-LQ | NBL | 0 | 3 | | | | 0 | 0 | 0 | 0 | 2 | 10.666 | 0 | 0 | 0 | |
| N | North-Right Turn Queue | N-RQ | NBR | 0 | 3 | | | | 0 | 0 | 0 | 0 | 2 | 10.666 | 0 | 0 | 0 | |
| S | South-Freeflow Approach | S-FA | | 687 | 35 | 0 | 12 | 1.321 | | | | | | | | | 2 | |
| S | South-Through Traffic Queue | S-TQ | SBT | 396 | 3 | | | | 0 | 0 | 110 | 63.9 | 2 | 10.666 | 1,770 | 2 | 46.1 | |
| S | South-Freeflow Departure | S-FD | | 450 | 35 | 0 | 12 | 1.321 | | | | | | | | | 2 | |
| S | South-Left Turn Queue | S-LQ | SBL | 291 | 3 | | | | 0 | 0 | 110 | 63.9 | 2 | 10.666 | 1,774 | 1 | 46.1 | |
| S | South-Right Turn Queue | S-RQ | SBR | 0 | 3 | | | | 0 | 0 | 0 | 0 | 2 | 10.666 | 0 | 0 | 0 | |
| W | West-Freeflow Approach | W-FA | | 0 | 35 | 0 | 6 | 1.321 | | | | | | | | | 0 | |
| W | West-Through Traffic Queue | W-TQ | WBT | 0 | 3 | | | | 0 | 0 | 0 | 0 | 2 | 10.666 | 0 | 0 | 0 | |
| W | West-Freeflow Departure | W-FD | | 0 | 35 | 0 | 6 | 1.321 | | | | | | | | | 0 | |
| W | West-Left Turn Queue | W-LQ | WBL | 0 | 3 | | | | 0 | 0 | 0 | 0 | 2 | 10.666 | 0 | 0 | 0 | |
| W | West-Right Turn Queue | W-RQ | WBR | 0 | 3 | | | | 0 | 0 | 0 | 0 | 2 | 10.666 | 0 | 0 | 0 | |
| E | East-Freeflow Approach | E-FA | | 1,907 | 35 | 0 | 15 | 1.321 | | | | | | | | | 3 | |
| E | East-Through Traffic Queue | E-TQ | EBT | 1,853 | 3 | | | | 0 | 0 | 110 | 55.9 | 2 | 10.666 | 1,695 | 3 | 54.1 | |
| E | East-Freeflow Departure | E-FD | | 2,144 | 35 | 0 | 15 | 1.321 | | | | | | | | | 3 | |
| E | East-Left Turn Queue | E-LQ | EBL | 0 | 3 | | | | 0 | 0 | 0 | 0 | 2 | 10.666 | 0 | 0 | 0 | |
| E | East-Right Turn Queue | E-RQ | EBR | 54 | 3 | | | | 0 | 0 | 110 | 55.9 | 2 | 10.666 | 1,831 | 0 | 54.1 | |
| Total | | | | 2,594 | | | | | | | | | | | | | | |

2050 Plus Project

| PM Peak Hour | | | | | | Freeflow Traffic Input Data | | | Queue Traffic Data | | | | | | # Lanes | Green time length s | | |
|--------------|-----------------------------|------|--------------|--------|-----------|-----------------------------|---------------------|------------------------|--------------------|---------------------|-------------------------------|---------------------------|-----------------------|-----------------------------|---------|---------------------|--------------------------------|--|
| Direction | Description | ID | Synchro Link | Volume | Speed mph | Link Height m | Mixing Zone Width m | Emission Factor g/v-mi | Link Height m | Mixing Zone Width m | Average signal cycle length s | Average red time length s | Clearance lost time s | Idle Emission Factor g/v-hr | | | Saturation Flow Rate v/hr/lane | |
| N | North-Freeflow Approach | N-FA | | 0 | 35 | 0 | 6 | 0.511 | | | | | | | | | 0 | |
| N | North-Through Traffic Queue | N-TQ | NBT | 0 | 3 | | | | 0 | 0 | 0 | 0 | 2 | 6.134 | 0 | 0 | 0 | |
| N | North-Freeflow Departure | N-FD | | 0 | 35 | 0 | 6 | 0.511 | | | | | | | | | 0 | |
| N | North-Left Turn Queue | N-LQ | NBL | 0 | 3 | | | | 0 | 0 | 0 | 0 | 2 | 6.134 | 0 | 0 | 0 | |
| N | North-Right Turn Queue | N-RQ | NBR | 0 | 3 | | | | 0 | 0 | 0 | 0 | 2 | 6.134 | 0 | 0 | 0 | |
| S | South-Freeflow Approach | S-FA | | 1,317 | 35 | 0 | 12 | 0.511 | | | | | | | | | 2 | |
| S | South-Through Traffic Queue | S-TQ | SBT | 842 | 3 | | | | 0 | 0 | 110 | 91 | 2 | 6.134 | 1,770 | 2 | 19 | |
| S | South-Freeflow Departure | S-FD | | 1,001 | 35 | 0 | 12 | 0.511 | | | | | | | | | 2 | |
| S | South-Left Turn Queue | S-LQ | SBL | 475 | 3 | | | | 0 | 0 | 110 | 91 | 2 | 6.134 | 1,774 | 1 | 19 | |
| S | South-Right Turn Queue | S-RQ | SBR | 0 | 3 | | | | 0 | 0 | 0 | 0 | 2 | 6.134 | 0 | 0 | 0 | |
| W | West-Freeflow Approach | W-FA | | 0 | 35 | 0 | 6 | 0.511 | | | | | | | | | 0 | |
| W | West-Through Traffic Queue | W-TQ | WBT | 0 | 3 | | | | 0 | 0 | 0 | 0 | 2 | 6.134 | 0 | 0 | 0 | |
| W | West-Freeflow Departure | W-FD | | 0 | 35 | 0 | 6 | 0.511 | | | | | | | | | 0 | |
| W | West-Left Turn Queue | W-LQ | WBL | 0 | 3 | | | | 0 | 0 | 0 | 0 | 2 | 6.134 | 0 | 0 | 0 | |
| W | West-Right Turn Queue | W-RQ | WBR | 0 | 3 | | | | 0 | 0 | 0 | 0 | 2 | 6.134 | 0 | 0 | 0 | |
| E | East-Freeflow Approach | E-FA | | 4,533 | 35 | 0 | 15 | 0.511 | | | | | | | | | 3 | |
| E | East-Through Traffic Queue | E-TQ | EBT | 4,374 | 3 | | | | 0 | 0 | 110 | 28.8 | 2 | 6.134 | 1,695 | 3 | 81.2 | |
| E | East-Freeflow Departure | E-FD | | 4,849 | 35 | 0 | 15 | 0.511 | | | | | | | | | 3 | |
| E | East-Left Turn Queue | E-LQ | EBL | 0 | 3 | | | | 0 | 0 | 0 | 0 | 2 | 6.134 | 0 | 0 | 0 | |
| E | East-Right Turn Queue | E-RQ | EBR | 159 | 3 | | | | 0 | 0 | 110 | 28.8 | 2 | 6.134 | 1,833 | 0 | 81.2 | |

Data in black obtained from traffic reports
 Data in blue are calculated values

Mixing zone width for freeflow traffic = road width + 6 meters
 Mixing zone width for queue traffic = road width

Lane width 3 m

Direction Legend
 N = Northbound
 S = Southbound
 W = Westbound
 E = Eastbound

Intersection 30 (Grape St & State St)

Existing Conditions (2018)

| PM Peak Hour | | | | | | Freeflow Traffic Input Data | | | Queue Traffic Data | | | | | | | # Lanes | Green time length s | | |
|--------------|-----------------------------|------|--------------|--------|-----------|-----------------------------|---------------------|------------------------|--------------------|---------------------|-------------------------------|---------------------------|-----------------------|-----------------------------|--------------------------------|---------|---------------------|------|--|
| Direction | Description | ID | Synchro Link | Volume | Speed mph | Link Height m | Mixing Zone Width m | Emission Factor g/v-mi | Link Height m | Mixing Zone Width m | Average signal cycle length s | Average red time length s | Clearance lost time s | Idle Emission Factor g/v-hr | Saturation Flow Rate v/hr/lane | | | | |
| N | North-Freeflow Approach | N-FA | | 159 | 35 | 0 | 12 | 1.321 | | | | | | | | | 2 | | |
| N | North-Through Traffic Queue | N-TQ | NBT | 67 | 3 | | | | 0 | 0 | 110 | 87.9 | 2 | 10.666 | 1,770 | | 2 | 22.1 | |
| N | North-Freeflow Departure | N-FD | | 86 | 35 | 0 | 12 | 1.321 | | | | | | | | | 2 | | |
| N | North-Left Turn Queue | N-LQ | NBL | 0 | 3 | | | | 0 | 0 | 0 | 0 | 2 | 10.666 | 0 | | 0 | 0 | |
| N | North-Right Turn Queue | N-RQ | NBR | 92 | 3 | | | | 0 | 0 | 110 | 87.9 | 2 | 10.666 | 1,536 | | 1 | 22.1 | |
| S | South-Freeflow Approach | S-FA | | 0 | 35 | 0 | 12 | 1.321 | | | | | | | | | 2 | | |
| S | South-Through Traffic Queue | S-TQ | SBT | 0 | 3 | | | | 0 | 0 | 0 | 0 | 2 | 10.666 | 0 | | 2 | 0 | |
| S | South-Freeflow Departure | S-FD | | 0 | 35 | 0 | 12 | 1.321 | | | | | | | | | 2 | | |
| S | South-Left Turn Queue | S-LQ | SBL | 0 | 3 | | | | 0 | 0 | 0 | 0 | 2 | 10.666 | 0 | | 0.5 | 0 | |
| S | South-Right Turn Queue | S-RQ | SBR | 0 | 3 | | | | 0 | 0 | 0 | 0 | 2 | 10.666 | 0 | | 1.5 | 0 | |
| W | West-Freeflow Approach | W-FA | | 0 | 35 | 0 | 12 | 1.321 | | | | | | | | | 2 | | |
| W | West-Through Traffic Queue | W-TQ | WBT | 0 | 3 | | | | 0 | 0 | 0 | 0 | 2 | 10.666 | 0 | | 2 | 0 | |
| W | West-Freeflow Departure | W-FD | | 0 | 35 | 0 | 12 | 1.321 | | | | | | | | | 2 | | |
| W | West-Left Turn Queue | W-LQ | WBL | 0 | 3 | | | | 0 | 0 | 0 | 0 | 2 | 10.666 | 0 | | 1 | 0 | |
| W | West-Right Turn Queue | W-RQ | WBR | 0 | 3 | | | | 0 | 0 | 0 | 0 | 2 | 10.666 | 0 | | 0 | 0 | |
| E | East-Freeflow Approach | E-FA | | 2,142 | 35 | 0 | 15 | 1.321 | | | | | | | | | 3 | | |
| E | East-Through Traffic Queue | E-TQ | EBT | 2,123 | 3 | | | | 0 | 0 | 110 | 31.9 | 2 | 10.666 | 1,695 | | 3 | 78.1 | |
| E | East-Freeflow Departure | E-FD | | 2,215 | 35 | 0 | 15 | 1.321 | | | | | | | | | 3 | | |
| E | East-Left Turn Queue | E-LQ | EBL | 19 | 3 | | | | 0 | 0 | 110 | 31.9 | 2 | 10.666 | 1,861 | | 1 | 78.1 | |
| E | East-Right Turn Queue | E-RQ | EBR | 0 | 3 | | | | 0 | 0 | 0 | 0 | 2 | 10.666 | 0 | | 0 | 0 | |
| | | | | Total | 2,301 | | | | | | | | | | | | | | |

2050 Plus Project

| PM Peak Hour | | | | | | Freeflow Traffic Input Data | | | Queue Traffic Data | | | | | | | # Lanes | Green time length s | |
|--------------|-----------------------------|------|--------------|--------|-----------|-----------------------------|---------------------|------------------------|--------------------|---------------------|-------------------------------|---------------------------|-----------------------|-----------------------------|--------------------------------|---------|---------------------|------|
| Direction | Description | ID | Synchro Link | Volume | Speed mph | Link Height m | Mixing Zone Width m | Emission Factor g/v-mi | Link Height m | Mixing Zone Width m | Average signal cycle length s | Average red time length s | Clearance lost time s | Idle Emission Factor g/v-hr | Saturation Flow Rate v/hr/lane | | | |
| N | North-Freeflow Approach | N-FA | | 490 | 35 | 0 | 10.5 | 0.511 | | | | | | | | | 1.5 | |
| N | North-Through Traffic Queue | N-TQ | NBT | 340 | 3 | | | | 0 | 0 | 110 | 91 | 2 | 6.134 | 1,770 | | 1.5 | 19 |
| N | North-Freeflow Departure | N-FD | | 459 | 35 | 0 | 10.5 | 0.511 | | | | | | | | | 1.5 | |
| N | North-Left Turn Queue | N-LQ | NBL | 0 | 3 | | | | 0 | 0 | 0 | 0 | 2 | 6.134 | 0 | | 0 | 0 |
| N | North-Right Turn Queue | N-RQ | NBR | 150 | 3 | | | | 0 | 0 | 110 | 91 | 2 | 6.134 | 1,666 | | 0.5 | 19 |
| S | South-Freeflow Approach | S-FA | | 0 | 35 | 0 | 12 | 0.511 | | | | | | | | | 2 | |
| S | South-Through Traffic Queue | S-TQ | SBT | 0 | 3 | | | | 0 | 0 | 0 | 0 | 2 | 6.134 | 0 | | 2 | 0 |
| S | South-Freeflow Departure | S-FD | | 0 | 35 | 0 | 12 | 0.511 | | | | | | | | | 2 | |
| S | South-Left Turn Queue | S-LQ | SBL | 0 | 3 | | | | 0 | 0 | 0 | 0 | 2 | 6.134 | 0 | | 0.5 | 0 |
| S | South-Right Turn Queue | S-RQ | SBR | 0 | 3 | | | | 0 | 0 | 0 | 0 | 2 | 6.134 | 0 | | 1.5 | 0 |
| W | West-Freeflow Approach | W-FA | | 0 | 35 | 0 | 12 | 0.511 | | | | | | | | | 2 | |
| W | West-Through Traffic Queue | W-TQ | WBT | 0 | 3 | | | | 0 | 0 | 0 | 0 | 2 | 6.134 | 0 | | 2 | 0 |
| W | West-Freeflow Departure | W-FD | | 0 | 35 | 0 | 12 | 0.511 | | | | | | | | | 2 | |
| W | West-Left Turn Queue | W-LQ | WBL | 0 | 3 | | | | 0 | 0 | 0 | 0 | 2 | 6.134 | 0 | | 1 | 0 |
| W | West-Right Turn Queue | W-RQ | WBR | 0 | 3 | | | | 0 | 0 | 0 | 0 | 2 | 6.134 | 0 | | 0 | 0 |
| E | East-Freeflow Approach | E-FA | | 4,530 | 35 | 0 | 15 | 0.511 | | | | | | | | | 3 | |
| E | East-Through Traffic Queue | E-TQ | EBT | 4,411 | 3 | | | | 0 | 0 | 110 | 28.8 | 2 | 6.134 | 1,695 | | 3 | 81.2 |
| E | East-Freeflow Departure | E-FD | | 4,561 | 35 | 0 | 15 | 0.511 | | | | | | | | | 3 | |
| E | East-Left Turn Queue | E-LQ | EBL | 119 | 3 | | | | 0 | 0 | 110 | 28.8 | 2 | 6.134 | 1,856 | | 0 | 81.2 |
| E | East-Right Turn Queue | E-RQ | EBR | 0 | 3 | | | | 0 | 0 | 0 | 0 | 2 | 6.134 | 0 | | 0 | 0 |

Data in black obtained from traffic reports
Data in blue are calculated values

Mixing zone width for freeflow traffic = road width + 6 meters
Mixing zone width for queue traffic = road width

Lane width 3 m

Direction Legend
N = Northbound
S = Southbound
W = Westbound
E = Eastbound

San Diego Airport - Traffic Count Data

Traffic Counts (Existing Conditions - 2018)

| Type | SBR | SBT | SBL | WBR | WBT | WBL | NBR | NBT | NBL | EBR | EBT | EBL | Total | NB | SB | EB | WB | Rank |
|--|-----|-------|-----|-----|-------|-----|-----|-----|-----|-----|-------|-----|-------|-----|-------|-------|-------|------|
| Intersection 7 (San Diego Ave & Washington) | | | | | | | | | | | | | | | | | | |
| AM Peak Hour | 0 | 0 | 0 | 526 | 511 | 0 | 24 | 194 | 113 | 0 | 482 | 189 | 2,039 | 909 | 0 | 506 | 624 | 14 |
| PM Peak Hour | 0 | 0 | 0 | 448 | 449 | 0 | 43 | 152 | 106 | 0 | 1,245 | 262 | 2,705 | 862 | 0 | 1,288 | 555 | 3 |
| Intersection 10 (Kettner Blvd & Sassafras St) | | | | | | | | | | | | | | | | | | |
| AM Peak Hour | 506 | 1,070 | 86 | 0 | 167 | 95 | 0 | 0 | 0 | 136 | 109 | 0 | 2,169 | 0 | 1,301 | 195 | 673 | 12 |
| PM Peak Hour | 341 | 1,535 | 240 | 0 | 157 | 54 | 0 | 0 | 0 | 217 | 228 | 0 | 2,772 | 0 | 1,806 | 468 | 498 | 2 |
| Intersection 16 (Laurel Dr & Kettner Blvd) | | | | | | | | | | | | | | | | | | |
| AM Peak Hour | 661 | 196 | 221 | 0 | 159 | 31 | 0 | 0 | 0 | 41 | 559 | 0 | 1,868 | 0 | 268 | 780 | 820 | 16 |
| PM Peak Hour | 466 | 571 | 329 | 0 | 165 | 43 | 0 | 0 | 0 | 96 | 1,161 | 0 | 2,831 | 0 | 710 | 1,490 | 631 | 1 |
| Intersection 20 (Hawthorn St & Kettner Blvd) | | | | | | | | | | | | | | | | | | |
| AM Peak Hour | 50 | 154 | 0 | 0 | 1,882 | 262 | 0 | 0 | 0 | 0 | 0 | 0 | 2,348 | 0 | 416 | 0 | 1,932 | 7 |
| PM Peak Hour | 61 | 451 | 0 | 0 | 1,172 | 254 | 0 | 0 | 0 | 0 | 0 | 0 | 1,938 | 0 | 705 | 0 | 1,233 | 15 |
| Intersection 21 (Hawthorn St & India St) | | | | | | | | | | | | | | | | | | |
| AM Peak Hour | 0 | 0 | 0 | 114 | 2,050 | 0 | 0 | 90 | 67 | 0 | 0 | 0 | 2,321 | 204 | 0 | 0 | 2,117 | 8 |
| PM Peak Hour | 0 | 0 | 0 | 92 | 1,327 | 0 | 0 | 181 | 85 | 0 | 0 | 0 | 1,685 | 273 | 0 | 0 | 1,412 | 19 |
| Intersection 22 (Hawthorn St & Columbia St) | | | | | | | | | | | | | | | | | | |
| AM Peak Hour | 38 | 209 | 0 | 0 | 2,129 | 299 | 0 | 0 | 0 | 0 | 0 | 0 | 2,675 | 0 | 508 | 0 | 2,167 | 4 |
| PM Peak Hour | 52 | 497 | 0 | 0 | 1,373 | 204 | 0 | 0 | 0 | 0 | 0 | 0 | 2,126 | 0 | 701 | 0 | 1,425 | 13 |
| Intersection 23 (Hawthorn St & State St) | | | | | | | | | | | | | | | | | | |
| AM Peak Hour | 0 | 0 | 0 | 89 | 2,413 | 0 | 0 | 35 | 31 | 0 | 0 | 0 | 2,568 | 124 | 0 | 0 | 2,444 | 6 |
| PM Peak Hour | 0 | 0 | 0 | 80 | 1,576 | 0 | 0 | 71 | 23 | 0 | 0 | 0 | 1,750 | 151 | 0 | 0 | 1,599 | 18 |
| Intersection 24 (I-5 NB Off-Ramp/Brandt & Hawthorn) | | | | | | | | | | | | | | | | | | |
| AM Peak Hour | 17 | 0 | 0 | 415 | 117 | 0 | 0 | 98 | 1 | 0 | 0 | 0 | 648 | 513 | 0 | 0 | 135 | 24 |
| PM Peak Hour | 25 | 0 | 0 | 568 | 154 | 0 | 0 | 103 | 3 | 0 | 0 | 0 | 853 | 671 | 0 | 0 | 182 | 23 |
| Intersection 27 (Grape St & Kettner Blvd) | | | | | | | | | | | | | | | | | | |
| AM Peak Hour | 0 | 304 | 108 | 0 | 0 | 0 | 0 | 0 | 0 | 34 | 1,106 | 0 | 1,552 | 0 | 338 | 1,214 | 0 | 20 |
| PM Peak Hour | 0 | 485 | 214 | 0 | 0 | 0 | 0 | 0 | 0 | 49 | 1,571 | 0 | 2,319 | 0 | 534 | 1,785 | 0 | 9 |
| Intersection 28 (Grape St & India St) | | | | | | | | | | | | | | | | | | |
| AM Peak Hour | 0 | 0 | 0 | 0 | 0 | 0 | 156 | 101 | 0 | 0 | 1,181 | 49 | 1,487 | 150 | 0 | 1,337 | 0 | 22 |
| PM Peak Hour | 0 | 0 | 0 | 0 | 0 | 0 | 182 | 204 | 0 | 0 | 1,712 | 74 | 2,172 | 278 | 0 | 1,894 | 0 | 11 |
| Intersection 29 (Grape St & Columbia St) | | | | | | | | | | | | | | | | | | |
| AM Peak Hour | 0 | 339 | 168 | 0 | 0 | 0 | 0 | 0 | 0 | 53 | 1,258 | 0 | 1,818 | 0 | 392 | 1,426 | 0 | 17 |
| PM Peak Hour | 0 | 396 | 291 | 0 | 0 | 0 | 0 | 0 | 0 | 54 | 1,853 | 0 | 2,594 | 0 | 450 | 2,144 | 0 | 5 |
| Intersection 30 (Grape St & State St) | | | | | | | | | | | | | | | | | | |
| AM Peak Hour | 0 | 0 | 0 | 0 | 0 | 0 | 68 | 42 | 0 | 0 | 1,386 | 30 | 1,526 | 72 | 0 | 1,454 | 0 | 21 |
| PM Peak Hour | 0 | 0 | 0 | 0 | 0 | 0 | 92 | 67 | 0 | 0 | 2,123 | 19 | 2,301 | 86 | 0 | 2,215 | 0 | 10 |

Maximum 2,831

Traffic Counts (2050 plus Project Peak-Hour Traffic Volumes)

| Type | SBR | SBT | SBL | WBR | WBT | WBL | NBR | NBT | NBL | EBR | EBT | EBL | Total | NB | SB | EB | WB | Rank |
|--|-------|-------|-----|-------|-------|-----|-----|-----|-----|-----|-------|-----|-------|-------|-------|-------|-------|------|
| Intersection 7 (San Diego Ave & Washington) | | | | | | | | | | | | | | | | | | |
| AM Peak Hour | 0 | 0 | 0 | 1,500 | 728 | 0 | 238 | 433 | 107 | 0 | 849 | 140 | 3,995 | 2,073 | 0 | 1,087 | 835 | 15 |
| PM Peak Hour | 0 | 0 | 0 | 1,413 | 625 | 0 | 408 | 319 | 67 | 0 | 2,109 | 175 | 5,116 | 1,907 | 0 | 2,517 | 692 | 3 |
| Intersection 10 (Kettner Blvd & Sassafras St) | | | | | | | | | | | | | | | | | | |
| AM Peak Hour | 831 | 1,955 | 110 | 0 | 434 | 194 | 0 | 0 | 0 | 245 | 175 | 0 | 3,944 | 0 | 2,394 | 285 | 1,265 | 16 |
| PM Peak Hour | 515 | 2,688 | 298 | 0 | 323 | 120 | 0 | 0 | 0 | 401 | 388 | 0 | 4,733 | 0 | 3,209 | 686 | 838 | 8 |
| Intersection 16 (Laurel Dr & Kettner Blvd) | | | | | | | | | | | | | | | | | | |
| AM Peak Hour | 1,334 | 597 | 424 | 0 | 231 | 66 | 0 | 0 | 0 | 88 | 1,056 | 0 | 3,796 | 0 | 751 | 1,480 | 1,565 | 17 |
| PM Peak Hour | 1,001 | 1,561 | 519 | 0 | 239 | 91 | 0 | 0 | 0 | 231 | 1,833 | 0 | 5,475 | 0 | 1,883 | 2,352 | 1,240 | 2 |
| Intersection 20 (Hawthorn St & Kettner Blvd) | | | | | | | | | | | | | | | | | | |
| AM Peak Hour | 106 | 430 | 0 | 0 | 3,261 | 538 | 0 | 0 | 0 | 0 | 0 | 0 | 4,335 | 0 | 968 | 0 | 3,367 | 10 |
| PM Peak Hour | 137 | 1,191 | 0 | 0 | 2,205 | 466 | 0 | 0 | 0 | 0 | 0 | 0 | 3,999 | 0 | 1,657 | 0 | 2,342 | 14 |
| Intersection 21 (Hawthorn St & India St) | | | | | | | | | | | | | | | | | | |
| AM Peak Hour | 0 | 0 | 0 | 230 | 3,640 | 0 | 0 | 179 | 107 | 0 | 0 | 0 | 4,156 | 409 | 0 | 0 | 3,747 | 12 |
| PM Peak Hour | 0 | 0 | 0 | 191 | 2,523 | 0 | 0 | 355 | 130 | 0 | 0 | 0 | 3,199 | 546 | 0 | 0 | 2,653 | 22 |
| Intersection 22 (Hawthorn St & Columbia St) | | | | | | | | | | | | | | | | | | |
| AM Peak Hour | 75 | 440 | 0 | 0 | 3,876 | 532 | 0 | 0 | 0 | 0 | 0 | 0 | 4,923 | 0 | 972 | 0 | 3,951 | 6 |
| PM Peak Hour | 110 | 1,023 | 0 | 0 | 2,679 | 331 | 0 | 0 | 0 | 0 | 0 | 0 | 4,143 | 0 | 1,354 | 0 | 2,789 | 13 |
| Intersection 23 (Hawthorn St & State St) | | | | | | | | | | | | | | | | | | |
| AM Peak Hour | 0 | 0 | 0 | 121 | 4,297 | 0 | 0 | 153 | 168 | 0 | 0 | 0 | 4,739 | 274 | 0 | 0 | 4,465 | 7 |
| PM Peak Hour | 0 | 0 | 0 | 69 | 2,967 | 0 | 0 | 271 | 176 | 0 | 0 | 0 | 3,483 | 340 | 0 | 0 | 3,143 | 20 |
| Intersection 24 (I-5 NB Off-Ramp/Brandt & Hawthorn) | | | | | | | | | | | | | | | | | | |
| AM Peak Hour | 37 | 0 | 0 | 649 | 153 | 0 | 0 | 223 | 2 | 0 | 0 | 0 | 1,064 | 872 | 0 | 0 | 192 | 24 |
| PM Peak Hour | 54 | 0 | 0 | 899 | 198 | 0 | 0 | 236 | 6 | 0 | 0 | 0 | 1,393 | 1,135 | 0 | 0 | 258 | 23 |
| Intersection 27 (Grape St & Kettner Blvd) | | | | | | | | | | | | | | | | | | |
| AM Peak Hour | 0 | 765 | 241 | 0 | 0 | 0 | 0 | 0 | 0 | 77 | 2,479 | 0 | 3,562 | 0 | 842 | 2,720 | 0 | 18 |
| PM Peak Hour | 0 | 1,227 | 473 | 0 | 0 | 0 | 0 | 0 | 0 | 109 | 3,267 | 0 | 5,076 | 0 | 1,336 | 3,740 | 0 | 4 |
| Intersection 28 (Grape St & India St) | | | | | | | | | | | | | | | | | | |
| AM Peak Hour | 0 | 0 | 0 | 0 | 0 | 0 | 189 | 136 | 0 | 0 | 2,910 | 119 | 3,354 | 255 | 0 | 3,099 | 0 | 21 |
| PM Peak Hour | 0 | 0 | 0 | 0 | 0 | 0 | 207 | 281 | 0 | 0 | 3,941 | 192 | 4,621 | 473 | 0 | 4,148 | 0 | 9 |
| Intersection 29 (Grape St & Columbia St) | | | | | | | | | | | | | | | | | | |
| AM Peak Hour | 0 | 711 | 264 | 0 | 0 | 0 | 0 | 0 | 0 | 160 | 3,144 | 0 | 4,279 | 0 | 871 | 3,408 | 0 | 11 |
| PM Peak Hour | 0 | 842 | 475 | 0 | 0 | 0 | 0 | 0 | 0 | 159 | 4,374 | 0 | 5,850 | 0 | 1,001 | 4,849 | 0 | 1 |
| Intersection 30 (Grape St & State St) | | | | | | | | | | | | | | | | | | |
| AM Peak Hour | 0 | 0 | 0 | 0 | 0 | 0 | 125 | 216 | 0 | 0 | 3,039 | 165 | 3,545 | 381 | 0 | 3,164 | 0 | 19 |
| PM Peak Hour | 0 | 0 | 0 | 0 | 0 | 0 | 150 | 340 | 0 | 0 | 4,411 | 119 | 5,020 | 459 | 0 | 4,561 | 0 | 5 |

| Intersection # | Intersection Name | E-W Speed | N-S Speed |
|----------------|-----------------------------------|-----------|-----------|
| 7 | San Diego Ave & Washington | 35 | 35 |
| 10 | Kettner Blvd & Sassafras St | 35 | 35 |
| 16 | Laurel Dr & Kettner Blvd | 35 | 35 |
| 20 | Hawthorn St & Kettner Blvd | 35 | 35 |
| 21 | Hawthorn St & India St | 35 | 35 |
| 22 | Hawthorn St & Columbia St | 35 | 35 |
| 23 | Hawthorn St & State St | 35 | 35 |
| 24 | I-5 NB Off-Ramp/Brandt & Hawthorn | 35 | 35 |
| 27 | Grape St & Kettner Blvd | 35 | 35 |
| 28 | Grape St & India St | 35 | 35 |
| 29 | Grape St & Columbia St | 35 | 35 |
| 30 | Grape St & State St | 35 | 35 |

| CO Emission Factors (Aggregate Fleet Mix) | | | | | | | | | | | | | | | | |
|---|---------------|------------------|------------|-------|------|------------|------------|------------|------------|------------|------------|------------|------------|------------|-------------|------------|
| Speed, mph | 2018 | 2050 | | | | | | | | | | | | | | |
| 5 | 3.55527391 | 2.04459766 | | | | | | | | | | | | | | |
| 10 | 2.87717404 | 1.77030088 | | | | | | | | | | | | | | |
| 15 | 2.20684325 | 1.21840592 | | | | | | | | | | | | | | |
| 20 | 2.43822263 | 2.02854152 | | | | | | | | | | | | | | |
| 25 | 1.55844035 | 0.59804386 | | | | | | | | | | | | | | |
| 30 | 1.42294496 | 0.54455823 | | | | | | | | | | | | | | |
| 35 | 1.32115007 | 0.51100853 | | | | | | | | | | | | | | |
| 40 | 1.23842197 | 0.48374281 | | | | | | | | | | | | | | |
| 45 | 1.16256713 | 0.45148655 | | | | | | | | | | | | | | |
| 50 | 1.07684346 | 0.38865791 | | | | | | | | | | | | | | |
| 55 | 1.04506175 | 0.3762519 | | | | | | | | | | | | | | |
| 60 | 1.01211386 | 0.37603095 | | | | | | | | | | | | | | |
| 65 | 1.01840219 | 0.38342766 | | | | | | | | | | | | | | |
| 70 | 0.70347344 | 0.15416943 | | | | | | | | | | | | | | |
| 75 | 0.76333582 | 0.18515213 | | | | | | | | | | | | | | |
| 80 | n/a | n/a | | | | | | | | | | | | | | |
| 85 | n/a | n/a | | | | | | | | | | | | | | |
| 90 | n/a | n/a | | | | | | | | | | | | | | |
| EMFAC2017 (v1.0.2) Emission Rates | | | | | | | | | | | | | | | | |
| Region Type: Air Basin | | | | | | | | | | | | | | | | |
| Region: SAN DIEGO | | | | | | | | | | | | | | | | |
| Calendar Year: 2018 | | | | | | | | | | | | | | | | |
| Season: Annual | | | | | | | | | | | | | | | | |
| Vehicle Classification: EMFAC2011 Categories | | | | | | | | | | | | | | | | |
| Units: miles/day for VMT, g/mile for RUNEX, PMBW and PMTW | | | | | | | | | | | | | | | | |
| Region | Calendar Year | Vehicle Category | Model Year | Speed | Fuel | VMT | ROG_RUNEX | TOG_RUNEX | CO_RUNEX | NOx_RUNEX | SOx_RUNEX | CO2_RUNEX | CH4_RUNEX | PM10_RUNEX | PM2_5_RUNEX | N2O_RUNEX |
| SAN DIEGO | 2018 | All Other Buses | Aggregated | 5 | DSL | 478.412091 | 4.18774694 | 4.76743112 | 5.24697129 | 16.2376048 | 0.02365075 | 2503.38624 | 0.19451 | 0.91598267 | 0.87635766 | 0.39349746 |
| SAN DIEGO | 2018 | All Other Buses | Aggregated | 10 | DSL | 1446.29352 | 3.21432721 | 3.65926685 | 4.40509033 | 13.3462718 | 0.02042545 | 2161.9939 | 0.14929717 | 0.76483946 | 0.73175284 | 0.33983533 |
| SAN DIEGO | 2018 | All Other Buses | Aggregated | 15 | DSL | 1645.07669 | 1.72233013 | 1.96074174 | 3.17967238 | 9.50326143 | 0.01646097 | 1742.36201 | 0.07999777 | 0.52012374 | 0.49762342 | 0.27387504 |
| SAN DIEGO | 2018 | All Other Buses | Aggregated | 20 | DSL | 1910.61242 | 0.82086927 | 0.93449718 | 2.33884058 | 7.49870554 | 0.01386568 | 1467.65563 | 0.03812725 | 0.35074189 | 0.33556895 | 0.23069503 |
| SAN DIEGO | 2018 | All Other Buses | Aggregated | 25 | DSL | 2323.90155 | 0.58720911 | 0.66849287 | 1.90886956 | 6.772257 | 0.01228255 | 1300.08401 | 0.02727434 | 0.28267693 | 0.27044845 | 0.2043551 |
| SAN DIEGO | 2018 | All Other Buses | Aggregated | 30 | DSL | 3168.85789 | 0.47978757 | 0.54620163 | 1.61400287 | 6.27129716 | 0.01115302 | 1180.52538 | 0.02228489 | 0.24339062 | 0.23286165 | 0.18556215 |
| SAN DIEGO | 2018 | All Other Buses | Aggregated | 35 | DSL | 5828.77013 | 0.39635456 | 0.4512195 | 1.37033196 | 5.88342163 | 0.01026617 | 1086.65393 | 0.01840964 | 0.215315 | 0.20600057 | 0.17080686 |
| SAN DIEGO | 2018 | All Other Buses | Aggregated | 40 | DSL | 6929.71395 | 0.33638307 | 0.38294652 | 1.17662129 | 5.61447779 | 0.00961549 | 1017.78088 | 0.01562412 | 0.19845054 | 0.18986566 | 0.15998098 |
| SAN DIEGO | 2018 | All Other Buses | Aggregated | 45 | DSL | 4392.20921 | 0.29939306 | 0.34083621 | 1.03207351 | 5.46005927 | 0.00919717 | 973.502396 | 0.01390603 | 0.19283589 | 0.18449389 | 0.15302102 |
| SAN DIEGO | 2018 | All Other Buses | Aggregated | 50 | DSL | 1296.69277 | 0.28491558 | 0.3243547 | 0.93624209 | 5.4212703 | 0.00900882 | 953.566415 | 0.01323359 | 0.19854453 | 0.18995558 | 0.14988736 |
| SAN DIEGO | 2018 | All Other Buses | Aggregated | 55 | DSL | 321.028394 | 0.29246639 | 0.33295072 | 0.88896707 | 5.50221379 | 0.00904891 | 957.810072 | 0.01358431 | 0.21568323 | 0.20635287 | 0.1505544 |
| SAN DIEGO | 2018 | All Other Buses | Aggregated | 60 | DSL | 23.5837057 | 0.30524069 | 0.34749329 | 0.88393947 | 5.63460997 | 0.00931684 | 986.169472 | 0.01417764 | 0.22906563 | 0.21915635 | 0.15501211 |
| SAN DIEGO | 2018 | All Other Buses | Aggregated | 65 | DSL | 0.01122966 | 0.30613931 | 0.3485163 | 0.88929669 | 5.7982687 | 0.00977289 | 1034.44189 | 0.01421938 | 0.23066322 | 0.22068484 | 0.16259986 |
| SAN DIEGO | 2018 | All Other Buses | Aggregated | 70 | DSL | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SAN DIEGO | 2018 | All Other Buses | Aggregated | 75 | DSL | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SAN DIEGO | 2018 | All Other Buses | Aggregated | 80 | DSL | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SAN DIEGO | 2018 | All Other Buses | Aggregated | 85 | DSL | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SAN DIEGO | 2018 | All Other Buses | Aggregated | 90 | DSL | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SAN DIEGO | 2018 | LDA | Aggregated | 5 | GAS | 89192.5744 | 0.10830007 | 0.15717367 | 1.65127944 | 0.11372972 | 0.00679038 | 686.187551 | 0.02633533 | 0.01039105 | 0.00955505 | 0.01109638 |
| SAN DIEGO | 2018 | LDA | Aggregated | 5 | DSL | 979.423467 | 0.2320484 | 0.26417168 | 3.51619969 | 0.21948223 | 0.00541275 | 572.560252 | 0.0107782 | 0.04384538 | 0.04194865 | 0.0899985 |
| SAN DIEGO | 2018 | LDA | Aggregated | 10 | GAS | 247438.738 | 0.06905937 | 0.10017744 | 1.49339929 | 0.09789481 | 0.00552257 | 558.071239 | 0.01674694 | 0.00656215 | 0.00603425 | 0.009568 |
| SAN DIEGO | 2018 | LDA | Aggregated | 10 | DSL | 2717.12425 | 0.17105139 | 0.19473063 | 2.62157153 | 0.20140523 | 0.00450933 | 476.996735 | 0.00794501 | 0.03233667 | 0.0309378 | 0.07497724 |
| SAN DIEGO | 2018 | LDA | Aggregated | 15 | GAS | 611854.865 | 0.04642115 | 0.06730716 | 1.35769065 | 0.08581604 | 0.0045242 | 457.183197 | 0.01122727 | 0.00437127 | 0.00401966 | 0.00839501 |
| SAN DIEGO | 2018 | LDA | Aggregated | 15 | DSL | 6718.77695 | 0.09199592 | 0.10473124 | 1.33120923 | 0.16937934 | 0.00370891 | 392.328457 | 0.00427303 | 0.02456141 | 0.02349889 | 0.06166857 |
| SAN DIEGO | 2018 | LDA | Aggregated | 20 | GAS | 1985941.76 | 0.03281588 | 0.04755643 | 1.23674274 | 0.07693255 | 0.00376147 | 380.107253 | 0.00791582 | 0.00307103 | 0.00282403 | 0.00752735 |
| SAN DIEGO | 2018 | LDA | Aggregated | 20 | DSL | 21807.6222 | 0.04536681 | 0.05164709 | 0.57631263 | 0.14876879 | 0.00304251 | 321.836722 | 0.0021072 | 0.01927902 | 0.01844502 | 0.05058825 |

| Region | Calendar Year | Vehicle Categ | Model Year | Speed | Fuel | VMT | ROG_RUNEX | TOG_RUNEX | CO_RUNEX | NOx_RUNEX | SOx_RUNEX | CO2_RUNEX | CH4_RUNEX | PM10_RUNEX | PM2_5_RUNEX | N2O_RUNEX |
|-----------|---------------|---------------|------------|-------|------|------------|------------|--------------|------------|------------|------------|------------|------------|------------|-------------|------------|
| SAN DIEGO | 2018 | LDA | Aggregated | 25 | GAS | 6033431.35 | 0.02443313 | 0.03539011 | 1.13086105 | 0.07028148 | 0.00321462 | 324.846573 | 0.00587928 | 0.00227517 | 0.0020922 | 0.00687388 |
| SAN DIEGO | 2018 | LDA | Aggregated | 25 | DSL | 66253.0966 | 0.03110064 | 0.03540601 | 0.37254125 | 0.14186753 | 0.00255036 | 269.776947 | 0.00144457 | 0.01568935 | 0.01501063 | 0.04240518 |
| SAN DIEGO | 2018 | LDA | Aggregated | 30 | GAS | 5119429.22 | 0.01918097 | 0.02776979 | 1.03914275 | 0.0651163 | 0.00285309 | 288.313355 | 0.00460596 | 0.00177723 | 0.00163432 | 0.00636328 |
| SAN DIEGO | 2018 | LDA | Aggregated | 30 | DSL | 56216.4412 | 0.02473337 | 0.02815729 | 0.29278465 | 0.14052296 | 0.00220908 | 233.676339 | 0.00114882 | 0.01332598 | 0.0127495 | 0.03673067 |
| SAN DIEGO | 2018 | LDA | Aggregated | 35 | GAS | 5829206.03 | 0.01584994 | 0.02293663 | 0.95811304 | 0.06148161 | 0.00264401 | 267.184727 | 0.0037993 | 0.00146363 | 0.00134595 | 0.00600064 |
| SAN DIEGO | 2018 | LDA | Aggregated | 35 | DSL | 64010.4987 | 0.02068932 | 0.02355342 | 0.24330279 | 0.14133235 | 0.00199697 | 211.238703 | 0.00096098 | 0.01176209 | 0.01125327 | 0.03320378 |
| SAN DIEGO | 2018 | LDA | Aggregated | 40 | GAS | 3685633.41 | 0.01378991 | 0.01994687 | 0.88665107 | 0.05903378 | 0.002558 | 258.493154 | 0.00330088 | 0.00127072 | 0.00116856 | 0.00575276 |
| SAN DIEGO | 2018 | LDA | Aggregated | 40 | DSL | 40471.9325 | 0.018078 | 0.02058061 | 0.21174116 | 0.1433813 | 0.00186871 | 197.672158 | 0.00083969 | 0.01076351 | 0.01029788 | 0.03107131 |
| SAN DIEGO | 2018 | LDA | Aggregated | 45 | GAS | 2497995.46 | 0.01264256 | 0.01828045 | 0.82462778 | 0.05753389 | 0.00256659 | 259.361343 | 0.00302348 | 0.00116301 | 0.00106951 | 0.00559643 |
| SAN DIEGO | 2018 | LDA | Aggregated | 45 | DSL | 27430.4828 | 0.01645038 | 0.01872766 | 0.19227773 | 0.14620275 | 0.00180503 | 190.936119 | 0.00076409 | 0.01020015 | 0.0097589 | 0.0300125 |
| SAN DIEGO | 2018 | LDA | Aggregated | 50 | GAS | 1794253.47 | 0.01218697 | 0.01761505 | 0.76874518 | 0.05719226 | 0.00263884 | 266.662507 | 0.00291268 | 0.00112211 | 0.00103191 | 0.00555161 |
| SAN DIEGO | 2018 | LDA | Aggregated | 50 | DSL | 19702.6934 | 0.01557891 | 0.01773555 | 0.18223541 | 0.14958695 | 0.00180963 | 191.422162 | 0.00072361 | 0.01001005 | 0.00957702 | 0.0300889 |
| SAN DIEGO | 2018 | LDA | Aggregated | 55 | GAS | 1436250.63 | 0.01241905 | 0.01794773 | 0.72318512 | 0.05713923 | 0.00275119 | 278.015122 | 0.002969 | 0.00114139 | 0.00104964 | 0.00553377 |
| SAN DIEGO | 2018 | LDA | Aggregated | 55 | DSL | 15771.4651 | 0.01537 | 0.01749773 | 0.18085611 | 0.1531759 | 0.00189363 | 200.308219 | 0.00071391 | 0.01018381 | 0.00974326 | 0.03148566 |
| SAN DIEGO | 2018 | LDA | Aggregated | 60 | GAS | 1579637.15 | 0.01328656 | 0.01919674 | 0.6815187 | 0.05866202 | 0.00286118 | 289.130048 | 0.00317722 | 0.00122406 | 0.00112567 | 0.00566618 |
| SAN DIEGO | 2018 | LDA | Aggregated | 60 | DSL | 17345.9921 | 0.01608862 | 0.01831583 | 0.19357228 | 0.15773014 | 0.00205293 | 217.158164 | 0.00074729 | 0.01083136 | 0.0103628 | 0.03413424 |
| SAN DIEGO | 2018 | LDA | Aggregated | 65 | GAS | 20817526.7 | 0.01493928 | 0.02157766 | 0.64507993 | 0.06188431 | 0.00294299 | 297.398029 | 0.0035732 | 0.00138418 | 0.00127292 | 0.00595884 |
| SAN DIEGO | 2018 | LDA | Aggregated | 65 | DSL | 228597.215 | 0.01777317 | 0.02023357 | 0.22182752 | 0.16306456 | 0.0023079 | 244.129726 | 0.00082553 | 0.01204125 | 0.01152035 | 0.03837379 |
| SAN DIEGO | 2018 | LDT1 | Aggregated | 5 | GAS | 10129.1542 | 0.29565848 | 0.42632489 | 4.01371321 | 0.36014806 | 0.00799449 | 807.86639 | 0.06474701 | 0.01690353 | 0.0155473 | 0.02442583 |
| SAN DIEGO | 2018 | LDT1 | Aggregated | 5 | DSL | 5.19676829 | 1.00208196 | 1.14080369 | 4.45301971 | 0.9452901 | 0.01027894 | 1087.30497 | 0.04654479 | 0.76749775 | 0.73429614 | 0.1709092 |
| SAN DIEGO | 2018 | LDT1 | Aggregated | 10 | GAS | 28100.379 | 0.19344255 | 0.27874075 | 3.51739496 | 0.30196266 | 0.00650065 | 656.909541 | 0.0422002 | 0.01086236 | 0.00999111 | 0.02060691 |
| SAN DIEGO | 2018 | LDT1 | Aggregated | 10 | DSL | 14.4169153 | 0.69982945 | 0.79670931 | 3.17961617 | 0.98883215 | 0.00865247 | 915.256926 | 0.03250574 | 0.53465244 | 0.51152362 | 0.14386564 |
| SAN DIEGO | 2018 | LDT1 | Aggregated | 15 | GAS | 69485.2945 | 0.13313662 | 0.19171427 | 3.122788 | 0.25953379 | 0.00532523 | 538.130209 | 0.02894125 | 0.0073547 | 0.00676498 | 0.01778864 |
| SAN DIEGO | 2018 | LDT1 | Aggregated | 15 | DSL | 35.6494695 | 0.50213168 | 0.57164353 | 2.29276994 | 1.03089209 | 0.00717432 | 758.898834 | 0.02332306 | 0.38968513 | 0.37282753 | 0.11928833 |
| SAN DIEGO | 2018 | LDT1 | Aggregated | 20 | GAS | 225533.466 | 0.09613782 | 0.13833204 | 2.79663893 | 0.22949674 | 0.00442838 | 447.500916 | 0.02082586 | 0.00524282 | 0.00482256 | 0.01577106 |
| SAN DIEGO | 2018 | LDT1 | Aggregated | 20 | DSL | 115.710072 | 0.37694885 | 0.42913121 | 1.74189212 | 1.07651368 | 0.00589425 | 623.49333 | 0.01750855 | 0.29717241 | 0.28431687 | 0.09800447 |
| SAN DIEGO | 2018 | LDT1 | Aggregated | 25 | GAS | 685186.599 | 0.07287128 | 0.10477218 | 2.52722605 | 0.20789307 | 0.00378539 | 382.524097 | 0.01573518 | 0.00393199 | 0.0036169 | 0.01430208 |
| SAN DIEGO | 2018 | LDT1 | Aggregated | 25 | DSL | 351.535371 | 0.29950015 | 0.34096101 | 1.4306362 | 1.12578515 | 0.00494212 | 522.776682 | 0.01391121 | 0.23712203 | 0.22686424 | 0.08217321 |
| SAN DIEGO | 2018 | LDT1 | Aggregated | 30 | GAS | 581387.953 | 0.05798999 | 0.0833167 | 2.30478109 | 0.1918982 | 0.00335979 | 339.5167 | 0.01248824 | 0.0031006 | 0.00285221 | 0.01319862 |
| SAN DIEGO | 2018 | LDT1 | Aggregated | 30 | DSL | 298.281417 | 0.24972385 | 0.284294 | 1.24535612 | 1.17659539 | 0.00427353 | 452.053885 | 0.0115992 | 0.19798809 | 0.18942322 | 0.07105658 |
| SAN DIEGO | 2018 | LDT1 | Aggregated | 35 | GAS | 661993.752 | 0.04837376 | 0.06944787 | 2.1181036 | 0.1813229 | 0.00311335 | 314.612917 | 0.01039222 | 0.00256961 | 0.00236382 | 0.01245327 |
| SAN DIEGO | 2018 | LDT1 | Aggregated | 35 | DSL | 339.636267 | 0.21792783 | 0.24809634 | 1.1421805 | 1.22880343 | 0.00385703 | 407.996004 | 0.01012233 | 0.17297485 | 0.16549203 | 0.06413129 |
| SAN DIEGO | 2018 | LDT1 | Aggregated | 40 | GAS | 418558.939 | 0.04229482 | 0.0606739 | 1.96172044 | 0.17497664 | 0.00301145 | 304.315784 | 0.00906763 | 0.00223745 | 0.00205831 | 0.01198714 |
| SAN DIEGO | 2018 | LDT1 | Aggregated | 40 | DSL | 214.741899 | 0.19901407 | 0.22656429 | 1.1033513 | 1.28185339 | 0.00359984 | 380.791046 | 0.00924382 | 0.15812079 | 0.15128056 | 0.05985505 |
| SAN DIEGO | 2018 | LDT1 | Aggregated | 45 | GAS | 283684.842 | 0.03878132 | 0.05559338 | 1.83341777 | 0.17209466 | 0.00302045 | 305.225291 | 0.00830146 | 0.00204673 | 0.0018829 | 0.01174864 |
| SAN DIEGO | 2018 | LDT1 | Aggregated | 45 | DSL | 145.544668 | 0.19017246 | 0.21649871 | 1.12253699 | 1.33540773 | 0.00347086 | 367.14717 | 0.00883315 | 0.15123419 | 0.14469187 | 0.05771042 |
| SAN DIEGO | 2018 | LDT1 | Aggregated | 50 | GAS | 203764.386 | 0.0372388 | 0.05333867 | 1.72634905 | 0.17340617 | 0.00310467 | 313.735302 | 0.00796013 | 0.00196711 | 0.00180969 | 0.01178535 |
| SAN DIEGO | 2018 | LDT1 | Aggregated | 50 | DSL | 104.541433 | 0.19015323 | 0.21647681 | 1.20286352 | 1.38973764 | 0.00347663 | 367.757084 | 0.00883225 | 0.1513447 | 0.1447976 | 0.05780629 |
| SAN DIEGO | 2018 | LDT1 | Aggregated | 55 | GAS | 163107.796 | 0.03758763 | 0.05381254 | 1.64770321 | 0.17636144 | 0.00323504 | 326.910456 | 0.00803297 | 0.00198689 | 0.00182792 | 0.01192261 |
| SAN DIEGO | 2018 | LDT1 | Aggregated | 55 | DSL | 83.6825465 | 0.19896051 | 0.22650331 | 1.35768187 | 1.44284038 | 0.0036351 | 384.51999 | 0.00924134 | 0.15847138 | 0.15161598 | 0.06044119 |
| SAN DIEGO | 2018 | LDT1 | Aggregated | 60 | GAS | 179391.484 | 0.0397276 | 0.05683491 | 1.58807735 | 0.18530514 | 0.0033638 | 339.921402 | 0.00848614 | 0.00211 | 0.00194122 | 0.01244713 |
| SAN DIEGO | 2018 | LDT1 | Aggregated | 60 | DSL | 92.0369021 | 0.2179104 | 0.24807651 | 1.6149419 | 1.49765511 | 0.00393755 | 416.513864 | 0.01012152 | 0.1736403 | 0.1661287 | 0.06547018 |
| SAN DIEGO | 2018 | LDT1 | Aggregated | 65 | GAS | 2364142.31 | 0.04403655 | 0.06293923 | 1.55347292 | 0.20125945 | 0.00346058 | 349.701781 | 0.00939938 | 0.00235723 | 0.00216871 | 0.01341653 |
| SAN DIEGO | 2018 | LDT1 | Aggregated | 65 | DSL | 1212.92454 | 0.24979585 | 0.28437596 | 2.02383309 | 1.55428208 | 0.00442276 | 467.838803 | 0.01160254 | 0.19909849 | 0.19048558 | 0.07353774 |
| SAN DIEGO | 2018 | LDT2 | Aggregated | 5 | GAS | 32067.3007 | 0.16569743 | 0.23867837 | 2.44564713 | 0.24821058 | 0.00889606 | 898.972025 | 0.03880568 | 0.01060987 | 0.0097583 | 0.01831643 |
| SAN DIEGO | 2018 | LDT2 | Aggregated | 5 | DSL | 164.203041 | 0.26937036 | 0.30666024 | 2.13188204 | 0.17340977 | 0.00732804 | 775.158485 | 0.01251174 | 0.02856751 | 0.0273317 | 0.12184412 |
| SAN DIEGO | 2018 | LDT2 | Aggregated | 10 | GAS | 88961.3567 | 0.10705422 | 0.1540623 | 2.18407409 | 0.21124187 | 0.00723269 | 730.8836 | 0.02494753 | 0.00672653 | 0.00618683 | 0.01566317 |
| SAN DIEGO | 2018 | LDT2 | Aggregated | 10 | DSL | 455.533361 | 0.2001326 | 0.22783767 | 1.59167794 | 0.15123645 | 0.00616849 | 652.502465 | 0.00929578 | 0.02169677 | 0.02075818 | 0.1025643 |
| SAN DIEGO | 2018 | LDT2 | Aggregated | 15 | GAS | 219979.455 | 0.07284831 | 0.10474118 | 1.9673961 | 0.18360035 | 0.00592351 | 598.588032 | 0.01689684 | 0.00449751 | 0.00413677 | 0.01365842 |
| SAN DIEGO | 2018 | LDT2 | Aggregated | 15 | DSL | 1126.42145 | 0.10255445 | 0.11675142 | 0.79755786 | 0.11423364 | 0.0051147 | 541.032082 | 0.00476346 | 0.01680807 | 0.01608096 | 0.08504271 |
| SAN DIEGO | 2018 | LDT2 | Aggregated | 20 | GAS | 714003.291 | 0.05208875 | 0.07481834 | 1.78074862 | 0.163598 | 0.00492505 | 497.690629 | 0.01202596 | 0.00317052 | 0.0029163 | 0.01219423 |
| SAN DIEGO | 2018 | LDT2 | Aggregated | 20 | DSL | 3656.1079 | 0.0453467 | 0.05162421 | 0.33348105 | 0.08921415 | 0.00420212 | 444.49916 | 0.00210627 | 0.01336725 | 0.01278898 | 0.06986908 |
| SAN DIEGO | 2018 | LDT2 | Aggregated | 25 | GAS | 2169192.43 | 0.03916996 | 0.0562053 | 1.62130417 | 0.14886929 | 0.00420943 | 425.37527 | 0.00900469 | 0.00235584 | 0.002167 | 0.01110549 |
| SAN DIEGO | 2018 | LDT2 | Aggregated | 25 | DSL | 11107.514 | 0.02942626 | 0.03349984 | 0.21077165 | 0.07862688 | 0.00352332 | 372.696523 | 0.00136679 | 0.01097268 | 0.01049801 | 0.0585827 |
| SAN DIEGO | 2018 | LDT2 | Aggregated | 30 | GAS | 1840582.33 | 0.03099085 | 0.04442833 | 1.48578259 | 0.13765251 | 0.00373595 | 377.528794 | 0.0070989 | 0.00184464 | 0.00169683 | 0.01026711 |
| SAN DIEGO | 2018 | LDT2 | Aggregated | 30 | DSL | 9424.84113 | 0.02293535 | 0.02611038 | 0.16374226 | 0.07388544 | 0.00304668 | 322.277019 | 0.0010653 | 0.00938811 | 0.00898198 | 0.05065746 |
| SAN DIEGO | 2018 | LDT2 | Aggregated | 35 | GAS | 2095767.54 | 0.02575944 | 0.03689408 | 1.36844581 | 0.12994586 | 0.00346228 | 349.87288 | 0.00588199 | 0.00152177 | 0.00139986 | 0.00968222 |
| SAN DIEGO | 2018 | LDT2 | Aggregated | 35 | DSL | 10731.5363 | 0.01882012 | 0.02142546</ | | | | | | | | |

| Region | Calendar Year | Vehicle Categ | Model Year | Speed | Fuel | VMT | ROG_RUNEX | TOG_RUNEX | CO_RUNEX | NOx_RUNEX | Sox_RUNEX | CO2_RUNEX | CH4_RUNEX | PM10_RUNEX | PM2_5_RUNEX | N2O_RUNEX |
|-----------|---------------|---------------|------------|-------|------|------------|------------|------------|------------|------------|------------|------------|------------|------------|-------------|------------|
| SAN DIEGO | 2018 | LDT2 | Aggregated | 40 | GAS | 1325091.42 | 0.02249355 | 0.03218724 | 1.26695589 | 0.12496996 | 0.00334977 | 338.503925 | 0.00512304 | 0.00132251 | 0.0012166 | 0.00929437 |
| SAN DIEGO | 2018 | LDT2 | Aggregated | 40 | DSL | 6785.2309 | 0.01609747 | 0.0183259 | 0.11522539 | 0.07010215 | 0.00256639 | 271.472512 | 0.0007477 | 0.00761877 | 0.00728918 | 0.0426717 |
| SAN DIEGO | 2018 | LDT2 | Aggregated | 45 | GAS | 898101.351 | 0.02064653 | 0.02952031 | 1.18065335 | 0.12220188 | 0.00336076 | 339.61443 | 0.00469388 | 0.0012107 | 0.00111377 | 0.0090651 |
| SAN DIEGO | 2018 | LDT2 | Aggregated | 45 | DSL | 4598.79595 | 0.01428133 | 0.01625834 | 0.10273429 | 0.06964014 | 0.00247444 | 261.745556 | 0.00066334 | 0.00719222 | 0.00688109 | 0.04114276 |
| SAN DIEGO | 2018 | LDT2 | Aggregated | 50 | GAS | 645085.825 | 0.01988899 | 0.02841255 | 1.10505677 | 0.12211505 | 0.00345576 | 349.214148 | 0.00451508 | 0.00116755 | 0.00107409 | 0.00902835 |
| SAN DIEGO | 2018 | LDT2 | Aggregated | 50 | DSL | 3303.21079 | 0.01311837 | 0.01493439 | 0.0951802 | 0.06972989 | 0.00247855 | 262.180375 | 0.00060932 | 0.0069996 | 0.0066968 | 0.0412111 |
| SAN DIEGO | 2018 | LDT2 | Aggregated | 55 | GAS | 516373.49 | 0.02018584 | 0.02882424 | 1.0454598 | 0.12288225 | 0.00360147 | 363.93873 | 0.00458314 | 0.00118618 | 0.00109125 | 0.00904794 |
| SAN DIEGO | 2018 | LDT2 | Aggregated | 55 | DSL | 2644.12954 | 0.01248345 | 0.01421158 | 0.09187811 | 0.07011849 | 0.00259152 | 274.13094 | 0.00057983 | 0.00703112 | 0.00672695 | 0.04308957 |
| SAN DIEGO | 2018 | LDT2 | Aggregated | 60 | GAS | 567925.073 | 0.02148971 | 0.03066573 | 0.99424193 | 0.12737302 | 0.00374558 | 378.501642 | 0.00487891 | 0.00126979 | 0.00116819 | 0.00933144 |
| SAN DIEGO | 2018 | LDT2 | Aggregated | 60 | DSL | 2908.10333 | 0.01267719 | 0.01443214 | 0.09578988 | 0.07142871 | 0.00280715 | 296.939925 | 0.00058883 | 0.00737636 | 0.00705726 | 0.04667482 |
| SAN DIEGO | 2018 | LDT2 | Aggregated | 65 | GAS | 7484500.72 | 0.02402822 | 0.03425822 | 0.95421631 | 0.13603865 | 0.00385402 | 389.459418 | 0.0054538 | 0.00143256 | 0.00131794 | 0.0099053 |
| SAN DIEGO | 2018 | LDT2 | Aggregated | 65 | DSL | 38324.9525 | 0.013638 | 0.01552596 | 0.10704487 | 0.07345595 | 0.00315306 | 333.530361 | 0.00063346 | 0.00807907 | 0.00772957 | 0.05242633 |
| SAN DIEGO | 2018 | LHD1 | Aggregated | 5 | GAS | 39062.5955 | 0.29921953 | 0.42498832 | 3.49712819 | 0.51626441 | 0.01938657 | 1959.06865 | 0.05879737 | 0.00916467 | 0.00843633 | 0.03084243 |
| SAN DIEGO | 2018 | LHD1 | Aggregated | 5 | DSL | 20120.7891 | 0.76609446 | 0.8721476 | 2.96406298 | 2.78145964 | 0.01206764 | 1276.51308 | 0.03558362 | 0.09930368 | 0.09500785 | 0.20065008 |
| SAN DIEGO | 2018 | LHD1 | Aggregated | 10 | GAS | 101858.877 | 0.19782133 | 0.28064007 | 2.71937386 | 0.45621921 | 0.01573388 | 1589.95364 | 0.03852513 | 0.00584129 | 0.00537763 | 0.02707813 |
| SAN DIEGO | 2018 | LHD1 | Aggregated | 10 | DSL | 66910.7943 | 0.55163775 | 0.6280029 | 2.15149566 | 2.86326937 | 0.01014473 | 1073.10842 | 0.02562252 | 0.07140477 | 0.06831583 | 0.1686777 |
| SAN DIEGO | 2018 | LHD1 | Aggregated | 15 | GAS | 231946.397 | 0.13748884 | 0.1947743 | 2.20922981 | 0.41209146 | 0.01286569 | 1300.11443 | 0.02654019 | 0.0039277 | 0.00361632 | 0.02429103 |
| SAN DIEGO | 2018 | LHD1 | Aggregated | 15 | DSL | 144909.612 | 0.33902521 | 0.38595767 | 1.37466008 | 2.92082118 | 0.00662536 | 700.829597 | 0.01574707 | 0.05327718 | 0.05097243 | 0.11016065 |
| SAN DIEGO | 2018 | LHD1 | Aggregated | 20 | GAS | 268012.261 | 0.1004825 | 0.14213436 | 1.86257149 | 0.3797398 | 0.01069406 | 1080.66528 | 0.01923382 | 0.0027856 | 0.00256503 | 0.02222633 |
| SAN DIEGO | 2018 | LHD1 | Aggregated | 20 | DSL | 158867.74 | 0.21073304 | 0.23990555 | 0.90685693 | 3.00169392 | 0.00564712 | 597.351401 | 0.00978815 | 0.0413106 | 0.03952352 | 0.09389532 |
| SAN DIEGO | 2018 | LHD1 | Aggregated | 25 | GAS | 206452.068 | 0.07715601 | 0.10893746 | 1.62074784 | 0.35809581 | 0.00914067 | 923.691057 | 0.01464584 | 0.00208335 | 0.00191857 | 0.02081156 |
| SAN DIEGO | 2018 | LHD1 | Aggregated | 25 | DSL | 170030.865 | 0.1583001 | 0.18021414 | 0.7129526 | 3.1243881 | 0.00500846 | 529.793802 | 0.00735274 | 0.03334318 | 0.03190077 | 0.08327621 |
| SAN DIEGO | 2018 | LHD1 | Aggregated | 30 | GAS | 182571.384 | 0.06251195 | 0.08818287 | 1.4544439 | 0.33876849 | 0.00811074 | 819.613974 | 0.01179067 | 0.00164275 | 0.00151296 | 0.01955743 |
| SAN DIEGO | 2018 | LHD1 | Aggregated | 30 | DSL | 143527.592 | 0.12977704 | 0.14774253 | 0.61065902 | 3.24915206 | 0.00454822 | 481.110048 | 0.0060279 | 0.02812107 | 0.02690457 | 0.0756238 |
| SAN DIEGO | 2018 | LHD1 | Aggregated | 35 | GAS | 68220.2941 | 0.05300055 | 0.07461438 | 1.33667996 | 0.33096713 | 0.00751814 | 759.729733 | 0.00992284 | 0.00136542 | 0.00125764 | 0.01898571 |
| SAN DIEGO | 2018 | LHD1 | Aggregated | 35 | DSL | 75745.0822 | 0.11160004 | 0.12704922 | 0.55209343 | 3.39581012 | 0.00454822 | 481.110048 | 0.00518361 | 0.02471703 | 0.02364778 | 0.0756238 |
| SAN DIEGO | 2018 | LHD1 | Aggregated | 40 | GAS | 20137.0751 | 0.04704841 | 0.06603225 | 1.25888736 | 0.33194141 | 0.0072771 | 735.372234 | 0.00873568 | 0.00119606 | 0.00110174 | 0.01893086 |
| SAN DIEGO | 2018 | LHD1 | Aggregated | 40 | DSL | 41581.5742 | 0.10040745 | 0.1143072 | 0.52596267 | 3.54378078 | 0.00442371 | 467.939065 | 0.00466373 | 0.02260874 | 0.02163069 | 0.0735535 |
| SAN DIEGO | 2018 | LHD1 | Aggregated | 45 | GAS | 24790.5116 | 0.04429479 | 0.0621613 | 1.22806721 | 0.32492405 | 0.00730218 | 737.905731 | 0.00819652 | 0.00110397 | 0.00101698 | 0.01844723 |
| SAN DIEGO | 2018 | LHD1 | Aggregated | 45 | DSL | 44880.1939 | 0.09442353 | 0.10749491 | 0.52779229 | 3.67965349 | 0.00431498 | 456.437737 | 0.00438579 | 0.02150656 | 0.02057619 | 0.07174566 |
| SAN DIEGO | 2018 | LHD1 | Aggregated | 50 | GAS | 183049.683 | 0.0440392 | 0.06190861 | 1.24092812 | 0.31604723 | 0.00751627 | 759.540378 | 0.0081476 | 0.00107353 | 0.00098899 | 0.01788527 |
| SAN DIEGO | 2018 | LHD1 | Aggregated | 50 | DSL | 173296.649 | 0.09280712 | 0.10565474 | 0.55803659 | 3.81743777 | 0.00452368 | 478.513959 | 0.00431071 | 0.02127681 | 0.02035638 | 0.07521573 |
| SAN DIEGO | 2018 | LHD1 | Aggregated | 55 | GAS | 50347.307 | 0.04522441 | 0.06336172 | 1.29007222 | 0.33245448 | 0.00782509 | 790.74822 | 0.00830941 | 0.00109965 | 0.0010131 | 0.01875821 |
| SAN DIEGO | 2018 | LHD1 | Aggregated | 55 | DSL | 104360.817 | 0.09538672 | 0.10859143 | 0.6220104 | 3.97872797 | 0.00472708 | 500.030106 | 0.00443053 | 0.02190894 | 0.02096117 | 0.07859777 |
| SAN DIEGO | 2018 | LHD2 | Aggregated | 5 | GAS | 5523.70828 | 0.21471924 | 0.31331781 | 2.36738183 | 0.47850199 | 0.02219904 | 2243.27632 | 0.04561105 | 0.00768824 | 0.00706905 | 0.03018052 |
| SAN DIEGO | 2018 | LHD2 | Aggregated | 5 | DSL | 6802.4623 | 0.74663815 | 0.84999789 | 2.89014381 | 2.23752936 | 0.01270233 | 1343.65079 | 0.03467991 | 0.08119424 | 0.07768181 | 0.21120319 |
| SAN DIEGO | 2018 | LHD2 | Aggregated | 10 | GAS | 14403.5161 | 0.14049697 | 0.20501284 | 1.88460934 | 0.42065321 | 0.01801872 | 1820.84288 | 0.02963427 | 0.00488059 | 0.00448752 | 0.02638702 |
| SAN DIEGO | 2018 | LHD2 | Aggregated | 10 | DSL | 22621.2876 | 0.54261603 | 0.61773227 | 2.11274655 | 2.27240125 | 0.01128896 | 1194.14444 | 0.02520348 | 0.05950696 | 0.05693272 | 0.18770288 |
| SAN DIEGO | 2018 | LHD2 | Aggregated | 15 | GAS | 32798.7483 | 0.0966116 | 0.14097542 | 1.55842728 | 0.3778674 | 0.01473493 | 1489.00654 | 0.0202424 | 0.00326867 | 0.00300542 | 0.0235655 |
| SAN DIEGO | 2018 | LHD2 | Aggregated | 15 | DSL | 48991.2283 | 0.31694962 | 0.36082607 | 1.2759558 | 2.27272962 | 0.00751472 | 794.906045 | 0.0147217 | 0.04500258 | 0.04305579 | 0.12494816 |
| SAN DIEGO | 2018 | LHD2 | Aggregated | 20 | GAS | 37898.699 | 0.06986949 | 0.1019534 | 1.33054999 | 0.34622387 | 0.01224808 | 1237.70394 | 0.01454874 | 0.0023092 | 0.00212323 | 0.02146255 |
| SAN DIEGO | 2018 | LHD2 | Aggregated | 20 | DSL | 53710.2104 | 0.18213245 | 0.20734569 | 0.77681186 | 2.30354915 | 0.0064095 | 677.996378 | 0.0084597 | 0.03521993 | 0.03369633 | 0.10657159 |
| SAN DIEGO | 2018 | LHD2 | Aggregated | 25 | GAS | 29193.6822 | 0.05305304 | 0.07741486 | 1.16512903 | 0.32462021 | 0.01046902 | 1057.92448 | 0.01098468 | 0.0017206 | 0.00158203 | 0.02000215 |
| SAN DIEGO | 2018 | LHD2 | Aggregated | 25 | DSL | 57484.2541 | 0.1330655 | 0.15148622 | 0.59338984 | 2.38175189 | 0.00571187 | 604.200854 | 0.00618064 | 0.02860575 | 0.02736828 | 0.09497196 |
| SAN DIEGO | 2018 | LHD2 | Aggregated | 30 | GAS | 25816.7961 | 0.04266109 | 0.06225096 | 1.05118228 | 0.30546698 | 0.0092895 | 938.730165 | 0.00878673 | 0.00135195 | 0.00124307 | 0.01871278 |
| SAN DIEGO | 2018 | LHD2 | Aggregated | 30 | DSL | 48523.9933 | 0.10812799 | 0.12309653 | 0.50259316 | 2.4677929 | 0.0051512 | 544.892794 | 0.00502234 | 0.02425591 | 0.02320661 | 0.08564956 |
| SAN DIEGO | 2018 | LHD2 | Aggregated | 35 | GAS | 9646.79891 | 0.03578275 | 0.05221411 | 0.96233616 | 0.2968718 | 0.00861087 | 870.152565 | 0.0073368 | 0.00112006 | 0.00102986 | 0.01808675 |
| SAN DIEGO | 2018 | LHD2 | Aggregated | 35 | DSL | 25607.995 | 0.09225316 | 0.10502409 | 0.44978837 | 2.57277924 | 0.0051512 | 544.892794 | 0.00428498 | 0.02138807 | 0.02046283 | 0.08564956 |
| SAN DIEGO | 2018 | LHD2 | Aggregated | 40 | GAS | 2847.51506 | 0.03133074 | 0.04571774 | 0.89482651 | 0.29625554 | 0.00833491 | 842.266951 | 0.00639978 | 0.00097827 | 0.00089948 | 0.01795989 |
| SAN DIEGO | 2018 | LHD2 | Aggregated | 40 | DSL | 14057.9522 | 0.08232557 | 0.09372219 | 0.42418811 | 2.68008149 | 0.00496305 | 524.99072 | 0.00382387 | 0.01957024 | 0.01872364 | 0.08252123 |
| SAN DIEGO | 2018 | LHD2 | Aggregated | 45 | GAS | 3505.54162 | 0.02940075 | 0.0429015 | 0.86694781 | 0.28895198 | 0.00836383 | 845.188661 | 0.0059843 | 0.00090065 | 0.00082811 | 0.01744552 |
| SAN DIEGO | 2018 | LHD2 | Aggregated | 45 | DSL | 15173.1538 | 0.07672643 | 0.08734794 | 0.42131895 | 2.77908558 | 0.00477071 | 504.645031 | 0.0035638 | 0.01856255 | 0.01775954 | 0.07932317 |
| SAN DIEGO | 2018 | LHD2 | Aggregated | 50 | GAS | 25884.4308 | 0.02932788 | 0.04279517 | 0.8719507 | 0.28042853 | 0.00860917 | 869.981461 | 0.0059507 | 0.00087392 | 0.00080354 | 0.01687807 |
| SAN DIEGO | 2018 | LHD2 | Aggregated | 50 | DSL | 58588.3545 | 0.07467026 | 0.08500712 | 0.44093213 | 2.88011292 | 0.00494642 | 523.231957 | 0.00346829 | 0.0182516 | 0.01746205 | 0.08224478 |
| SAN DIEGO | 2018 | LHD2 | Aggregated | 55 | GAS | 7119.44082 | 0.02972265 | 0.04337122 | 0.87888171 | 0.29415747 | 0.00896249 | 905.684816 | 0.00601972 | 0.00089367 | 0.00082169 | 0.01766258 |
| SAN DIEGO | 2018 | LHD2 | Aggregated | 55 | DSL | 35282.4394 | 0.07593745 | 0.08644974 | 0.4866908 | 2.99926277 | 0.00511979 | 541.570277 | 0.00352715 | 0.01862219 | 0.0178166 | 0.08512731 |
| SAN DIEGO | 2018 | MCY | Aggregated | 5 | GAS | 1186.33778 | 12.8407224 | 15.7359109 | 53.4556503 | 1.51516539 | 0.00535212 | 540.846904 | 1.86869965 | 0.00914211 | 0.00856974 | 0.08735417 |
| SAN DIEGO | 2018 | MCY | Aggregated | 10 | GAS | 3291.14756 | | | | | | | | | | |

| Region | Calendar Year | Vehicle Categ | Model Year | Speed | Fuel | VMT | ROG_RUNEX | TOG_RUNEX | CO_RUNEX | NOx_RUNEX | SOx_RUNEX | CO2_RUNEX | CH4_RUNEX | PM10_RUNEX | PM2_5_RUNEX | N2O_RUNEX |
|-----------|---------------|---------------|------------|-------|------|------------|------------|------------|------------|------------|------------|------------|------------|------------|-------------|------------|
| SAN DIEGO | 2018 | MCY | Aggregated | 15 | GAS | 8138.19476 | 5.79125695 | 7.08236915 | 31.5466991 | 1.27746463 | 0.00339234 | 342.805678 | 0.8403664 | 0.00416406 | 0.00390568 | 0.07354289 |
| SAN DIEGO | 2018 | MCY | Aggregated | 20 | GAS | 26414.7297 | 4.21669326 | 5.15152318 | 26.0899845 | 1.20784984 | 0.00279608 | 282.552172 | 0.61101352 | 0.00303756 | 0.00284983 | 0.06948671 |
| SAN DIEGO | 2018 | MCY | Aggregated | 25 | GAS | 80249.8144 | 3.23504486 | 3.94846595 | 22.4693149 | 1.1605612 | 0.0023792 | 240.424503 | 0.46814375 | 0.00233211 | 0.00218849 | 0.06672277 |
| SAN DIEGO | 2018 | MCY | Aggregated | 30 | GAS | 68092.8018 | 2.60685956 | 3.17918717 | 19.9890547 | 1.12756531 | 0.00210239 | 212.452167 | 0.37681468 | 0.00188358 | 0.00176796 | 0.06478782 |
| SAN DIEGO | 2018 | MCY | Aggregated | 35 | GAS | 77533.4424 | 2.21202554 | 2.69566076 | 18.4343244 | 1.11038319 | 0.00193999 | 196.041849 | 0.31941005 | 0.00159974 | 0.00150183 | 0.06376773 |
| SAN DIEGO | 2018 | MCY | Aggregated | 40 | GAS | 49022.0871 | 1.97357419 | 2.40351692 | 17.5865246 | 1.10524151 | 0.00186787 | 188.753714 | 0.2847205 | 0.00142819 | 0.00134099 | 0.06344482 |
| SAN DIEGO | 2018 | MCY | Aggregated | 45 | GAS | 33225.4833 | 1.84829293 | 2.24979237 | 17.3454615 | 1.10906119 | 0.00186495 | 188.458656 | 0.26645587 | 0.00133984 | 0.0012582 | 0.06364183 |
| SAN DIEGO | 2018 | MCY | Aggregated | 50 | GAS | 23865.1108 | 1.8228299 | 2.21774208 | 17.842107 | 1.12539052 | 0.00191665 | 193.682951 | 0.2626104 | 0.00132048 | 0.00124017 | 0.06456163 |
| SAN DIEGO | 2018 | MCY | Aggregated | 55 | GAS | 19103.3659 | 1.87333272 | 2.27882956 | 18.8929137 | 1.14042057 | 0.00199951 | 202.0566 | 0.26982595 | 0.00136689 | 0.00128386 | 0.06541291 |
| SAN DIEGO | 2018 | MCY | Aggregated | 60 | GAS | 21010.5296 | 2.036081 | 2.47619023 | 21.2308403 | 1.17386373 | 0.00210837 | 213.056835 | 0.29316555 | 0.00148587 | 0.0013957 | 0.06732505 |
| SAN DIEGO | 2018 | MCY | Aggregated | 65 | GAS | 276890.969 | 2.33935916 | 2.84409934 | 25.4674398 | 1.22657391 | 0.00223767 | 226.123311 | 0.33668151 | 0.001696 | 0.00159313 | 0.07034726 |
| SAN DIEGO | 2018 | MDV | Aggregated | 5 | GAS | 20938.9653 | 0.21742469 | 0.30576542 | 2.91417579 | 0.28595174 | 0.01065536 | 1076.75453 | 0.04789674 | 0.01098197 | 0.01010656 | 0.02091253 |
| SAN DIEGO | 2018 | MDV | Aggregated | 5 | DSL | 447.667637 | 0.20702789 | 0.23568749 | 3.46365875 | 0.17963992 | 0.00906825 | 959.237619 | 0.00961605 | 0.02130262 | 0.02038108 | 0.1507788 |
| SAN DIEGO | 2018 | MDV | Aggregated | 10 | GAS | 58089.0414 | 0.14121028 | 0.19809346 | 2.52691455 | 0.24428204 | 0.00866033 | 875.150869 | 0.03086535 | 0.00697724 | 0.00642161 | 0.01788669 |
| SAN DIEGO | 2018 | MDV | Aggregated | 10 | DSL | 1241.92306 | 0.15394052 | 0.17525104 | 2.58816168 | 0.15836717 | 0.00770115 | 814.626234 | 0.00715024 | 0.01669858 | 0.01597621 | 0.1280479 |
| SAN DIEGO | 2018 | MDV | Aggregated | 15 | GAS | 143639.847 | 0.09659143 | 0.1351777 | 2.23179926 | 0.21328619 | 0.00709087 | 716.552537 | 0.020956 | 0.00467508 | 0.00430315 | 0.01561049 |
| SAN DIEGO | 2018 | MDV | Aggregated | 15 | DSL | 3070.96889 | 0.07847893 | 0.08934304 | 1.28640992 | 0.12255131 | 0.00653109 | 690.857751 | 0.0036452 | 0.01319979 | 0.01262877 | 0.10859322 |
| SAN DIEGO | 2018 | MDV | Aggregated | 20 | GAS | 466222.283 | 0.06948874 | 0.09699653 | 1.99577943 | 0.19102264 | 0.00589519 | 595.725871 | 0.01496027 | 0.00330266 | 0.00304017 | 0.01395604 |
| SAN DIEGO | 2018 | MDV | Aggregated | 20 | DSL | 9967.66673 | 0.03426378 | 0.03900704 | 0.52616554 | 0.09851176 | 0.00542404 | 573.754627 | 0.00159149 | 0.01063476 | 0.0101747 | 0.09018624 |
| SAN DIEGO | 2018 | MDV | Aggregated | 25 | GAS | 1416416.22 | 0.05259393 | 0.07322426 | 1.80441165 | 0.17477399 | 0.00503852 | 509.156403 | 0.0112394 | 0.00245911 | 0.00226385 | 0.01273251 |
| SAN DIEGO | 2018 | MDV | Aggregated | 25 | DSL | 30282.4755 | 0.02207939 | 0.02513591 | 0.32762218 | 0.08864849 | 0.00458659 | 485.168575 | 0.00102555 | 0.00880305 | 0.00842224 | 0.07626174 |
| SAN DIEGO | 2018 | MDV | Aggregated | 30 | GAS | 1201843.89 | 0.04186368 | 0.05815124 | 1.64785339 | 0.16250691 | 0.00447158 | 451.866066 | 0.00888925 | 0.00192936 | 0.0017763 | 0.01179563 |
| SAN DIEGO | 2018 | MDV | Aggregated | 30 | DSL | 25694.9953 | 0.01716308 | 0.01953903 | 0.25251609 | 0.08452801 | 0.00396138 | 419.034558 | 0.00079719 | 0.00758445 | 0.00725635 | 0.06586664 |
| SAN DIEGO | 2018 | MDV | Aggregated | 35 | GAS | 1368472.02 | 0.03502433 | 0.04853905 | 1.51806895 | 0.15423638 | 0.00414412 | 418.775606 | 0.0073921 | 0.0015947 | 0.0014683 | 0.01114847 |
| SAN DIEGO | 2018 | MDV | Aggregated | 35 | DSL | 29257.4455 | 0.01404682 | 0.01599137 | 0.20543623 | 0.08259089 | 0.00359441 | 380.215915 | 0.00065245 | 0.0067503 | 0.00645828 | 0.05976465 |
| SAN DIEGO | 2018 | MDV | Aggregated | 40 | GAS | 865244.113 | 0.03078787 | 0.04257446 | 1.41071386 | 0.14906678 | 0.00400975 | 405.196534 | 0.00646287 | 0.00138837 | 0.00127841 | 0.01072634 |
| SAN DIEGO | 2018 | MDV | Aggregated | 40 | DSL | 18498.6117 | 0.01197909 | 0.0136374 | 0.17429936 | 0.08190824 | 0.00336207 | 355.63969 | 0.00055641 | 0.00618252 | 0.00591507 | 0.05590161 |
| SAN DIEGO | 2018 | MDV | Aggregated | 45 | GAS | 586432.678 | 0.02843702 | 0.03924863 | 1.3243273 | 0.14639364 | 0.00402307 | 406.542621 | 0.00594337 | 0.00127308 | 0.00117233 | 0.01048526 |
| SAN DIEGO | 2018 | MDV | Aggregated | 45 | DSL | 12537.7223 | 0.01058916 | 0.01205506 | 0.15332771 | 0.08200845 | 0.00323551 | 342.251846 | 0.00049185 | 0.00581522 | 0.00556366 | 0.05379722 |
| SAN DIEGO | 2018 | MDV | Aggregated | 50 | GAS | 421221.287 | 0.02758576 | 0.03799753 | 1.25549987 | 0.14678947 | 0.00413747 | 418.103288 | 0.00574112 | 0.0012295 | 0.00113226 | 0.01046493 |
| SAN DIEGO | 2018 | MDV | Aggregated | 50 | DSL | 9005.56144 | 0.0096832 | 0.01102368 | 0.13961675 | 0.08265721 | 0.00325172 | 343.96686 | 0.00044977 | 0.00561469 | 0.0053718 | 0.0540668 |
| SAN DIEGO | 2018 | MDV | Aggregated | 55 | GAS | 337176.075 | 0.02811169 | 0.03868597 | 1.20844861 | 0.14808245 | 0.00431151 | 435.690678 | 0.00584284 | 0.0012507 | 0.00115183 | 0.01050864 |
| SAN DIEGO | 2018 | MDV | Aggregated | 55 | DSL | 7208.70466 | 0.00916368 | 0.01043225 | 0.13183236 | 0.08358607 | 0.0034317 | 363.005198 | 0.00042564 | 0.00557059 | 0.00532961 | 0.05705936 |
| SAN DIEGO | 2018 | MDV | Aggregated | 60 | GAS | 370837.68 | 0.03010957 | 0.04137499 | 1.18199596 | 0.15369561 | 0.00448471 | 453.19242 | 0.00624376 | 0.00134022 | 0.00123433 | 0.01085743 |
| SAN DIEGO | 2018 | MDV | Aggregated | 60 | DSL | 7928.37782 | 0.00926112 | 0.01054317 | 0.13446107 | 0.08543548 | 0.00371585 | 393.061584 | 0.00043016 | 0.00576459 | 0.00551522 | 0.06178381 |
| SAN DIEGO | 2018 | MDV | Aggregated | 65 | GAS | 4887149.75 | 0.0339293 | 0.04653483 | 1.18525776 | 0.16416968 | 0.00461615 | 466.475337 | 0.00701369 | 0.00151314 | 0.00139362 | 0.011544 |
| SAN DIEGO | 2018 | MDV | Aggregated | 65 | DSL | 104485.525 | 0.00991963 | 0.01129284 | 0.14698114 | 0.08800602 | 0.00417237 | 441.353066 | 0.00046075 | 0.00621778 | 0.0059488 | 0.06937456 |
| SAN DIEGO | 2018 | MH | Aggregated | 5 | GAS | 964.050953 | 0.6393422 | 0.91452379 | 9.52797638 | 1.05083351 | 0.04114208 | 4157.52499 | 0.13531583 | 0.01154459 | 0.01062621 | 0.05913416 |
| SAN DIEGO | 2018 | MH | Aggregated | 5 | DSL | 294.05167 | 1.08054906 | 1.23013326 | 2.35646562 | 15.4187313 | 0.01997537 | 2112.99125 | 0.05018944 | 0.35734797 | 0.34188925 | 0.3321328 |
| SAN DIEGO | 2018 | MH | Aggregated | 10 | GAS | 4846.29264 | 0.42139059 | 0.60208116 | 7.25828513 | 0.93837362 | 0.03338675 | 3373.82717 | 0.08836368 | 0.0074124 | 0.00682336 | 0.05232936 |
| SAN DIEGO | 2018 | MH | Aggregated | 10 | DSL | 1463.67844 | 0.81669612 | 0.92975423 | 1.90353408 | 12.8692491 | 0.01813772 | 1918.60513 | 0.03793397 | 0.30481081 | 0.29162483 | 0.30157801 |
| SAN DIEGO | 2018 | MH | Aggregated | 15 | GAS | 6121.69856 | 0.29324391 | 0.41865883 | 5.80837498 | 0.84824447 | 0.02729903 | 2758.64563 | 0.06098174 | 0.00502014 | 0.00462161 | 0.04686259 |
| SAN DIEGO | 2018 | MH | Aggregated | 15 | DSL | 1975.45787 | 0.41601121 | 0.4736011 | 1.19252033 | 8.95145735 | 0.01489264 | 1575.34113 | 0.01932293 | 0.21853845 | 0.20908457 | 0.24762169 |
| SAN DIEGO | 2018 | MH | Aggregated | 20 | GAS | 6349.70481 | 0.21426827 | 0.3056023 | 4.83497561 | 0.78457027 | 0.02269039 | 2292.92931 | 0.04420246 | 0.00358523 | 0.00330089 | 0.04293299 |
| SAN DIEGO | 2018 | MH | Aggregated | 20 | DSL | 2095.04486 | 0.18468759 | 0.21025454 | 0.74130568 | 6.63802584 | 0.01222118 | 1292.75475 | 0.00857839 | 0.15733535 | 0.15052909 | 0.20320304 |
| SAN DIEGO | 2018 | MH | Aggregated | 25 | GAS | 7075.03926 | 0.16471799 | 0.23471474 | 4.17427583 | 0.73743006 | 0.01939416 | 1959.83497 | 0.03373301 | 0.00269916 | 0.00248529 | 0.03997717 |
| SAN DIEGO | 2018 | MH | Aggregated | 25 | DSL | 2181.90614 | 0.12925515 | 0.1471484 | 0.5813042 | 5.82385163 | 0.0109619 | 1159.54847 | 0.00600365 | 0.13175475 | 0.1260551 | 0.18226487 |
| SAN DIEGO | 2018 | MH | Aggregated | 30 | GAS | 7999.33969 | 0.13333764 | 0.18986589 | 3.72915906 | 0.70288935 | 0.01720876 | 1738.99407 | 0.02713179 | 0.00214149 | 0.00197195 | 0.03776876 |
| SAN DIEGO | 2018 | MH | Aggregated | 30 | DSL | 2623.56536 | 0.10491342 | 0.11943695 | 0.49481775 | 5.37815024 | 0.0102894 | 1088.41158 | 0.00487303 | 0.11831168 | 0.11319357 | 0.17108314 |
| SAN DIEGO | 2018 | MH | Aggregated | 35 | GAS | 9941.96561 | 0.11318797 | 0.1610242 | 3.42996105 | 0.6824737 | 0.01595138 | 1611.93296 | 0.02289318 | 0.00179002 | 0.00164841 | 0.03637156 |
| SAN DIEGO | 2018 | MH | Aggregated | 35 | DSL | 3093.5291 | 0.08664413 | 0.09863858 | 0.42734296 | 5.05220593 | 0.00973131 | 1029.37678 | 0.00402445 | 0.11067331 | 0.10588563 | 0.16180369 |
| SAN DIEGO | 2018 | MH | Aggregated | 40 | GAS | 12376.7224 | 0.10096238 | 0.14350484 | 3.25433345 | 0.67195533 | 0.01544012 | 1560.2688 | 0.02031201 | 0.00157591 | 0.00145133 | 0.03555204 |
| SAN DIEGO | 2018 | MH | Aggregated | 40 | DSL | 3840.1348 | 0.07345122 | 0.08361933 | 0.37606777 | 4.8161446 | 0.00928763 | 982.444067 | 0.00341167 | 0.10876118 | 0.10405622 | 0.15442653 |
| SAN DIEGO | 2018 | MH | Aggregated | 45 | GAS | 11286.725 | 0.09495296 | 0.13492722 | 3.20021428 | 0.66388739 | 0.01549345 | 1565.65772 | 0.01902879 | 0.00146095 | 0.00134553 | 0.03491894 |
| SAN DIEGO | 2018 | MH | Aggregated | 45 | DSL | 3144.56121 | 0.06485272 | 0.07383051 | 0.33963144 | 4.6478151 | 0.00895835 | 947.613448 | 0.00301228 | 0.11253099 | 0.10766295 | 0.14895164 |
| SAN DIEGO | 2018 | MH | Aggregated | 50 | GAS | 10984.303 | 0.09347346 | 0.13272777 | 3.25363579 | 0.67067403 | 0.01594779 | 1611.56981 | 0.01866068 | 0.00142584 | 0.00131325 | 0.03510898 |
| SAN DIEGO | 2018 | MH | Aggregated | 50 | DSL | 3519.27537 | 0.06058965 | 0.06897729 | 0.31730284 | 4.55751864 | 0.00874349 | 924.884921 | 0.00281427 | 0.12195562 | 0.11667988 | 0.14537903 |
| SAN DIEGO | 2018 | MH | Aggregated | 55 | GAS | 14366.4679 | 0.0963 | | | | | | | | | |

| Region | Calendar Year | Vehicle Categ | Model Year | Speed | Fuel | VMT | ROG_RUNEX | TOG_RUNEX | CO_RUNEX | NOx_RUNEX | SOx_RUNEX | CO2_RUNEX | CH4_RUNEX | PM10_RUNEX | PM2_5_RUNEX | N2O_RUNEX |
|-----------|---------------|---------------|------------|-------|------|------------|------------|------------|------------|------------|------------|------------|------------|------------|-------------|------------|
| SAN DIEGO | 2018 | MH | Aggregated | 55 | DSL | 5157.17914 | 0.06051158 | 0.06888841 | 0.30865724 | 4.52835627 | 0.00864303 | 914.258485 | 0.00281065 | 0.13701747 | 0.13109015 | 0.1437087 |
| SAN DIEGO | 2018 | MH | Aggregated | 60 | GAS | 16578.2484 | 0.10452604 | 0.14817992 | 3.81363116 | 0.70819558 | 0.01728143 | 1746.33817 | 0.02074497 | 0.00158359 | 0.00145862 | 0.03688203 |
| SAN DIEGO | 2018 | MH | Aggregated | 60 | DSL | 6197.21498 | 0.06493188 | 0.07392063 | 0.31457941 | 4.57024396 | 0.00865698 | 915.734139 | 0.00301596 | 0.1578211 | 0.15099383 | 0.14394065 |
| SAN DIEGO | 2018 | MH | Aggregated | 65 | GAS | 2590.56117 | 0.12009106 | 0.17038555 | 4.48916966 | 0.72295732 | 0.01781881 | 1800.64194 | 0.0238357 | 0.00180165 | 0.0016595 | 0.03766154 |
| SAN DIEGO | 2018 | MH | Aggregated | 65 | DSL | 975.265437 | 0.07367552 | 0.08387468 | 0.33457516 | 4.66985109 | 0.00878534 | 929.311886 | 0.00342209 | 0.18433531 | 0.17636105 | 0.14607489 |
| SAN DIEGO | 2018 | Motor Coach | Aggregated | 5 | DSL | 185.672993 | 3.65156737 | 4.15703149 | 6.20710777 | 19.3076243 | 0.03584739 | 3794.37673 | 0.16960585 | 0.51684583 | 0.49448731 | 0.59642318 |
| SAN DIEGO | 2018 | Motor Coach | Aggregated | 10 | DSL | 422.179833 | 2.76701138 | 3.15003183 | 4.92727426 | 15.5566378 | 0.03054053 | 3232.65562 | 0.12852051 | 0.42740849 | 0.40891899 | 0.50812845 |
| SAN DIEGO | 2018 | Motor Coach | Aggregated | 15 | DSL | 394.808938 | 1.4561577 | 1.6577247 | 3.32009304 | 11.0413104 | 0.02450675 | 2593.99198 | 0.06763475 | 0.28477218 | 0.27245306 | 0.40773942 |
| SAN DIEGO | 2018 | Motor Coach | Aggregated | 20 | DSL | 576.819786 | 0.70813137 | 0.80615366 | 2.31454427 | 8.68513761 | 0.02082821 | 2204.62529 | 0.03289087 | 0.18729161 | 0.17918945 | 0.34653639 |
| SAN DIEGO | 2018 | Motor Coach | Aggregated | 25 | DSL | 507.339583 | 0.50888222 | 0.57932367 | 1.83723864 | 7.62097764 | 0.01839518 | 1947.09429 | 0.02363626 | 0.14878049 | 0.14234431 | 0.30605611 |
| SAN DIEGO | 2018 | Motor Coach | Aggregated | 30 | DSL | 280.412134 | 0.40161274 | 0.45720553 | 1.52692041 | 6.82853465 | 0.01654748 | 1751.51874 | 0.01865387 | 0.12789529 | 0.1223626 | 0.27531435 |
| SAN DIEGO | 2018 | Motor Coach | Aggregated | 35 | DSL | 374.885235 | 0.31970278 | 0.36395728 | 1.2783566 | 6.20792116 | 0.01511246 | 1599.62478 | 0.01484937 | 0.11469232 | 0.10973078 | 0.25143874 |
| SAN DIEGO | 2018 | Motor Coach | Aggregated | 40 | DSL | 347.010752 | 0.26155795 | 0.29776381 | 1.08735293 | 5.75720493 | 0.01407477 | 1489.78728 | 0.01214869 | 0.10917861 | 0.10445559 | 0.23417381 |
| SAN DIEGO | 2018 | Motor Coach | Aggregated | 45 | DSL | 462.266039 | 0.22573286 | 0.25697968 | 0.95118931 | 5.47797615 | 0.01342541 | 1421.05335 | 0.01048471 | 0.11144718 | 0.10662603 | 0.2233698 |
| SAN DIEGO | 2018 | Motor Coach | Aggregated | 50 | DSL | 680.403208 | 0.21082259 | 0.24000548 | 0.86832378 | 5.36952017 | 0.01315875 | 1392.82869 | 0.00979216 | 0.12167051 | 0.1164071 | 0.21893327 |
| SAN DIEGO | 2018 | Motor Coach | Aggregated | 55 | DSL | 1633.45017 | 0.21538277 | 0.24519689 | 0.83817442 | 5.42558575 | 0.01327119 | 1404.73014 | 0.01000397 | 0.1400972 | 0.13403666 | 0.22080402 |
| SAN DIEGO | 2018 | Motor Coach | Aggregated | 60 | DSL | 5960.53321 | 0.22714867 | 0.25859147 | 0.84359867 | 5.60224763 | 0.0137758 | 1458.14181 | 0.01055047 | 0.15344558 | 0.14680759 | 0.22919959 |
| SAN DIEGO | 2018 | Motor Coach | Aggregated | 65 | DSL | 10920.5459 | 0.22982704 | 0.26164059 | 0.85911949 | 5.88076728 | 0.01464029 | 1549.64661 | 0.01067487 | 0.1567858 | 0.15000332 | 0.24358287 |
| SAN DIEGO | 2018 | Motor Coach | Aggregated | 70 | DSL | 134.207797 | 0.23144783 | 0.26348574 | 0.87438156 | 5.86858909 | 0.01464029 | 1549.64661 | 0.01075015 | 0.1567858 | 0.15000332 | 0.24358287 |
| SAN DIEGO | 2018 | Motor Coach | Aggregated | 75 | DSL | 0.04252295 | 0.23346809 | 0.26578565 | 0.89529035 | 5.87061177 | 0.01464029 | 1549.64661 | 0.01084399 | 0.1567858 | 0.15000332 | 0.24358287 |
| SAN DIEGO | 2018 | Motor Coach | Aggregated | 80 | DSL | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SAN DIEGO | 2018 | Motor Coach | Aggregated | 85 | DSL | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SAN DIEGO | 2018 | Motor Coach | Aggregated | 90 | DSL | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SAN DIEGO | 2018 | OBUS | Aggregated | 5 | GAS | 622.698458 | 0.75181915 | 1.09078646 | 6.41656347 | 1.5644573 | 0.0410149 | 4144.67323 | 0.15273482 | 0.00591947 | 0.00544642 | 0.07019148 |
| SAN DIEGO | 2018 | OBUS | Aggregated | 10 | GAS | 3130.31063 | 0.47886213 | 0.69439226 | 5.54143174 | 1.36810508 | 0.03329472 | 3364.52664 | 0.09700227 | 0.00375598 | 0.00345605 | 0.06126108 |
| SAN DIEGO | 2018 | OBUS | Aggregated | 15 | GAS | 3954.11906 | 0.32253223 | 0.46749132 | 4.89341609 | 1.2099647 | 0.02723066 | 2751.73628 | 0.06515517 | 0.00251431 | 0.00231368 | 0.05406529 |
| SAN DIEGO | 2018 | OBUS | Aggregated | 20 | GAS | 4101.39254 | 0.22850315 | 0.33102815 | 4.37653956 | 1.09412695 | 0.02263786 | 2287.62019 | 0.04603079 | 0.00177545 | 0.00163389 | 0.04878027 |
| SAN DIEGO | 2018 | OBUS | Aggregated | 25 | GAS | 4569.89957 | 0.17069418 | 0.24715562 | 3.96023156 | 1.00553529 | 0.01935177 | 1955.55147 | 0.03429264 | 0.00132232 | 0.00121696 | 0.04472871 |
| SAN DIEGO | 2018 | OBUS | Aggregated | 30 | GAS | 5166.92242 | 0.13459268 | 0.19479692 | 3.62306206 | 0.93804415 | 0.01717228 | 1735.30805 | 0.02697227 | 0.00103857 | 0.00095587 | 0.04163338 |
| SAN DIEGO | 2018 | OBUS | Aggregated | 35 | GAS | 6421.70067 | 0.11158645 | 0.16141718 | 3.33689148 | 0.892546 | 0.01591753 | 1608.51212 | 0.02230715 | 0.00086009 | 0.00079165 | 0.03952951 |
| SAN DIEGO | 2018 | OBUS | Aggregated | 40 | GAS | 7994.35538 | 0.09748479 | 0.1409491 | 3.10056796 | 0.86303589 | 0.01540627 | 1556.84771 | 0.01944436 | 0.00075095 | 0.00069123 | 0.03814833 |
| SAN DIEGO | 2018 | OBUS | Aggregated | 45 | GAS | 7290.3058 | 0.09007937 | 0.13020827 | 2.91912246 | 0.84016867 | 0.01545743 | 1562.01722 | 0.01793617 | 0.00069115 | 0.00063621 | 0.03707653 |
| SAN DIEGO | 2018 | OBUS | Aggregated | 50 | GAS | 7094.96582 | 0.08737478 | 0.12624794 | 2.77106227 | 0.83858744 | 0.01590763 | 1607.51129 | 0.01736784 | 0.00067047 | 0.00061719 | 0.03695758 |
| SAN DIEGO | 2018 | OBUS | Aggregated | 55 | GAS | 9279.56906 | 0.08902498 | 0.12856837 | 2.66272844 | 0.85289779 | 0.0165578 | 1673.2127 | 0.01766761 | 0.00068547 | 0.00063102 | 0.03755248 |
| SAN DIEGO | 2018 | OBUS | Aggregated | 60 | GAS | 10708.1993 | 0.09578737 | 0.13829346 | 2.61507093 | 0.87378428 | 0.01722724 | 1740.86179 | 0.01898941 | 0.00073853 | 0.00067988 | 0.03845316 |
| SAN DIEGO | 2018 | OBUS | Aggregated | 65 | GAS | 1673.29169 | 0.10953596 | 0.1581828 | 2.65722461 | 0.89274665 | 0.01775354 | 1794.04634 | 0.02171361 | 0.00083848 | 0.00077191 | 0.03928906 |
| SAN DIEGO | 2018 | PTO | Aggregated | 20 | DSL | 26322.2839 | 0.87391094 | 0.99488108 | 2.81899136 | 11.2834238 | 0.02060533 | 2181.03455 | 0.0405909 | 0.29939213 | 0.28644056 | 0.34282826 |
| SAN DIEGO | 2018 | SBUS | Aggregated | 5 | GAS | 82.9378108 | 1.51285721 | 2.2075577 | 10.6385881 | 3.18776797 | 0.01919504 | 1939.71348 | 0.30048182 | 0.01726015 | 0.01587007 | 0.13485132 |
| SAN DIEGO | 2018 | SBUS | Aggregated | 5 | DSL | 1003.31556 | 0.95798422 | 1.09059211 | 1.30105433 | 23.5096699 | 0.02316712 | 2452.1944 | 0.04449589 | 0.22086844 | 0.21131377 | 0.38545081 |
| SAN DIEGO | 2018 | SBUS | Aggregated | 10 | GAS | 290.692776 | 0.95316855 | 1.39086131 | 9.7011663 | 2.76173873 | 0.01558713 | 1575.12371 | 0.18931715 | 0.01086004 | 0.00998541 | 0.11682912 |
| SAN DIEGO | 2018 | SBUS | Aggregated | 10 | DSL | 2469.9009 | 0.72625943 | 0.82679108 | 1.06817102 | 19.0552026 | 0.02056458 | 2176.7205 | 0.03373287 | 0.18048233 | 0.17267474 | 0.34215015 |
| SAN DIEGO | 2018 | SBUS | Aggregated | 15 | GAS | 581.385552 | 0.63269054 | 0.92322056 | 8.85878984 | 2.4384662 | 0.01275517 | 1288.9463 | 0.12566421 | 0.00720864 | 0.00662808 | 0.1031538 |
| SAN DIEGO | 2018 | SBUS | Aggregated | 15 | DSL | 3172.50904 | 0.38147981 | 0.43428573 | 0.75216813 | 12.9187102 | 0.01677319 | 1775.41002 | 0.01771875 | 0.11568526 | 0.11068077 | 0.27906973 |
| SAN DIEGO | 2018 | SBUS | Aggregated | 20 | GAS | 789.136329 | 0.44310849 | 0.64658288 | 8.11255745 | 2.18705418 | 0.01061058 | 1072.22909 | 0.08800966 | 0.0050479 | 0.00464135 | 0.09251839 |
| SAN DIEGO | 2018 | SBUS | Aggregated | 20 | DSL | 4187.31516 | 0.18184044 | 0.2070115 | 0.53766615 | 9.91739162 | 0.01395961 | 1477.59721 | 0.00844602 | 0.07163528 | 0.06853637 | 0.23225771 |
| SAN DIEGO | 2018 | SBUS | Aggregated | 25 | GAS | 1245.70473 | 0.32726657 | 0.4775466 | 7.44656477 | 1.99486703 | 0.00907507 | 917.062236 | 0.06500128 | 0.00372909 | 0.00342876 | 0.08438834 |
| SAN DIEGO | 2018 | SBUS | Aggregated | 25 | DSL | 5385.2541 | 0.12852889 | 0.14632036 | 0.42562691 | 9.30644751 | 0.01246217 | 1319.09635 | 0.00596983 | 0.05444012 | 0.05208506 | 0.20734358 |
| SAN DIEGO | 2018 | SBUS | Aggregated | 30 | GAS | 1494.51816 | 0.25499749 | 0.37209174 | 6.85386928 | 1.84880525 | 0.00805488 | 813.969141 | 0.05064728 | 0.00290621 | 0.00267216 | 0.07820953 |
| SAN DIEGO | 2018 | SBUS | Aggregated | 30 | DSL | 6282.05756 | 0.10055749 | 0.11447705 | 0.35004126 | 8.99108978 | 0.01153253 | 1220.69603 | 0.00467064 | 0.04465945 | 0.0427275 | 0.19187642 |
| SAN DIEGO | 2018 | SBUS | Aggregated | 35 | GAS | 1533.93487 | 0.20937786 | 0.30552368 | 6.31875877 | 1.74527331 | 0.00746505 | 754.365085 | 0.04158637 | 0.0023894 | 0.00219696 | 0.07382985 |
| SAN DIEGO | 2018 | SBUS | Aggregated | 35 | DSL | 5353.63572 | 0.07945886 | 0.09045786 | 0.28854886 | 8.76470475 | 0.01078652 | 1141.7322 | 0.00369066 | 0.03778338 | 0.03614889 | 0.1794644 |
| SAN DIEGO | 2018 | SBUS | Aggregated | 40 | GAS | 1035.48713 | 0.18144469 | 0.26476367 | 5.84355872 | 1.67254257 | 0.00722125 | 729.728271 | 0.03603832 | 0.00207245 | 0.00190554 | 0.07075314 |
| SAN DIEGO | 2018 | SBUS | Aggregated | 40 | DSL | 3924.03892 | 0.06490705 | 0.07389173 | 0.24035108 | 8.62378394 | 0.01021725 | 1081.47561 | 0.00301476 | 0.03381111 | 0.03234845 | 0.16999291 |
| SAN DIEGO | 2018 | SBUS | Aggregated | 45 | GAS | 496.801801 | 0.16595188 | 0.24215659 | 5.42099038 | 1.62713106 | 0.00723916 | 731.537708 | 0.03296116 | 0.00189633 | 0.00174361 | 0.0688321 |
| SAN DIEGO | 2018 | SBUS | Aggregated | 45 | DSL | 3300.47616 | 0.05663035 | 0.06446934 | 0.20489824 | 8.5662735 | 0.00982067 | 1039.49852 | 0.00263033 | 0.03275636 | 0.03133933 | 0.16339469 |
| SAN DIEGO | 2018 | SBUS | Aggregated | 50 | GAS | 248.813432 | 0.16044739 | 0.23412445 | 5.05238979 | 1.60137883 | 0.0074431 | 752.14679 | 0.03186786 | 0.00183054 | 0.00168311 | 0.06774271 |
| SAN DIEGO | 2018 | SBUS | Aggregated | 50 | DSL | 5633.59277 | 0.05438893 | 0.06191766 | 0.1818338 | 8.59724568 | 0.00959431 | 1015.53901 | 0.00252622 | 0.03464602 | 0.03314725 | 0.15962859 |
| SAN DIEGO | 2018 | SBUS | Aggregated | 55 | GAS | 370.342894 | 0.16218321 | 0.23665736 | 4.68082222 | 1.63313833 | 0.00773969 | 782.117907 | 0.03221263 | 0.00186414 | 0.00171401 | 0.06908623 |

| Region | Calendar Year | Vehicle Categ | Model Year | Speed | Fuel | VMT | ROG_RUNEX | TOG_RUNEX | CO_RUNEX | NOx_RUNEX | SOx_RUNEX | CO2_RUNEX | CH4_RUNEX | PM10_RUNEX | PM2_5_RUNEX | N2O_RUNEX |
|-----------|---------------|---------------|------------|-------|------|------------|------------|------------|------------|------------|------------|------------|------------|------------|-------------|------------|
| SAN DIEGO | 2018 | SBUS | Aggregated | 55 | DSL | 14271.8067 | 0.05795837 | 0.06598119 | 0.17095315 | 8.71014262 | 0.00953666 | 1009.43709 | 0.00269202 | 0.03951946 | 0.03780986 | 0.15866945 |
| SAN DIEGO | 2018 | SBUS | Aggregated | 60 | GAS | 206.113213 | 0.17453566 | 0.25468203 | 4.38673975 | 1.65917814 | 0.00804635 | 813.106308 | 0.03466606 | 0.00200269 | 0.0018414 | 0.07018778 |
| SAN DIEGO | 2018 | SBUS | Aggregated | 60 | DSL | 14081.1713 | 0.0622727 | 0.07089273 | 0.17028115 | 8.8124922 | 0.00963372 | 1019.71087 | 0.00289241 | 0.04329045 | 0.04141773 | 0.16028435 |
| SAN DIEGO | 2018 | SBUS | Aggregated | 65 | DSL | 5288.13039 | 0.06287455 | 0.07157789 | 0.17247025 | 8.89039825 | 0.00982203 | 1039.64246 | 0.00292036 | 0.04392765 | 0.04202736 | 0.16341732 |
| SAN DIEGO | 2018 | SBUS | Aggregated | 70 | DSL | 461.565298 | 0.06307461 | 0.07180564 | 0.17414954 | 8.90251574 | 0.00982203 | 1039.64246 | 0.00292965 | 0.04392765 | 0.04202736 | 0.16341732 |
| SAN DIEGO | 2018 | SBUS | Aggregated | 75 | DSL | 25.8610199 | 0.06332397 | 0.07208952 | 0.17645015 | 8.91135989 | 0.00982203 | 1039.64246 | 0.00294123 | 0.04392765 | 0.04202736 | 0.16341732 |
| SAN DIEGO | 2018 | SBUS | Aggregated | 80 | DSL | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SAN DIEGO | 2018 | SBUS | Aggregated | 85 | DSL | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SAN DIEGO | 2018 | SBUS | Aggregated | 90 | DSL | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SAN DIEGO | 2018 | T6 Ag | Aggregated | 5 | DSL | 2.34067177 | 8.50559032 | 9.68296712 | 9.66233875 | 25.7231683 | 0.02341359 | 2478.2834 | 0.39506264 | 1.86984138 | 1.78895287 | 0.38955164 |
| SAN DIEGO | 2018 | T6 Ag | Aggregated | 10 | DSL | 7.16608649 | 6.56215642 | 7.47051556 | 8.34494975 | 21.4038195 | 0.02088559 | 2210.69956 | 0.30479517 | 1.57160913 | 1.50362201 | 0.34749119 |
| SAN DIEGO | 2018 | T6 Ag | Aggregated | 15 | DSL | 6.85524366 | 3.54264368 | 4.03303016 | 6.21234472 | 15.1939713 | 0.01702195 | 1801.74024 | 0.16454662 | 1.08609302 | 1.03910912 | 0.28320848 |
| SAN DIEGO | 2018 | T6 Ag | Aggregated | 20 | DSL | 5.27683019 | 1.67936503 | 1.91182925 | 4.67311143 | 11.9534147 | 0.01407185 | 1489.47854 | 0.07800216 | 0.74761726 | 0.71527567 | 0.23412528 |
| SAN DIEGO | 2018 | T6 Ag | Aggregated | 25 | DSL | 5.38465787 | 1.20132616 | 1.36761839 | 3.86029756 | 11.0531301 | 0.01256108 | 1329.56574 | 0.05579849 | 0.61024118 | 0.58384241 | 0.20898922 |
| SAN DIEGO | 2018 | T6 Ag | Aggregated | 30 | DSL | 6.62238244 | 0.99563851 | 1.13345865 | 3.29016986 | 10.5190189 | 0.01165742 | 1233.9148 | 0.04624483 | 0.52981568 | 0.50689609 | 0.19395422 |
| SAN DIEGO | 2018 | T6 Ag | Aggregated | 35 | DSL | 8.76318391 | 0.83429115 | 0.94977696 | 2.8129682 | 10.1132537 | 0.01092478 | 1156.36675 | 0.03875066 | 0.47098903 | 0.45061426 | 0.18176475 |
| SAN DIEGO | 2018 | T6 Ag | Aggregated | 40 | DSL | 10.0675228 | 0.71718779 | 0.81646371 | 2.42850094 | 9.83421345 | 0.01036254 | 1096.85476 | 0.03331152 | 0.43376695 | 0.41500239 | 0.17241029 |
| SAN DIEGO | 2018 | T6 Ag | Aggregated | 45 | DSL | 12.4043789 | 0.64419554 | 0.73336758 | 2.13670328 | 9.6839058 | 0.00997033 | 1055.33961 | 0.02992121 | 0.41818031 | 0.40009001 | 0.16588469 |
| SAN DIEGO | 2018 | T6 Ag | Aggregated | 50 | DSL | 16.4352533 | 0.6151386 | 0.70028847 | 1.93762282 | 9.66342164 | 0.00974792 | 1031.79852 | 0.02857159 | 0.42428369 | 0.40592936 | 0.16218436 |
| SAN DIEGO | 2018 | T6 Ag | Aggregated | 55 | DSL | 44.8536867 | 0.62979372 | 0.71697221 | 1.83140889 | 9.76920219 | 0.00969522 | 1026.21988 | 0.02925229 | 0.4521547 | 0.43259469 | 0.16130747 |
| SAN DIEGO | 2018 | T6 Ag | Aggregated | 60 | DSL | 209.797949 | 0.65391062 | 0.74442747 | 1.81298128 | 9.89664494 | 0.00979089 | 1036.34643 | 0.03037245 | 0.47438392 | 0.45386228 | 0.16289923 |
| SAN DIEGO | 2018 | T6 Ag | Aggregated | 65 | DSL | 151.438309 | 0.65418293 | 0.74473747 | 1.81489234 | 9.95369514 | 0.00995623 | 1053.84761 | 0.0303851 | 0.47497927 | 0.45443187 | 0.16565017 |
| SAN DIEGO | 2018 | T6 Ag | Aggregated | 70 | DSL | 0.70555653 | 0.6541834 | 0.744738 | 1.81489628 | 9.95001521 | 0.00995623 | 1053.84761 | 0.03038512 | 0.47497927 | 0.45443187 | 0.16565017 |
| SAN DIEGO | 2018 | T6 Ag | Aggregated | 75 | DSL | 0.00597645 | 0.65418398 | 0.74473867 | 1.81490168 | 9.99030307 | 0.00995623 | 1053.84761 | 0.03038515 | 0.47497927 | 0.45443187 | 0.16565017 |
| SAN DIEGO | 2018 | T6 Ag | Aggregated | 80 | DSL | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SAN DIEGO | 2018 | T6 Ag | Aggregated | 85 | DSL | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SAN DIEGO | 2018 | T6 Ag | Aggregated | 90 | DSL | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SAN DIEGO | 2018 | T6 CAIRP heav | Aggregated | 5 | DSL | 128.019306 | 0.67473 | 0.76812874 | 1.52615428 | 7.3724293 | 0.02286346 | 2420.05337 | 0.03133946 | 0.09137431 | 0.0874215 | 0.38039869 |
| SAN DIEGO | 2018 | T6 CAIRP heav | Aggregated | 10 | DSL | 290.718736 | 0.50710793 | 0.57730377 | 1.11863368 | 5.89189327 | 0.01916855 | 2028.95422 | 0.02355385 | 0.07861266 | 0.07521191 | 0.31892335 |
| SAN DIEGO | 2018 | T6 CAIRP heav | Aggregated | 15 | DSL | 283.715647 | 0.27052509 | 0.30797223 | 0.68779172 | 4.27677556 | 0.01522761 | 1611.813 | 0.01256519 | 0.05795012 | 0.05544322 | 0.25335456 |
| SAN DIEGO | 2018 | T6 CAIRP heav | Aggregated | 20 | DSL | 366.852359 | 0.13871619 | 0.15791782 | 0.45922614 | 3.41292798 | 0.01298176 | 1374.09425 | 0.00644301 | 0.04339082 | 0.04151375 | 0.21598848 |
| SAN DIEGO | 2018 | T6 CAIRP heav | Aggregated | 25 | DSL | 315.372948 | 0.10358582 | 0.11792458 | 0.36628728 | 2.84894557 | 0.01139488 | 1206.12615 | 0.00481129 | 0.03730925 | 0.03569526 | 0.18958623 |
| SAN DIEGO | 2018 | T6 CAIRP heav | Aggregated | 30 | DSL | 200.152303 | 0.08463864 | 0.09635465 | 0.30791267 | 2.38435359 | 0.01007015 | 1065.90616 | 0.00393125 | 0.03443205 | 0.03294253 | 0.16754561 |
| SAN DIEGO | 2018 | T6 CAIRP heav | Aggregated | 35 | DSL | 287.778455 | 0.06976357 | 0.07942051 | 0.26221283 | 2.01647417 | 0.00904568 | 957.467946 | 0.00324034 | 0.03331663 | 0.03187537 | 0.15050063 |
| SAN DIEGO | 2018 | T6 CAIRP heav | Aggregated | 40 | DSL | 281.444882 | 0.05861027 | 0.06672333 | 0.22833395 | 1.74570793 | 0.00831219 | 879.829109 | 0.0027223 | 0.03395186 | 0.03248312 | 0.13829688 |
| SAN DIEGO | 2018 | T6 CAIRP heav | Aggregated | 45 | DSL | 359.547085 | 0.05091315 | 0.05796074 | 0.20565601 | 1.57060729 | 0.0078624 | 832.219279 | 0.00236478 | 0.03633394 | 0.03476215 | 0.13081328 |
| SAN DIEGO | 2018 | T6 CAIRP heav | Aggregated | 50 | DSL | 480.763271 | 0.04646715 | 0.05289932 | 0.19373351 | 1.49147048 | 0.00769007 | 813.979139 | 0.00215828 | 0.04046424 | 0.03871378 | 0.12794619 |
| SAN DIEGO | 2018 | T6 CAIRP heav | Aggregated | 55 | DSL | 1130.30459 | 0.04510995 | 0.05135425 | 0.19225186 | 1.50756958 | 0.00783225 | 829.028379 | 0.00209524 | 0.04634828 | 0.04434327 | 0.13031172 |
| SAN DIEGO | 2018 | T6 CAIRP heav | Aggregated | 60 | DSL | 3928.52086 | 0.0460679 | 0.0524448 | 0.19744079 | 1.61401251 | 0.00825316 | 873.581458 | 0.00213973 | 0.05080909 | 0.04861111 | 0.13731484 |
| SAN DIEGO | 2018 | T6 CAIRP heav | Aggregated | 65 | DSL | 7577.81205 | 0.04732749 | 0.05387874 | 0.20521581 | 1.80168334 | 0.00894204 | 946.497642 | 0.00219824 | 0.0527552 | 0.05047303 | 0.14877625 |
| SAN DIEGO | 2018 | T6 CAIRP heav | Aggregated | 70 | DSL | 90.7634875 | 0.0483577 | 0.05505156 | 0.21386346 | 1.79797105 | 0.00894204 | 946.497642 | 0.00224609 | 0.0527552 | 0.05047303 | 0.14877625 |
| SAN DIEGO | 2018 | T6 CAIRP heav | Aggregated | 75 | DSL | 0.03397242 | 0.04964182 | 0.05651343 | 0.2257106 | 1.79803934 | 0.00894204 | 946.497642 | 0.00230573 | 0.0527552 | 0.05047303 | 0.14877625 |
| SAN DIEGO | 2018 | T6 CAIRP heav | Aggregated | 80 | DSL | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SAN DIEGO | 2018 | T6 CAIRP heav | Aggregated | 85 | DSL | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SAN DIEGO | 2018 | T6 CAIRP heav | Aggregated | 90 | DSL | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SAN DIEGO | 2018 | T6 CAIRP sma | Aggregated | 5 | DSL | 17.973408 | 1.24896763 | 1.42185457 | 2.32306196 | 8.50316888 | 0.02315674 | 2451.09589 | 0.05801131 | 0.15871448 | 0.15184856 | 0.38527814 |
| SAN DIEGO | 2018 | T6 CAIRP sma | Aggregated | 10 | DSL | 40.8157692 | 0.93987316 | 1.06997405 | 1.76450394 | 6.89789342 | 0.01955513 | 2069.87211 | 0.04365467 | 0.13761596 | 0.13166275 | 0.32535507 |
| SAN DIEGO | 2018 | T6 CAIRP sma | Aggregated | 15 | DSL | 39.8325631 | 0.4933241 | 0.56161193 | 1.08995529 | 5.03315075 | 0.01560155 | 1651.3943 | 0.02291363 | 0.10326245 | 0.09879537 | 0.25957619 |
| SAN DIEGO | 2018 | T6 CAIRP sma | Aggregated | 20 | DSL | 51.504631 | 0.24658133 | 0.28071408 | 0.71297371 | 4.0049268 | 0.01327756 | 1405.40419 | 0.01145306 | 0.07875878 | 0.07535171 | 0.22090997 |
| SAN DIEGO | 2018 | T6 CAIRP sma | Aggregated | 25 | DSL | 44.2771239 | 0.1852126 | 0.21085044 | 0.57623301 | 3.39825039 | 0.01168542 | 1236.87872 | 0.00860265 | 0.06837731 | 0.06541934 | 0.19442011 |
| SAN DIEGO | 2018 | T6 CAIRP sma | Aggregated | 30 | DSL | 28.1005976 | 0.15274222 | 0.17388539 | 0.49847114 | 2.91912073 | 0.01043937 | 1104.98681 | 0.00709448 | 0.06359658 | 0.06084542 | 0.17368854 |
| SAN DIEGO | 2018 | T6 CAIRP sma | Aggregated | 35 | DSL | 40.4029654 | 0.12691954 | 0.14448823 | 0.43872133 | 2.53849504 | 0.00947427 | 1002.83279 | 0.00589508 | 0.06197139 | 0.05929053 | 0.15763135 |
| SAN DIEGO | 2018 | T6 CAIRP sma | Aggregated | 40 | DSL | 39.5137566 | 0.10723639 | 0.12208047 | 0.39575097 | 2.25668642 | 0.00878379 | 929.746676 | 0.00498085 | 0.06348206 | 0.06073585 | 0.14614323 |
| SAN DIEGO | 2018 | T6 CAIRP sma | Aggregated | 45 | DSL | 50.4789993 | 0.09330894 | 0.10622512 | 0.36866326 | 2.0718434 | 0.00836421 | 885.335679 | 0.00433396 | 0.0681203 | 0.06517344 | 0.13916244 |
| SAN DIEGO | 2018 | T6 CAIRP sma | Aggregated | 50 | DSL | 67.4972759 | 0.08484252 | 0.09658675 | 0.35681176 | 1.98439855 | 0.00821321 | 869.351976 | 0.00394072 | 0.07588554 | 0.07260277 | 0.13665002 |
| SAN DIEGO | 2018 | T6 CAIRP sma | Aggregated | 55 | DSL | 158.690327 | 0.08160583 | 0.09290203 | 0.35973738 | 1.99340077 | 0.00832921 | 881.630524 | 0.00379038 | 0.0867831 | 0.0830289 | 0.13858004 |
| SAN DIEGO | 2018 | T6 CAIRP sma | Aggregated | 60 | DSL | 551.548906 | 0.08240835 | 0.09381564 | 0.36851553 | 2.09163836 | 0.00872107 | 923.108476 | 0.00382765 | 0.09420761 | 0.09013223 | 0.1450998 |
| SAN DIEGO | 2018 | T6 CAIRP sma | Aggregated | 65 | DSL | 1063.89506 | 0.08363337 | 0.09521023 | 0.37563465 | 2.26385792 | 0.00937103 | 991.905042 | 0.00388455 | 0.09603112 | 0.09187686 | 0.15591366 |

| Region | Calendar Year | Vehicle Categ | Model Year | Speed | Fuel | VMT | ROG_RUNEX | TOG_RUNEX | CO_RUNEX | NOx_RUNEX | Sox_RUNEX | CO2_RUNEX | CH4_RUNEX | PM10_RUNEX | PM2_5_RUNEX | N2O_RUNEX |
|-----------|---------------|----------------|------------|-------|------|------------|------------|------------|------------|------------|------------|------------|------------|------------|-------------|------------|
| SAN DIEGO | 2018 | T6 instate hea | Aggregated | 90 | DSL | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SAN DIEGO | 2018 | T6 instate sma | Aggregated | 5 | DSL | 7501.75409 | 2.74274914 | 3.12241112 | 4.1287639 | 12.3792669 | 0.02314396 | 2449.74383 | 0.12739359 | 0.41456955 | 0.39663545 | 0.38506561 |
| SAN DIEGO | 2018 | T6 instate sma | Aggregated | 10 | DSL | 17018.0224 | 2.06794378 | 2.35419657 | 3.27839067 | 10.1809106 | 0.01986807 | 2102.99719 | 0.09605063 | 0.35138692 | 0.33618608 | 0.33056187 |
| SAN DIEGO | 2018 | T6 instate sma | Aggregated | 15 | DSL | 21737.1357 | 1.06783575 | 1.21564971 | 2.10460122 | 7.33122938 | 0.0159761 | 1691.03923 | 0.0495982 | 0.24890865 | 0.23814097 | 0.26580782 |
| SAN DIEGO | 2018 | T6 instate sma | Aggregated | 20 | DSL | 28672.6876 | 0.50993398 | 0.58052101 | 1.39466009 | 5.76256682 | 0.01350432 | 1429.40581 | 0.02368511 | 0.17722008 | 0.16955362 | 0.22468269 |
| SAN DIEGO | 2018 | T6 instate sma | Aggregated | 25 | DSL | 40065.3358 | 0.37720463 | 0.42941876 | 1.13361161 | 5.06291144 | 0.01194446 | 1264.29841 | 0.01752018 | 0.14802647 | 0.14162291 | 0.1987301 |
| SAN DIEGO | 2018 | T6 instate sma | Aggregated | 30 | DSL | 51079.7522 | 0.30942116 | 0.35225244 | 0.98753994 | 4.56062924 | 0.0107995 | 1143.1057 | 0.01437181 | 0.13328263 | 0.12751688 | 0.1796803 |
| SAN DIEGO | 2018 | T6 instate sma | Aggregated | 35 | DSL | 42751.3605 | 0.25586314 | 0.29128071 | 0.87336663 | 4.16550717 | 0.00990419 | 1048.33965 | 0.01188418 | 0.12569665 | 0.12025907 | 0.16478439 |
| SAN DIEGO | 2018 | T6 instate sma | Aggregated | 40 | DSL | 25908.5385 | 0.21595077 | 0.24584352 | 0.78970606 | 3.87554894 | 0.00925157 | 979.261153 | 0.01003035 | 0.12525115 | 0.11983284 | 0.15392622 |
| SAN DIEGO | 2018 | T6 instate sma | Aggregated | 45 | DSL | 19146.1875 | 0.18921561 | 0.21540756 | 0.73558792 | 3.68905755 | 0.00883754 | 935.4369 | 0.00878857 | 0.1319527 | 0.12624448 | 0.14703765 |
| SAN DIEGO | 2018 | T6 instate sma | Aggregated | 50 | DSL | 39542.5917 | 0.17526069 | 0.19952096 | 0.71036055 | 3.60484029 | 0.00865953 | 916.594418 | 0.00814041 | 0.14582741 | 0.13951898 | 0.14407588 |
| SAN DIEGO | 2018 | T6 instate sma | Aggregated | 55 | DSL | 98813.6903 | 0.1737312 | 0.19777975 | 0.71361967 | 3.61993839 | 0.00871583 | 922.553929 | 0.00806936 | 0.16691867 | 0.15969784 | 0.14501263 |
| SAN DIEGO | 2018 | T6 instate sma | Aggregated | 60 | DSL | 67107.2549 | 0.17815486 | 0.20281575 | 0.72692952 | 3.71048337 | 0.00901125 | 953.823396 | 0.00827483 | 0.18076314 | 0.1729434 | 0.14992776 |
| SAN DIEGO | 2018 | T6 instate sma | Aggregated | 65 | DSL | 26116.8563 | 0.17916798 | 0.20396911 | 0.73254178 | 3.84996144 | 0.00951211 | 1006.83828 | 0.00832189 | 0.1822749 | 0.17438977 | 0.15826096 |
| SAN DIEGO | 2018 | T6 instate sma | Aggregated | 70 | DSL | 2228.59515 | 0.17980152 | 0.20469035 | 0.73785978 | 3.85260553 | 0.00951211 | 1006.83828 | 0.00835132 | 0.1822749 | 0.17438977 | 0.15826096 |
| SAN DIEGO | 2018 | T6 instate sma | Aggregated | 75 | DSL | 66.4297961 | 0.18059121 | 0.20558935 | 0.74514535 | 3.86633218 | 0.00951211 | 1006.83828 | 0.00838799 | 0.1822749 | 0.17438977 | 0.15826096 |
| SAN DIEGO | 2018 | T6 instate sma | Aggregated | 80 | DSL | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SAN DIEGO | 2018 | T6 instate sma | Aggregated | 85 | DSL | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SAN DIEGO | 2018 | T6 instate sma | Aggregated | 90 | DSL | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SAN DIEGO | 2018 | T6 OOS heavy | Aggregated | 5 | DSL | 73.5347178 | 0.67145855 | 0.76440445 | 1.54310717 | 7.24654718 | 0.02288205 | 2422.02053 | 0.03118751 | 0.08474523 | 0.08107919 | 0.3807079 |
| SAN DIEGO | 2018 | T6 OOS heavy | Aggregated | 10 | DSL | 166.989815 | 0.50355137 | 0.57325491 | 1.12703707 | 5.78738602 | 0.0191745 | 2029.58413 | 0.02338866 | 0.07327752 | 0.07010756 | 0.31902236 |
| SAN DIEGO | 2018 | T6 OOS heavy | Aggregated | 15 | DSL | 162.967217 | 0.26735982 | 0.3043688 | 0.68570364 | 4.20534532 | 0.01522842 | 1611.89896 | 0.01241817 | 0.05471499 | 0.05234805 | 0.25336807 |
| SAN DIEGO | 2018 | T6 OOS heavy | Aggregated | 20 | DSL | 210.721223 | 0.13717093 | 0.15615866 | 0.45299178 | 3.35804923 | 0.01298496 | 1374.43242 | 0.00637123 | 0.04158018 | 0.03978144 | 0.21604164 |
| SAN DIEGO | 2018 | T6 OOS heavy | Aggregated | 25 | DSL | 181.151277 | 0.10287637 | 0.11711691 | 0.36123833 | 2.79505759 | 0.01139584 | 1206.22706 | 0.00477834 | 0.03605558 | 0.03449583 | 0.1896021 |
| SAN DIEGO | 2018 | T6 OOS heavy | Aggregated | 30 | DSL | 114.968153 | 0.08413459 | 0.09578083 | 0.3047237 | 2.32969026 | 0.01006706 | 1065.57834 | 0.00390783 | 0.03356742 | 0.03211531 | 0.16749408 |
| SAN DIEGO | 2018 | T6 OOS heavy | Aggregated | 35 | DSL | 165.300908 | 0.0693821 | 0.07898624 | 0.26075207 | 1.96129672 | 0.00903974 | 956.838696 | 0.00322262 | 0.03282426 | 0.03140429 | 0.15040172 |
| SAN DIEGO | 2018 | T6 OOS heavy | Aggregated | 40 | DSL | 161.662882 | 0.0582653 | 0.06633061 | 0.22846315 | 1.6902438 | 0.0083046 | 879.02584 | 0.00270627 | 0.03381485 | 0.03235203 | 0.13817062 |
| SAN DIEGO | 2018 | T6 OOS heavy | Aggregated | 45 | DSL | 206.525049 | 0.05051477 | 0.05750722 | 0.20723387 | 1.51509922 | 0.00785435 | 831.368116 | 0.00234628 | 0.03653594 | 0.03495541 | 0.13067949 |
| SAN DIEGO | 2018 | T6 OOS heavy | Aggregated | 50 | DSL | 276.152032 | 0.04592082 | 0.05227736 | 0.19661875 | 1.43612724 | 0.00768275 | 813.204199 | 0.0021329 | 0.04099005 | 0.03921684 | 0.12782438 |
| SAN DIEGO | 2018 | T6 OOS heavy | Aggregated | 55 | DSL | 649.25074 | 0.04431552 | 0.05044985 | 0.19630584 | 1.45261118 | 0.00782684 | 828.455929 | 0.00205834 | 0.04718432 | 0.04514315 | 0.13022174 |
| SAN DIEGO | 2018 | T6 OOS heavy | Aggregated | 60 | DSL | 2256.55553 | 0.04512167 | 0.05136758 | 0.20202841 | 1.56038349 | 0.00825089 | 873.340759 | 0.00209578 | 0.05180159 | 0.04956068 | 0.13727701 |
| SAN DIEGO | 2018 | T6 OOS heavy | Aggregated | 65 | DSL | 4352.7206 | 0.04638931 | 0.05281069 | 0.20986518 | 1.75073478 | 0.00894459 | 946.767027 | 0.00215466 | 0.05376877 | 0.05144275 | 0.14881859 |
| SAN DIEGO | 2018 | T6 OOS heavy | Aggregated | 70 | DSL | 52.134851 | 0.04741527 | 0.05397868 | 0.21847717 | 1.74712746 | 0.00894459 | 946.767027 | 0.00220232 | 0.05376877 | 0.05144275 | 0.14881859 |
| SAN DIEGO | 2018 | T6 OOS heavy | Aggregated | 75 | DSL | 0.01951387 | 0.0486941 | 0.05543452 | 0.23027546 | 1.74719382 | 0.00894459 | 946.767027 | 0.00226171 | 0.05376877 | 0.05144275 | 0.14881859 |
| SAN DIEGO | 2018 | T6 OOS heavy | Aggregated | 80 | DSL | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SAN DIEGO | 2018 | T6 OOS heavy | Aggregated | 85 | DSL | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SAN DIEGO | 2018 | T6 OOS heavy | Aggregated | 90 | DSL | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SAN DIEGO | 2018 | T6 OOS small | Aggregated | 5 | DSL | 10.3373505 | 1.25737767 | 1.43142876 | 2.33694067 | 8.51729227 | 0.02315995 | 2451.43598 | 0.05840194 | 0.15876633 | 0.15189817 | 0.3853316 |
| SAN DIEGO | 2018 | T6 OOS small | Aggregated | 10 | DSL | 23.4750645 | 0.94620407 | 1.07718131 | 1.77509131 | 6.9110551 | 0.01955919 | 2070.30229 | 0.04394873 | 0.13778493 | 0.13182441 | 0.32542269 |
| SAN DIEGO | 2018 | T6 OOS small | Aggregated | 15 | DSL | 22.9095765 | 0.49644827 | 0.56516856 | 1.09549862 | 5.04386463 | 0.01560484 | 1651.74244 | 0.02305874 | 0.10361495 | 0.09913262 | 0.25963091 |
| SAN DIEGO | 2018 | T6 OOS small | Aggregated | 20 | DSL | 29.6227306 | 0.24802481 | 0.28235736 | 0.71590104 | 4.0131188 | 0.01327929 | 1405.58674 | 0.01152011 | 0.07921475 | 0.07578795 | 0.22093866 |
| SAN DIEGO | 2018 | T6 OOS small | Aggregated | 25 | DSL | 25.465852 | 0.18640343 | 0.21220611 | 0.57898147 | 3.40459547 | 0.011687 | 1237.04617 | 0.00865796 | 0.06886467 | 0.06588561 | 0.19444643 |
| SAN DIEGO | 2018 | T6 OOS small | Aggregated | 30 | DSL | 16.1619725 | 0.1538383 | 0.1751332 | 0.50142602 | 2.92419687 | 0.0104413 | 1105.19166 | 0.00714539 | 0.06412275 | 0.06134883 | 0.17372074 |
| SAN DIEGO | 2018 | T6 OOS small | Aggregated | 35 | DSL | 23.2376417 | 0.12791488 | 0.14562136 | 0.44188387 | 2.54253683 | 0.00947643 | 1003.06161 | 0.00594131 | 0.06255355 | 0.05984751 | 0.15766732 |
| SAN DIEGO | 2018 | T6 OOS small | Aggregated | 40 | DSL | 22.726216 | 0.1081285 | 0.12309607 | 0.3991317 | 2.2599449 | 0.00878609 | 929.990592 | 0.00502229 | 0.06413786 | 0.06136328 | 0.14618157 |
| SAN DIEGO | 2018 | T6 OOS small | Aggregated | 45 | DSL | 29.0328417 | 0.09409638 | 0.10712156 | 0.3722814 | 2.07457615 | 0.0083666 | 885.588486 | 0.00437053 | 0.06886834 | 0.06588912 | 0.13920218 |
| SAN DIEGO | 2018 | T6 OOS small | Aggregated | 50 | DSL | 38.8208513 | 0.08552276 | 0.09736115 | 0.36069526 | 1.98687032 | 0.00821564 | 869.609205 | 0.00397231 | 0.07674583 | 0.07342584 | 0.13669046 |
| SAN DIEGO | 2018 | T6 OOS small | Aggregated | 55 | DSL | 91.2702552 | 0.08217325 | 0.09354799 | 0.36392338 | 1.99588082 | 0.00833165 | 881.888944 | 0.00381673 | 0.08777757 | 0.08398035 | 0.13862066 |
| SAN DIEGO | 2018 | T6 OOS small | Aggregated | 60 | DSL | 317.221662 | 0.08292399 | 0.09440265 | 0.37285001 | 2.09426156 | 0.00872331 | 923.345782 | 0.0038516 | 0.09527375 | 0.09115225 | 0.1451371 |
| SAN DIEGO | 2018 | T6 OOS small | Aggregated | 65 | DSL | 611.895983 | 0.08414645 | 0.09579433 | 0.37996366 | 2.2666335 | 0.0093728 | 992.092567 | 0.00390838 | 0.09709625 | 0.0928959 | 0.15594314 |
| SAN DIEGO | 2018 | T6 OOS small | Aggregated | 70 | DSL | 7.32900382 | 0.08505384 | 0.09682732 | 0.38758032 | 2.26196319 | 0.0093728 | 992.092567 | 0.00395053 | 0.09709625 | 0.0928959 | 0.15594314 |
| SAN DIEGO | 2018 | T6 OOS small | Aggregated | 75 | DSL | 0.00274322 | 0.08618486 | 0.0981149 | 0.39801503 | 2.2620491 | 0.0093728 | 992.092567 | 0.00400306 | 0.09709625 | 0.0928959 | 0.15594314 |
| SAN DIEGO | 2018 | T6 OOS small | Aggregated | 80 | DSL | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SAN DIEGO | 2018 | T6 OOS small | Aggregated | 85 | DSL | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SAN DIEGO | 2018 | T6 OOS small | Aggregated | 90 | DSL | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SAN DIEGO | 2018 | T6 Public | Aggregated | 5 | DSL | 1266.57968 | 0.49327934 | 0.56156099 | 0.89284069 | 15.6710003 | 0.02319238 | 2454.86813 | 0.02291155 | 0.11145139 | 0.10663005 | 0.38587108 |
| SAN DIEGO | 2018 | T6 Public | Aggregated | 10 | DSL | 2409.93729 | 0.38036535 | 0.43301699 | 0.69858353 | 12.9678536 | 0.02029554 | 2148.24361 | 0.01766699 | 0.09384037 | 0.08978088 | 0.33767398 |
| SAN DIEGO | 2018 | T6 Public | Aggregated | 15 | DSL | 1927.57083 | 0.21637744 | 0.24632924 | 0.48089471 | 9.27401224 | 0.01649234 | 1745.68186 | 0.01005017 | 0.06538333 | 0.06255487 | 0.27439688 |

| Region | Calendar Year | Vehicle Categ | Model Year | Speed | Fuel | VMT | ROG_RUNEX | TOG_RUNEX | CO_RUNEX | NOx_RUNEX | SOx_RUNEX | CO2_RUNEX | CH4_RUNEX | PM10_RUNEX | PM2_5_RUNEX | N2O_RUNEX |
|-----------|---------------|---------------|------------|-------|------|------------|------------|------------|------------|------------|------------|------------|------------|------------|-------------|------------|
| SAN DIEGO | 2018 | T6 Public | Aggregated | 20 | DSL | 1438.0596 | 0.11608818 | 0.13215756 | 0.35012943 | 7.32072254 | 0.01387082 | 1468.19989 | 0.005392 | 0.04562288 | 0.04364925 | 0.23078058 |
| SAN DIEGO | 2018 | T6 Public | Aggregated | 25 | DSL | 2037.60776 | 0.08413959 | 0.09578652 | 0.27800985 | 6.69269083 | 0.01234829 | 1307.04296 | 0.00390807 | 0.03751307 | 0.03589027 | 0.20544895 |
| SAN DIEGO | 2018 | T6 Public | Aggregated | 30 | DSL | 2829.07115 | 0.06734152 | 0.0766632 | 0.22662447 | 6.29422041 | 0.01131573 | 1197.748 | 0.00312784 | 0.03280813 | 0.03138887 | 0.18826931 |
| SAN DIEGO | 2018 | T6 Public | Aggregated | 35 | DSL | 3610.02766 | 0.05449901 | 0.06204297 | 0.18556673 | 5.98511349 | 0.01049835 | 1111.22994 | 0.00253134 | 0.02948026 | 0.02820496 | 0.17466987 |
| SAN DIEGO | 2018 | T6 Public | Aggregated | 40 | DSL | 4151.24859 | 0.04514296 | 0.05139182 | 0.1536825 | 5.76056152 | 0.00988559 | 1046.37053 | 0.00209677 | 0.02751884 | 0.02632839 | 0.16447488 |
| SAN DIEGO | 2018 | T6 Public | Aggregated | 45 | DSL | 3844.23955 | 0.038924 | 0.04431201 | 0.13012583 | 5.62418326 | 0.00947126 | 1002.51421 | 0.00180792 | 0.02691926 | 0.02575475 | 0.15758127 |
| SAN DIEGO | 2018 | T6 Public | Aggregated | 50 | DSL | 2765.93364 | 0.03558003 | 0.04050516 | 0.11427897 | 5.57522066 | 0.00925145 | 979.248526 | 0.0016526 | 0.02768099 | 0.02648352 | 0.15392423 |
| SAN DIEGO | 2018 | T6 Public | Aggregated | 55 | DSL | 3256.59972 | 0.03491235 | 0.03974505 | 0.10569348 | 5.61228635 | 0.00922361 | 976.301002 | 0.00162159 | 0.02980652 | 0.0285171 | 0.15346092 |
| SAN DIEGO | 2018 | T6 Public | Aggregated | 60 | DSL | 3740.62867 | 0.03578648 | 0.04074019 | 0.10485335 | 5.68297465 | 0.0093951 | 994.453364 | 0.00166219 | 0.03166774 | 0.03029781 | 0.15631422 |
| SAN DIEGO | 2018 | T6 Public | Aggregated | 65 | DSL | 1591.40636 | 0.03639888 | 0.04143736 | 0.10799565 | 5.75084339 | 0.00971421 | 1028.2301 | 0.00169063 | 0.03232823 | 0.03092973 | 0.16162345 |
| SAN DIEGO | 2018 | T6 Public | Aggregated | 70 | DSL | 674.208819 | 0.03679182 | 0.04188468 | 0.11129396 | 5.75945276 | 0.00971421 | 1028.2301 | 0.00170888 | 0.03232823 | 0.03092973 | 0.16162345 |
| SAN DIEGO | 2018 | T6 Public | Aggregated | 75 | DSL | 164.111461 | 0.0372816 | 0.04244226 | 0.11581259 | 5.76881599 | 0.00971421 | 1028.2301 | 0.00173163 | 0.03232823 | 0.03092973 | 0.16162345 |
| SAN DIEGO | 2018 | T6 Public | Aggregated | 80 | DSL | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SAN DIEGO | 2018 | T6 Public | Aggregated | 85 | DSL | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SAN DIEGO | 2018 | T6 Public | Aggregated | 90 | DSL | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SAN DIEGO | 2018 | T6 utility | Aggregated | 5 | DSL | 73.5422675 | 0.19078686 | 0.21719631 | 0.78989244 | 6.57880019 | 0.02345444 | 2482.60713 | 0.00886156 | 0.01639766 | 0.01568831 | 0.39023127 |
| SAN DIEGO | 2018 | T6 utility | Aggregated | 10 | DSL | 264.210314 | 0.14252785 | 0.16225711 | 0.54244044 | 5.3714494 | 0.01982423 | 2098.35633 | 0.00662005 | 0.0144318 | 0.01380749 | 0.32983239 |
| SAN DIEGO | 2018 | T6 utility | Aggregated | 15 | DSL | 281.137268 | 0.08733435 | 0.09942351 | 0.32693196 | 3.97456135 | 0.01586801 | 1679.59815 | 0.00405645 | 0.01141409 | 0.01092032 | 0.26400944 |
| SAN DIEGO | 2018 | T6 utility | Aggregated | 20 | DSL | 236.940829 | 0.05673802 | 0.06459192 | 0.22364144 | 3.19468768 | 0.01356249 | 1435.56285 | 0.00263533 | 0.00933607 | 0.0089322 | 0.22565049 |
| SAN DIEGO | 2018 | T6 utility | Aggregated | 25 | DSL | 282.016205 | 0.0424295 | 0.04830275 | 0.1700424 | 2.72077497 | 0.01195714 | 1265.64023 | 0.00197074 | 0.00836941 | 0.00800736 | 0.19894102 |
| SAN DIEGO | 2018 | T6 utility | Aggregated | 30 | DSL | 365.442994 | 0.03277229 | 0.03730876 | 0.13171599 | 2.34737435 | 0.0106928 | 1131.81209 | 0.00152219 | 0.00797378 | 0.00762884 | 0.1779051 |
| SAN DIEGO | 2018 | T6 utility | Aggregated | 35 | DSL | 445.805672 | 0.02553427 | 0.02906882 | 0.10200291 | 2.05393199 | 0.00971501 | 1028.31524 | 0.001186 | 0.00798213 | 0.00763683 | 0.16163684 |
| SAN DIEGO | 2018 | T6 utility | Aggregated | 40 | DSL | 586.953582 | 0.0202474 | 0.02305013 | 0.07973258 | 1.83754035 | 0.0090124 | 953.945419 | 0.00094044 | 0.00838269 | 0.00802005 | 0.14994694 |
| SAN DIEGO | 2018 | T6 utility | Aggregated | 45 | DSL | 603.769485 | 0.01656661 | 0.01885983 | 0.06404261 | 1.6960062 | 0.0085783 | 907.996637 | 0.00076948 | 0.00916818 | 0.00877157 | 0.14272443 |
| SAN DIEGO | 2018 | T6 utility | Aggregated | 50 | DSL | 559.020912 | 0.0142374 | 0.01620819 | 0.0542977 | 1.62770093 | 0.0084085 | 890.023028 | 0.00066129 | 0.01033392 | 0.00988688 | 0.13989923 |
| SAN DIEGO | 2018 | T6 utility | Aggregated | 55 | DSL | 869.531478 | 0.01307195 | 0.01488142 | 0.05003 | 1.6332341 | 0.00850017 | 899.72687 | 0.00060716 | 0.01187674 | 0.01136295 | 0.14142453 |
| SAN DIEGO | 2018 | T6 utility | Aggregated | 60 | DSL | 587.082435 | 0.01337424 | 0.01522555 | 0.05159887 | 1.71271588 | 0.00887382 | 939.27697 | 0.0006212 | 0.01341053 | 0.0128304 | 0.14764126 |
| SAN DIEGO | 2018 | T6 utility | Aggregated | 65 | DSL | 4.44647706 | 0.01467929 | 0.01671126 | 0.05789774 | 1.86091223 | 0.00951319 | 1006.95242 | 0.00068182 | 0.01479015 | 0.01415034 | 0.1582789 |
| SAN DIEGO | 2018 | T6 utility | Aggregated | 70 | DSL | 0.0007857 | 0.01536521 | 0.01749212 | 0.06365537 | 1.85595013 | 0.00951319 | 1006.95242 | 0.00071367 | 0.01479015 | 0.01415034 | 0.1582789 |
| SAN DIEGO | 2018 | T6 utility | Aggregated | 75 | DSL | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SAN DIEGO | 2018 | T6 utility | Aggregated | 80 | DSL | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SAN DIEGO | 2018 | T6 utility | Aggregated | 85 | DSL | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SAN DIEGO | 2018 | T6 utility | Aggregated | 90 | DSL | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SAN DIEGO | 2018 | T6TS | Aggregated | 5 | GAS | 1596.50212 | 1.00490125 | 1.4482038 | 9.25999796 | 1.78394324 | 0.04051493 | 4094.15005 | 0.19538375 | 0.00883551 | 0.00813514 | 0.07842064 |
| SAN DIEGO | 2018 | T6TS | Aggregated | 10 | GAS | 8025.63021 | 0.64409729 | 0.92723324 | 7.83251808 | 1.56126162 | 0.03288691 | 3323.31626 | 0.12469849 | 0.00562368 | 0.00517858 | 0.06853554 |
| SAN DIEGO | 2018 | T6TS | Aggregated | 15 | GAS | 10137.747 | 0.4363911 | 0.627668 | 6.81134962 | 1.3819263 | 0.02689697 | 2718.01586 | 0.08415449 | 0.00377619 | 0.00347776 | 0.0605723 |
| SAN DIEGO | 2018 | T6TS | Aggregated | 20 | GAS | 10515.3334 | 0.31103415 | 0.44690145 | 6.03167093 | 1.2507253 | 0.02236094 | 2259.63654 | 0.05973623 | 0.00267458 | 0.00246351 | 0.05473484 |
| SAN DIEGO | 2018 | T6TS | Aggregated | 25 | GAS | 11716.5126 | 0.23368476 | 0.3354297 | 5.42446164 | 1.1504833 | 0.01911553 | 1931.67953 | 0.04470631 | 0.00199775 | 0.00184032 | 0.05026707 |
| SAN DIEGO | 2018 | T6TS | Aggregated | 30 | GAS | 13247.1865 | 0.18523116 | 0.26565447 | 4.94711325 | 1.07419523 | 0.01696284 | 1714.14314 | 0.03531208 | 0.00157336 | 0.00144954 | 0.04686004 |
| SAN DIEGO | 2018 | T6TS | Aggregated | 35 | GAS | 16464.243 | 0.15436405 | 0.22116608 | 4.55701937 | 1.02296673 | 0.01572309 | 1588.86354 | 0.02932357 | 0.00130629 | 0.00120361 | 0.04455795 |
| SAN DIEGO | 2018 | T6TS | Aggregated | 40 | GAS | 20496.2854 | 0.13549442 | 0.19394727 | 4.24731496 | 0.98992068 | 0.01521737 | 1537.75836 | 0.02565537 | 0.00114313 | 0.00105337 | 0.04305935 |
| SAN DIEGO | 2018 | T6TS | Aggregated | 45 | GAS | 18691.2116 | 0.12564406 | 0.17976229 | 4.02074662 | 0.96428719 | 0.01526698 | 1542.77163 | 0.02373542 | 0.0010542 | 0.00097151 | 0.04189631 |
| SAN DIEGO | 2018 | T6TS | Aggregated | 50 | GAS | 18190.3902 | 0.1223092 | 0.17485608 | 3.8554325 | 0.96300055 | 0.01571073 | 1587.61457 | 0.02304781 | 0.00102438 | 0.00094409 | 0.04180105 |
| SAN DIEGO | 2018 | T6TS | Aggregated | 55 | GAS | 23791.3736 | 0.12504506 | 0.17859476 | 3.76270135 | 0.97986802 | 0.01635234 | 1652.4507 | 0.0235045 | 0.0010487 | 0.00096656 | 0.04250392 |
| SAN DIEGO | 2018 | T6TS | Aggregated | 60 | GAS | 27454.1595 | 0.13484512 | 0.19248215 | 3.7735973 | 1.00409021 | 0.01701373 | 1719.28587 | 0.02530594 | 0.00113097 | 0.00104242 | 0.04353916 |
| SAN DIEGO | 2018 | T6TS | Aggregated | 65 | GAS | 4290.05995 | 0.15419015 | 0.22021064 | 3.93239772 | 1.02576895 | 0.01753496 | 1771.95816 | 0.02894554 | 0.00128478 | 0.00118422 | 0.04448163 |
| SAN DIEGO | 2018 | T7 Ag | Aggregated | 5 | DSL | 0.99338123 | 12.7525977 | 14.5178618 | 17.8802833 | 39.8445036 | 0.03639612 | 3852.45889 | 0.59232513 | 2.4483177 | 2.34240456 | 0.60555289 |
| SAN DIEGO | 2018 | T7 Ag | Aggregated | 10 | DSL | 3.32915605 | 9.80055496 | 11.1571858 | 15.4835448 | 32.6997002 | 0.03230316 | 3419.22667 | 0.45521039 | 2.05467486 | 1.96579054 | 0.53745482 |
| SAN DIEGO | 2018 | T7 Ag | Aggregated | 15 | DSL | 3.27257778 | 5.21191499 | 5.93336848 | 11.632695 | 22.8889639 | 0.02627162 | 2780.80007 | 0.24207995 | 1.41884689 | 1.3574682 | 0.43710305 |
| SAN DIEGO | 2018 | T7 Ag | Aggregated | 20 | DSL | 2.49475301 | 2.43870114 | 2.77627561 | 8.81272094 | 17.8310962 | 0.02175399 | 2302.6172 | 0.11327135 | 0.97676845 | 0.93451388 | 0.36193936 |
| SAN DIEGO | 2018 | T7 Ag | Aggregated | 25 | DSL | 2.50563822 | 1.73343133 | 1.97337962 | 7.27014728 | 16.3839728 | 0.01939333 | 2052.74689 | 0.0805134 | 0.79779943 | 0.76328698 | 0.32266323 |
| SAN DIEGO | 2018 | T7 Ag | Aggregated | 30 | DSL | 3.20973016 | 1.41149286 | 1.60687718 | 6.17693637 | 15.5094009 | 0.01795071 | 1900.04823 | 0.06556019 | 0.69328853 | 0.66329717 | 0.29866112 |
| SAN DIEGO | 2018 | T7 Ag | Aggregated | 35 | DSL | 4.42843745 | 1.16154757 | 1.32233349 | 5.26065448 | 14.8498211 | 0.01679163 | 1777.36152 | 0.05395088 | 0.61693773 | 0.59024928 | 0.27937648 |
| SAN DIEGO | 2018 | T7 Ag | Aggregated | 40 | DSL | 5.12098383 | 0.9830028 | 1.11907386 | 4.52036786 | 14.399451 | 0.01591209 | 1684.26338 | 0.04565793 | 0.56885395 | 0.54424558 | 0.26474275 |
| SAN DIEGO | 2018 | T7 Ag | Aggregated | 45 | DSL | 6.41592652 | 0.87456763 | 0.99562868 | 3.95655948 | 14.1653684 | 0.01530973 | 1620.50503 | 0.0406214 | 0.54938876 | 0.52562244 | 0.25472082 |
| SAN DIEGO | 2018 | T7 Ag | Aggregated | 50 | DSL | 8.38585887 | 0.83421771 | 0.94969336 | 3.57104617 | 14.1450919 | 0.01498329 | 1585.95226 | 0.03874725 | 0.55913144 | 0.53494366 | 0.24928961 |
| SAN DIEGO | 2018 | T7 Ag | Aggregated | 55 | DSL | 24.0132805 | 0.85916926 | 0.9780988 | 3.36691765 | 14.3333562 | 0.01493232 | 1580.55723 | 0.03990619 | 0.59890552 | 0.57299714 | 0.24844159 |
| SAN DIEGO | 2018 | T7 Ag | Aggregated | 60 | DSL | 122.428734 | 0.90052123 | 1.02517487 | 3.32414102 | 14.5425673 | 0.01510529 | 1598.86537 | 0.04182688 | 0.62919636 | 0.6019776 | 0.25131937 |

| Region | Calendar Year | Vehicle Categ | Model Year | Speed | Fuel | VMT | ROG_RUNEX | TOG_RUNEX | CO_RUNEX | NOx_RUNEX | Sox_RUNEX | CO2_RUNEX | CH4_RUNEX | PM10_RUNEX | PM2_5_RUNEX | N2O_RUNEX |
|-----------|---------------|---------------|------------|-------|------|------------|------------|------------|------------|------------|------------|------------|------------|------------|-------------|------------|
| SAN DIEGO | 2018 | T7 NNOOS | Aggregated | 85 | DSL | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SAN DIEGO | 2018 | T7 NNOOS | Aggregated | 90 | DSL | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SAN DIEGO | 2018 | T7 NOOS | Aggregated | 5 | DSL | 996.9468 | 1.14872369 | 1.30773448 | 3.61607824 | 14.7900664 | 0.03437755 | 3638.79665 | 0.05335524 | 0.11105709 | 0.10625281 | 0.57196816 |
| SAN DIEGO | 2018 | T7 NOOS | Aggregated | 10 | DSL | 2266.83927 | 0.86195678 | 0.98127218 | 2.57488684 | 11.7947669 | 0.02885023 | 3053.74128 | 0.04003566 | 0.0949562 | 0.09084844 | 0.4800056 |
| SAN DIEGO | 2018 | T7 NOOS | Aggregated | 15 | DSL | 2119.87484 | 0.48730849 | 0.55476362 | 1.58863994 | 8.65861968 | 0.02298344 | 2432.75227 | 0.02263422 | 0.06949104 | 0.06648489 | 0.38239478 |
| SAN DIEGO | 2018 | T7 NOOS | Aggregated | 20 | DSL | 3097.15823 | 0.27823415 | 0.3167484 | 1.0844035 | 6.99190878 | 0.01966052 | 2081.02765 | 0.01292326 | 0.0519898 | 0.04974074 | 0.32710857 |
| SAN DIEGO | 2018 | T7 NOOS | Aggregated | 25 | DSL | 2724.09339 | 0.20628139 | 0.23483566 | 0.83861071 | 5.80126901 | 0.01728396 | 1829.47377 | 0.00958124 | 0.04471095 | 0.04277678 | 0.2875678 |
| SAN DIEGO | 2018 | T7 NOOS | Aggregated | 30 | DSL | 1505.6362 | 0.16217834 | 0.1846277 | 0.66951115 | 4.80198605 | 0.01528338 | 1617.71662 | 0.00753276 | 0.0414675 | 0.03967364 | 0.25428253 |
| SAN DIEGO | 2018 | T7 NOOS | Aggregated | 35 | DSL | 2012.89713 | 0.12867821 | 0.14649035 | 0.53754631 | 4.01793623 | 0.0137376 | 1454.09825 | 0.00597677 | 0.04062879 | 0.03887121 | 0.228564 |
| SAN DIEGO | 2018 | T7 NOOS | Aggregated | 40 | DSL | 1863.22875 | 0.10423529 | 0.11866394 | 0.43843023 | 3.44721028 | 0.01262597 | 1336.43457 | 0.00484146 | 0.04216647 | 0.04034237 | 0.2100689 |
| SAN DIEGO | 2018 | T7 NOOS | Aggregated | 45 | DSL | 2482.0769 | 0.08768119 | 0.09981836 | 0.36904462 | 3.08971072 | 0.01193345 | 1263.13307 | 0.00407256 | 0.04607238 | 0.04407931 | 0.19854693 |
| SAN DIEGO | 2018 | T7 NOOS | Aggregated | 50 | DSL | 3653.33584 | 0.07811817 | 0.08893159 | 0.32714155 | 2.943887 | 0.01164793 | 1232.91116 | 0.00362839 | 0.05235291 | 0.05008815 | 0.19379647 |
| SAN DIEGO | 2018 | T7 NOOS | Aggregated | 55 | DSL | 8770.59659 | 0.07484035 | 0.08520005 | 0.31112449 | 3.00568405 | 0.01182981 | 1252.16291 | 0.00347614 | 0.06102625 | 0.05838628 | 0.19682257 |
| SAN DIEGO | 2018 | T7 NOOS | Aggregated | 60 | DSL | 32004.3017 | 0.07721963 | 0.08790867 | 0.31871321 | 3.27574978 | 0.01243098 | 1315.79477 | 0.00358665 | 0.06902321 | 0.06603729 | 0.20682462 |
| SAN DIEGO | 2018 | T7 NOOS | Aggregated | 65 | DSL | 58636.4399 | 0.08163274 | 0.09293266 | 0.34247046 | 3.74413851 | 0.01343753 | 1422.33621 | 0.00379163 | 0.0752598 | 0.07200409 | 0.22357145 |
| SAN DIEGO | 2018 | T7 NOOS | Aggregated | 70 | DSL | 720.611175 | 0.08381861 | 0.09542111 | 0.36305352 | 3.73638496 | 0.01343753 | 1422.33621 | 0.00389316 | 0.0752598 | 0.07200409 | 0.22357145 |
| SAN DIEGO | 2018 | T7 NOOS | Aggregated | 75 | DSL | 0.22832141 | 0.08654321 | 0.09852286 | 0.39125198 | 3.73767275 | 0.01343753 | 1422.33621 | 0.00401971 | 0.0752598 | 0.07200409 | 0.22357145 |
| SAN DIEGO | 2018 | T7 NOOS | Aggregated | 80 | DSL | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SAN DIEGO | 2018 | T7 NOOS | Aggregated | 85 | DSL | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SAN DIEGO | 2018 | T7 NOOS | Aggregated | 90 | DSL | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SAN DIEGO | 2018 | T7 other port | Aggregated | 5 | DSL | 3243.90932 | 1.13006321 | 1.28649094 | 4.0953572 | 14.5106615 | 0.03541444 | 3748.54946 | 0.05248851 | 0.04964392 | 0.04749634 | 0.58921977 |
| SAN DIEGO | 2018 | T7 other port | Aggregated | 10 | DSL | 5900.44411 | 0.87578986 | 0.99702008 | 3.01214475 | 11.9600216 | 0.03019551 | 3196.13614 | 0.04067817 | 0.04448605 | 0.04256161 | 0.50238809 |
| SAN DIEGO | 2018 | T7 other port | Aggregated | 15 | DSL | 5455.42548 | 0.59410819 | 0.67634695 | 1.9622253 | 9.22326456 | 0.02451426 | 2594.78692 | 0.02759479 | 0.03768105 | 0.03605098 | 0.40786437 |
| SAN DIEGO | 2018 | T7 other port | Aggregated | 20 | DSL | 4218.48304 | 0.4245347 | 0.48330044 | 1.38849674 | 7.63479172 | 0.02121899 | 2245.98889 | 0.01971854 | 0.03333864 | 0.03189643 | 0.35303818 |
| SAN DIEGO | 2018 | T7 other port | Aggregated | 25 | DSL | 4383.99098 | 0.31392399 | 0.35737856 | 1.0297519 | 6.55119536 | 0.01885075 | 1995.31586 | 0.01458096 | 0.03059573 | 0.02927217 | 0.31363587 |
| SAN DIEGO | 2018 | T7 other port | Aggregated | 30 | DSL | 5432.56388 | 0.23456081 | 0.26702963 | 0.76882127 | 5.70329871 | 0.01698123 | 1797.43009 | 0.01089474 | 0.02911399 | 0.02785453 | 0.28253098 |
| SAN DIEGO | 2018 | T7 other port | Aggregated | 35 | DSL | 6706.48469 | 0.17595215 | 0.20030813 | 0.57201803 | 5.04433074 | 0.01553928 | 1644.80257 | 0.00817252 | 0.0287229 | 0.02748036 | 0.25854006 |
| SAN DIEGO | 2018 | T7 other port | Aggregated | 40 | DSL | 8321.85164 | 0.13314851 | 0.15157944 | 0.42557365 | 4.56229078 | 0.01448033 | 1532.71445 | 0.0061844 | 0.0293275 | 0.02805881 | 0.24092137 |
| SAN DIEGO | 2018 | T7 other port | Aggregated | 45 | DSL | 8709.51706 | 0.10250246 | 0.11669125 | 0.31934171 | 4.24634118 | 0.01377823 | 1458.3994 | 0.00476097 | 0.0308687 | 0.02953333 | 0.22924008 |
| SAN DIEGO | 2018 | T7 other port | Aggregated | 50 | DSL | 8851.91722 | 0.08132612 | 0.0925836 | 0.24584503 | 4.08593522 | 0.0134165 | 1420.11005 | 0.00377739 | 0.03330719 | 0.03186633 | 0.22322152 |
| SAN DIEGO | 2018 | T7 other port | Aggregated | 55 | DSL | 7761.94169 | 0.0676387 | 0.07700151 | 0.19957345 | 4.08057351 | 0.01338408 | 1416.67905 | 0.00314164 | 0.0366155 | 0.03503153 | 0.22268222 |
| SAN DIEGO | 2018 | T7 other port | Aggregated | 60 | DSL | 5123.11016 | 0.06530968 | 0.0743501 | 0.19087401 | 4.26863068 | 0.01377191 | 1457.73003 | 0.00303347 | 0.04117419 | 0.03939302 | 0.22913486 |
| SAN DIEGO | 2018 | T7 other port | Aggregated | 65 | DSL | 2015.16221 | 0.07108372 | 0.0809234 | 0.21068015 | 4.63937494 | 0.01455722 | 1540.85322 | 0.00330165 | 0.04690512 | 0.04487602 | 0.24220067 |
| SAN DIEGO | 2018 | T7 other port | Aggregated | 70 | DSL | 46.0632288 | 0.07219487 | 0.08218836 | 0.22114317 | 4.63029165 | 0.01455722 | 1540.85322 | 0.00335326 | 0.04690512 | 0.04487602 | 0.24220067 |
| SAN DIEGO | 2018 | T7 other port | Aggregated | 75 | DSL | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SAN DIEGO | 2018 | T7 other port | Aggregated | 80 | DSL | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SAN DIEGO | 2018 | T7 other port | Aggregated | 85 | DSL | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SAN DIEGO | 2018 | T7 other port | Aggregated | 90 | DSL | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SAN DIEGO | 2018 | T7 POLA | Aggregated | 5 | DSL | 1062.57335 | 1.30092529 | 1.48100441 | 4.45193226 | 15.1682754 | 0.03551454 | 3759.14473 | 0.06042461 | 0.05684478 | 0.0543857 | 0.5908852 |
| SAN DIEGO | 2018 | T7 POLA | Aggregated | 10 | DSL | 1932.74659 | 1.01386636 | 1.15420967 | 3.3215336 | 12.5975508 | 0.03043485 | 3221.47023 | 0.04709147 | 0.05097687 | 0.04877163 | 0.50637026 |
| SAN DIEGO | 2018 | T7 POLA | Aggregated | 15 | DSL | 1786.97651 | 0.69051865 | 0.78610292 | 2.18983031 | 9.7806301 | 0.02483094 | 2628.30739 | 0.0320728 | 0.0432855 | 0.04141299 | 0.41313332 |
| SAN DIEGO | 2018 | T7 POLA | Aggregated | 20 | DSL | 1381.80424 | 0.49374397 | 0.56208993 | 1.55454406 | 8.1142369 | 0.0215374 | 2279.69229 | 0.02293313 | 0.03835088 | 0.03669184 | 0.35833588 |
| SAN DIEGO | 2018 | T7 POLA | Aggregated | 25 | DSL | 1436.01795 | 0.36469536 | 0.4151779 | 1.15103637 | 7.02386575 | 0.01918545 | 2030.74306 | 0.01693915 | 0.0351485 | 0.03362799 | 0.31920453 |
| SAN DIEGO | 2018 | T7 POLA | Aggregated | 30 | DSL | 1779.48797 | 0.27208507 | 0.30974814 | 0.8581712 | 6.1927444 | 0.01734709 | 1836.15618 | 0.01263765 | 0.03327644 | 0.03183691 | 0.28861818 |
| SAN DIEGO | 2018 | T7 POLA | Aggregated | 35 | DSL | 2196.77285 | 0.20370012 | 0.23189708 | 0.6381657 | 5.54707534 | 0.01592806 | 1685.95479 | 0.00946134 | 0.0325318 | 0.03112449 | 0.26500861 |
| SAN DIEGO | 2018 | T7 POLA | Aggregated | 40 | DSL | 2725.90166 | 0.1536811 | 0.17495423 | 0.47475461 | 5.07244725 | 0.01487621 | 1574.61821 | 0.00713809 | 0.03280179 | 0.0313828 | 0.24750805 |
| SAN DIEGO | 2018 | T7 POLA | Aggregated | 45 | DSL | 2852.88516 | 0.11771002 | 0.1340039 | 0.35595164 | 4.75625353 | 0.01416096 | 1498.91004 | 0.00546733 | 0.03401617 | 0.03254464 | 0.23560778 |
| SAN DIEGO | 2018 | T7 POLA | Aggregated | 50 | DSL | 2899.52968 | 0.09260486 | 0.10542358 | 0.27292371 | 4.58631581 | 0.01376299 | 1456.78599 | 0.00430126 | 0.03612824 | 0.03456535 | 0.22898647 |
| SAN DIEGO | 2018 | T7 POLA | Aggregated | 55 | DSL | 2542.49783 | 0.07602067 | 0.08654375 | 0.21916152 | 4.56186628 | 0.01366941 | 1446.88037 | 0.00353096 | 0.03910537 | 0.03741369 | 0.22742944 |
| SAN DIEGO | 2018 | T7 POLA | Aggregated | 60 | DSL | 1678.12346 | 0.07254142 | 0.08258288 | 0.20686239 | 4.7279581 | 0.01398656 | 1480.45059 | 0.00336936 | 0.04339694 | 0.04151961 | 0.23270622 |
| SAN DIEGO | 2018 | T7 POLA | Aggregated | 65 | DSL | 660.08555 | 0.07831014 | 0.08915013 | 0.22530576 | 5.0721097 | 0.01468777 | 1554.67155 | 0.0036373 | 0.04890943 | 0.04679363 | 0.24437272 |
| SAN DIEGO | 2018 | T7 POLA | Aggregated | 70 | DSL | 15.0884487 | 0.07920632 | 0.09017037 | 0.23374459 | 5.06217916 | 0.01468777 | 1554.67155 | 0.00367893 | 0.04890943 | 0.04679363 | 0.24437272 |
| SAN DIEGO | 2018 | T7 POLA | Aggregated | 75 | DSL | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SAN DIEGO | 2018 | T7 POLA | Aggregated | 80 | DSL | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SAN DIEGO | 2018 | T7 POLA | Aggregated | 85 | DSL | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SAN DIEGO | 2018 | T7 POLA | Aggregated | 90 | DSL | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SAN DIEGO | 2018 | T7 Public | Aggregated | 5 | DSL | 1029.55771 | 0.85973884 | 0.97874722 | 1.88896073 | 27.6793658 | 0.03547865 | 3755.34651 | 0.03993264 | 0.18131574 | 0.1734721 | 0.59028818 |
| SAN DIEGO | 2018 | T7 Public | Aggregated | 10 | DSL | 1806.73151 | 0.66829089 | 0.7607983 | 1.51049802 | 22.8432279 | 0.03127024 | 3309.89479 | 0.03104038 | 0.15435683 | 0.14767942 | 0.52026937 |

| Region | Calendar Year | Vehicle Categ | Model Year | Speed | Fuel | VMT | ROG_RUNEX | TOG_RUNEX | CO_RUNEX | NOx_RUNEX | SOx_RUNEX | CO2_RUNEX | CH4_RUNEX | PM10_RUNEX | PM2_5_RUNEX | N2O_RUNEX |
|-----------|---------------|----------------|------------|-------|------|------------|------------|------------|------------|------------|------------|------------|------------|------------|-------------|------------|
| SAN DIEGO | 2018 | T7 Public | Aggregated | 15 | DSL | 1387.65954 | 0.38971538 | 0.44366129 | 1.08064468 | 16.400464 | 0.02550646 | 2699.80986 | 0.01810127 | 0.11084285 | 0.10604784 | 0.42437251 |
| SAN DIEGO | 2018 | T7 Public | Aggregated | 20 | DSL | 1036.1248 | 0.21553143 | 0.24536613 | 0.81408184 | 12.9651099 | 0.02140153 | 2265.31047 | 0.01001088 | 0.08030475 | 0.0768308 | 0.35607526 |
| SAN DIEGO | 2018 | T7 Public | Aggregated | 25 | DSL | 1722.69125 | 0.1562484 | 0.17787691 | 0.6528755 | 11.8084411 | 0.01909788 | 2021.47338 | 0.00725733 | 0.06751707 | 0.06459631 | 0.31774746 |
| SAN DIEGO | 2018 | T7 Public | Aggregated | 30 | DSL | 2799.25744 | 0.1245736 | 0.14181756 | 0.53340258 | 11.069147 | 0.01759453 | 1862.34693 | 0.00578612 | 0.05990018 | 0.05730893 | 0.292735 |
| SAN DIEGO | 2018 | T7 Public | Aggregated | 35 | DSL | 3284.65517 | 0.10039137 | 0.11428793 | 0.4373457 | 10.4857773 | 0.01640113 | 1736.02794 | 0.00466292 | 0.05427391 | 0.05192605 | 0.27287942 |
| SAN DIEGO | 2018 | T7 Public | Aggregated | 40 | DSL | 3431.70772 | 0.08266082 | 0.09410305 | 0.36185422 | 10.0626461 | 0.01549763 | 1640.39373 | 0.00383938 | 0.05062827 | 0.04843811 | 0.25784705 |
| SAN DIEGO | 2018 | T7 Public | Aggregated | 45 | DSL | 3600.28513 | 0.07057615 | 0.08034557 | 0.30488055 | 9.8179712 | 0.01487226 | 1574.19951 | 0.00327808 | 0.04897469 | 0.04685606 | 0.24744224 |
| SAN DIEGO | 2018 | T7 Public | Aggregated | 50 | DSL | 2357.53971 | 0.06349485 | 0.07228405 | 0.26498204 | 9.71479027 | 0.01451776 | 1536.67623 | 0.00294917 | 0.04934279 | 0.04720825 | 0.2415441 |
| SAN DIEGO | 2018 | T7 Public | Aggregated | 55 | DSL | 2352.54401 | 0.06088483 | 0.06931275 | 0.24117497 | 9.76536132 | 0.01442957 | 1527.34152 | 0.00282794 | 0.0517788 | 0.04953887 | 0.24007682 |
| SAN DIEGO | 2018 | T7 Public | Aggregated | 60 | DSL | 2758.37763 | 0.06177064 | 0.07032117 | 0.2361871 | 9.86900435 | 0.01460471 | 1545.88027 | 0.00286909 | 0.05409236 | 0.05175235 | 0.24299085 |
| SAN DIEGO | 2018 | T7 Public | Aggregated | 65 | DSL | 1233.0578 | 0.06289286 | 0.07159873 | 0.24195469 | 9.96594369 | 0.01496726 | 1584.25549 | 0.00292121 | 0.05500147 | 0.05262213 | 0.2490229 |
| SAN DIEGO | 2018 | T7 Public | Aggregated | 70 | DSL | 672.87953 | 0.06352408 | 0.07231733 | 0.24789858 | 9.99346788 | 0.01496726 | 1584.25549 | 0.00295053 | 0.05500147 | 0.05262213 | 0.2490229 |
| SAN DIEGO | 2018 | T7 Public | Aggregated | 75 | DSL | 196.558457 | 0.06431088 | 0.07321305 | 0.25604162 | 10.0076649 | 0.01496726 | 1584.25549 | 0.00298707 | 0.05500147 | 0.05262213 | 0.2490229 |
| SAN DIEGO | 2018 | T7 Public | Aggregated | 80 | DSL | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SAN DIEGO | 2018 | T7 Public | Aggregated | 85 | DSL | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SAN DIEGO | 2018 | T7 Public | Aggregated | 90 | DSL | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SAN DIEGO | 2018 | T7 Single | Aggregated | 5 | DSL | 1788.57874 | 4.57147623 | 5.2042777 | 7.10239275 | 24.8509463 | 0.03475393 | 3678.63624 | 0.21233323 | 0.73994426 | 0.7079346 | 0.57823039 |
| SAN DIEGO | 2018 | T7 Single | Aggregated | 10 | DSL | 4167.54272 | 3.47734227 | 3.95868947 | 5.80186856 | 20.3785308 | 0.03026764 | 3203.77073 | 0.16151354 | 0.62188233 | 0.59497997 | 0.50358814 |
| SAN DIEGO | 2018 | T7 Single | Aggregated | 15 | DSL | 5182.82553 | 1.8270977 | 2.08001165 | 3.98781255 | 14.4419756 | 0.02451069 | 2594.40874 | 0.08486396 | 0.43159501 | 0.4129244 | 0.40780492 |
| SAN DIEGO | 2018 | T7 Single | Aggregated | 20 | DSL | 6621.81352 | 0.87391094 | 0.99488108 | 2.81899136 | 11.2591039 | 0.02060533 | 2181.03455 | 0.0405909 | 0.29939213 | 0.28644056 | 0.34282826 |
| SAN DIEGO | 2018 | T7 Single | Aggregated | 25 | DSL | 9102.81802 | 0.63357299 | 0.72127462 | 2.29083092 | 10.0899934 | 0.01830706 | 1937.76635 | 0.02942782 | 0.24602802 | 0.23538495 | 0.30458989 |
| SAN DIEGO | 2018 | T7 Single | Aggregated | 30 | DSL | 11475.3957 | 0.51348837 | 0.58456743 | 1.95263472 | 9.30831795 | 0.01672523 | 1770.33272 | 0.0238502 | 0.21697004 | 0.20758401 | 0.27827165 |
| SAN DIEGO | 2018 | T7 Single | Aggregated | 35 | DSL | 9890.46115 | 0.41997105 | 0.47810507 | 1.6790857 | 8.70148054 | 0.01547789 | 1638.30448 | 0.01950657 | 0.19856656 | 0.18997666 | 0.25751865 |
| SAN DIEGO | 2018 | T7 Single | Aggregated | 40 | DSL | 6334.21658 | 0.35194049 | 0.40065746 | 1.46741907 | 8.26375988 | 0.01455183 | 1540.28257 | 0.01634672 | 0.19083313 | 0.18257777 | 0.24211097 |
| SAN DIEGO | 2018 | T7 Single | Aggregated | 45 | DSL | 5076.001 | 0.3083456 | 0.351028 | 1.31594676 | 7.9913569 | 0.01393929 | 1475.44656 | 0.01432185 | 0.19386994 | 0.18548321 | 0.23191965 |
| SAN DIEGO | 2018 | T7 Single | Aggregated | 50 | DSL | 11999.3075 | 0.28809165 | 0.32797041 | 1.22386065 | 7.88244854 | 0.01363547 | 1443.28827 | 0.01338111 | 0.20785646 | 0.19886468 | 0.22686482 |
| SAN DIEGO | 2018 | T7 Single | Aggregated | 55 | DSL | 30888.0345 | 0.28998645 | 0.3301275 | 1.19108758 | 7.92722345 | 0.01363735 | 1443.48657 | 0.01346912 | 0.23304882 | 0.22296724 | 0.22689599 |
| SAN DIEGO | 2018 | T7 Single | Aggregated | 60 | DSL | 22271.2542 | 0.30094949 | 0.34260809 | 1.19624176 | 8.0518283 | 0.01394138 | 1475.66796 | 0.01397832 | 0.2501622 | 0.23934029 | 0.23195445 |
| SAN DIEGO | 2018 | T7 Single | Aggregated | 65 | DSL | 7121.38225 | 0.30244318 | 0.34430854 | 1.20549357 | 8.19378535 | 0.01448281 | 1532.97743 | 0.0140477 | 0.25187247 | 0.24097658 | 0.2409627 |
| SAN DIEGO | 2018 | T7 Single | Aggregated | 70 | DSL | 621.643861 | 0.3034565 | 0.34546213 | 1.21503543 | 8.19968395 | 0.01448281 | 1532.97743 | 0.01409477 | 0.25187247 | 0.24097658 | 0.2409627 |
| SAN DIEGO | 2018 | T7 Single | Aggregated | 75 | DSL | 23.0075815 | 0.30471957 | 0.34690004 | 1.22810763 | 8.22374619 | 0.01448281 | 1532.97743 | 0.01415343 | 0.25187247 | 0.24097658 | 0.2409627 |
| SAN DIEGO | 2018 | T7 Single | Aggregated | 80 | DSL | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SAN DIEGO | 2018 | T7 Single | Aggregated | 85 | DSL | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SAN DIEGO | 2018 | T7 Single | Aggregated | 90 | DSL | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SAN DIEGO | 2018 | T7 single cons | Aggregated | 5 | DSL | 9928.36431 | 3.61492181 | 4.11531331 | 5.98301085 | 21.4803548 | 0.03481017 | 3684.58942 | 0.16790376 | 0.62322 | 0.59625978 | 0.57916615 |
| SAN DIEGO | 2018 | T7 single cons | Aggregated | 10 | DSL | 6829.08449 | 2.75879603 | 3.14067927 | 4.86112245 | 17.4398374 | 0.02999268 | 3174.6668 | 0.12813893 | 0.52259686 | 0.49998955 | 0.49901341 |
| SAN DIEGO | 2018 | T7 single cons | Aggregated | 15 | DSL | 1450.70891 | 1.46775346 | 1.67092558 | 3.38799906 | 12.3812205 | 0.0241758 | 2558.96104 | 0.06817335 | 0.36090308 | 0.34529057 | 0.40223304 |
| SAN DIEGO | 2018 | T7 single cons | Aggregated | 20 | DSL | 1445.17465 | 0.71142215 | 0.80989997 | 2.44272583 | 9.70474757 | 0.02042349 | 2161.78703 | 0.03304372 | 0.24886512 | 0.23809932 | 0.33980282 |
| SAN DIEGO | 2018 | T7 single cons | Aggregated | 25 | DSL | 1949.24967 | 0.51286884 | 0.58386213 | 1.98040359 | 8.63334237 | 0.01809138 | 1914.93763 | 0.02382143 | 0.20367759 | 0.19486659 | 0.30100153 |
| SAN DIEGO | 2018 | T7 single cons | Aggregated | 30 | DSL | 2340.00125 | 0.41339891 | 0.47062319 | 1.67003367 | 7.87526138 | 0.01640599 | 1736.54235 | 0.01920131 | 0.17849573 | 0.17077408 | 0.27296027 |
| SAN DIEGO | 2018 | T7 single cons | Aggregated | 35 | DSL | 3021.87476 | 0.33640723 | 0.38297402 | 1.41748955 | 7.28633622 | 0.01508763 | 1596.99618 | 0.01562524 | 0.16172543 | 0.15472926 | 0.25102556 |
| SAN DIEGO | 2018 | T7 single cons | Aggregated | 40 | DSL | 3874.50857 | 0.28078813 | 0.31965592 | 1.21992863 | 6.86307646 | 0.01412253 | 1494.84252 | 0.01304188 | 0.15338412 | 0.14674879 | 0.23496843 |
| SAN DIEGO | 2018 | T7 single cons | Aggregated | 45 | DSL | 4707.82307 | 0.24546549 | 0.27944377 | 1.07561439 | 6.59637125 | 0.01350263 | 1429.22721 | 0.01140124 | 0.15357564 | 0.14693203 | 0.22465461 |
| SAN DIEGO | 2018 | T7 single cons | Aggregated | 50 | DSL | 4730.95703 | 0.22931796 | 0.26106105 | 0.98371412 | 6.48387755 | 0.01322293 | 1399.62127 | 0.01065123 | 0.16248504 | 0.155456 | 0.22000097 |
| SAN DIEGO | 2018 | T7 single cons | Aggregated | 55 | DSL | 5772.18119 | 0.23112395 | 0.26311702 | 0.94414982 | 6.53514907 | 0.01328027 | 1405.69054 | 0.01073511 | 0.18037593 | 0.17257295 | 0.22095498 |
| SAN DIEGO | 2018 | T7 single cons | Aggregated | 60 | DSL | 21186.4832 | 0.24065328 | 0.27396544 | 0.94390451 | 6.68843474 | 0.0136759 | 1447.5678 | 0.01117772 | 0.19320763 | 0.18484955 | 0.2275375 |
| SAN DIEGO | 2018 | T7 single cons | Aggregated | 65 | DSL | 10387.2522 | 0.24255634 | 0.27613194 | 0.95564781 | 6.88457426 | 0.01436282 | 1520.27645 | 0.01126611 | 0.19539615 | 0.18694339 | 0.23896629 |
| SAN DIEGO | 2018 | T7 single cons | Aggregated | 70 | DSL | 2319.15833 | 0.24380085 | 0.27754871 | 0.96736659 | 6.90991916 | 0.01436282 | 1520.27645 | 0.01132392 | 0.19539615 | 0.18694339 | 0.23896629 |
| SAN DIEGO | 2018 | T7 single cons | Aggregated | 75 | DSL | 1840.07075 | 0.24535208 | 0.27931467 | 0.98342112 | 6.91980129 | 0.01436282 | 1520.27645 | 0.01139597 | 0.19539615 | 0.18694339 | 0.23896629 |
| SAN DIEGO | 2018 | T7 single cons | Aggregated | 80 | DSL | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SAN DIEGO | 2018 | T7 single cons | Aggregated | 85 | DSL | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SAN DIEGO | 2018 | T7 single cons | Aggregated | 90 | DSL | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SAN DIEGO | 2018 | T7 SWCV | Aggregated | 5 | DSL | 860.056136 | 0.07243048 | 0.08245659 | 0.22665722 | 32.9572347 | 0.07778515 | 8233.40688 | 0.00336421 | 0.03223978 | 0.0308451 | 1.2941769 |
| SAN DIEGO | 2018 | T7 SWCV | Aggregated | 5 | NG | 669.966761 | 1.82591378 | 22.4557326 | 40.5732693 | 10.0027602 | 0 | 5543.85427 | 20.2882074 | 0.033178 | 0.03174274 | 1.13015096 |
| SAN DIEGO | 2018 | T7 SWCV | Aggregated | 10 | DSL | 2248.60563 | 0.05571438 | 0.06342658 | 0.17648411 | 27.4673032 | 0.07008131 | 7417.97065 | 0.00258779 | 0.02786958 | 0.02666396 | 1.16600168 |
| SAN DIEGO | 2018 | T7 SWCV | Aggregated | 10 | NG | 1751.61942 | 1.3868546 | 17.5618593 | 32.8737286 | 8.14601457 | 0 | 4930.32168 | 15.9133745 | 0.02744059 | 0.02625353 | 1.00507833 |
| SAN DIEGO | 2018 | T7 SWCV | Aggregated | 15 | DSL | 2406.23045 | 0.03725671 | 0.04241393 | 0.12056933 | 19.7722835 | 0.05782979 | 6121.17102 | 0.00173048 | 0.02086293 | 0.01996041 | 0.96216284 |
| SAN DIEGO | 2018 | T7 SWCV | Aggregated | 15 | NG | 1874.40605 | 0.7307323 | 10.6964224 | 23.1526126 | 5.50576539 | 0 | 4125.56365 | 9.82166745 | 0.0183354 | 0.01754222 | 0.84102314 |

| Region | Calendar Year | Vehicle Categ | Model Year | Speed | Fuel | VMT | ROG_RUNEX | TOG_RUNEX | CO_RUNEX | NOx_RUNEX | SOx_RUNEX | CO2_RUNEX | CH4_RUNEX | PM10_RUNEX | PM2_5_RUNEX | N2O_RUNEX |
|-----------|---------------|----------------|------------|-------|------|------------|------------|------------|------------|------------|------------|------------|------------|------------|-------------|------------|
| SAN DIEGO | 2018 | T7 SWCV | Aggregated | 20 | DSL | 2021.89555 | 0.02632431 | 0.02996822 | 0.08676762 | 15.5534652 | 0.048258 | 5108.01597 | 0.0012227 | 0.01589907 | 0.01521128 | 0.80290898 |
| SAN DIEGO | 2018 | T7 SWCV | Aggregated | 20 | NG | 1575.01674 | 0.352484 | 6.54081424 | 16.7444172 | 4.17347343 | 0 | 3577.22377 | 6.11295272 | 0.01214743 | 0.01162194 | 0.72924047 |
| SAN DIEGO | 2018 | T7 SWCV | Aggregated | 25 | DSL | 2454.95744 | 0.01950242 | 0.02220202 | 0.06528571 | 14.2095567 | 0.04336913 | 4590.5387 | 0.00090584 | 0.0137307 | 0.01313672 | 0.72156876 |
| SAN DIEGO | 2018 | T7 SWCV | Aggregated | 25 | NG | 1912.36341 | 0.24955461 | 4.73384943 | 12.2811414 | 3.8689233 | 0 | 3290.47626 | 4.4304879 | 0.00961314 | 0.00919728 | 0.67078511 |
| SAN DIEGO | 2018 | T7 SWCV | Aggregated | 30 | DSL | 2554.08029 | 0.01464431 | 0.01667143 | 0.04981754 | 13.4153293 | 0.0405311 | 4290.13871 | 0.00068019 | 0.01250413 | 0.01196321 | 0.67435006 |
| SAN DIEGO | 2018 | T7 SWCV | Aggregated | 30 | NG | 1989.57815 | 0.19389308 | 3.55640145 | 9.06289154 | 3.72451419 | 0 | 3112.25776 | 3.3212226 | 0.00812065 | 0.00776935 | 0.6344541 |
| SAN DIEGO | 2018 | T7 SWCV | Aggregated | 35 | DSL | 2781.57344 | 0.01105043 | 0.01258007 | 0.03814596 | 12.7968831 | 0.03823538 | 4047.14044 | 0.00051326 | 0.01171689 | 0.01121003 | 0.63615412 |
| SAN DIEGO | 2018 | T7 SWCV | Aggregated | 35 | NG | 2166.79083 | 0.15205004 | 2.68310306 | 6.68966836 | 3.62890337 | 0 | 2970.28034 | 2.49912931 | 0.00705435 | 0.00674918 | 0.60551108 |
| SAN DIEGO | 2018 | T7 SWCV | Aggregated | 40 | DSL | 3048.82185 | 0.00842707 | 0.00959358 | 0.0294251 | 12.344305 | 0.03642244 | 3855.24451 | 0.00039142 | 0.0113615 | 0.01087001 | 0.60599075 |
| SAN DIEGO | 2018 | T7 SWCV | Aggregated | 40 | NG | 2374.97207 | 0.12308309 | 2.05224378 | 4.94004241 | 3.57038417 | 0 | 2854.19894 | 1.90383053 | 0.00640387 | 0.00612684 | 0.58184713 |
| SAN DIEGO | 2018 | T7 SWCV | Aggregated | 45 | DSL | 3373.59282 | 0.00655771 | 0.00746545 | 0.02303317 | 12.0574852 | 0.03505739 | 3710.75683 | 0.00030459 | 0.0114358 | 0.01094109 | 0.5832793 |
| SAN DIEGO | 2018 | T7 SWCV | Aggregated | 45 | NG | 2627.96225 | 0.10629774 | 1.61834742 | 3.6508361 | 3.54472816 | 0 | 2757.85082 | 1.49083243 | 0.00616276 | 0.00589617 | 0.56220593 |
| SAN DIEGO | 2018 | T7 SWCV | Aggregated | 50 | DSL | 3121.8942 | 0.00528269 | 0.00601394 | 0.01851385 | 11.9313182 | 0.03411864 | 3611.39173 | 0.00024537 | 0.0119415 | 0.01142492 | 0.56766049 |
| SAN DIEGO | 2018 | T7 SWCV | Aggregated | 50 | NG | 2431.89398 | 0.10118221 | 1.3479013 | 2.70179929 | 3.54819958 | 0 | 2677.28944 | 1.22734621 | 0.00632673 | 0.00605304 | 0.54578297 |
| SAN DIEGO | 2018 | T7 SWCV | Aggregated | 55 | DSL | 2486.77307 | 0.00448427 | 0.005105 | 0.01553317 | 11.9628121 | 0.03359258 | 3555.70915 | 0.00020828 | 0.01288341 | 0.01232608 | 0.55890796 |
| SAN DIEGO | 2018 | T7 SWCV | Aggregated | 55 | NG | 1937.14715 | 0.10735936 | 1.21620899 | 2.00431628 | 3.57847679 | 0 | 2609.84642 | 1.08920892 | 0.00689278 | 0.0065946 | 0.53203427 |
| SAN DIEGO | 2018 | T7 SWCV | Aggregated | 60 | DSL | 3596.28258 | 0.00439169 | 0.00499961 | 0.01468034 | 12.0294621 | 0.03347487 | 3543.25042 | 0.00020398 | 0.01358528 | 0.01299758 | 0.55694962 |
| SAN DIEGO | 2018 | T7 SWCV | Aggregated | 60 | NG | 2801.43318 | 0.11459272 | 1.19650453 | 1.72876939 | 3.6054229 | 0 | 2580.43389 | 1.06138239 | 0.00732588 | 0.00700896 | 0.52603833 |
| SAN DIEGO | 2018 | T7 SWCV | Aggregated | 65 | DSL | 687.679663 | 0.00480408 | 0.00546908 | 0.0152328 | 12.0353265 | 0.03353606 | 3549.72747 | 0.00022314 | 0.01376381 | 0.01316839 | 0.55796772 |
| SAN DIEGO | 2018 | T7 SWCV | Aggregated | 65 | NG | 535.688889 | 0.11459272 | 1.19650453 | 1.72876939 | 3.6053024 | 0 | 2580.43389 | 1.06138239 | 0.00732588 | 0.00700896 | 0.52603833 |
| SAN DIEGO | 2018 | T7 SWCV | Aggregated | 70 | DSL | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SAN DIEGO | 2018 | T7 SWCV | Aggregated | 70 | NG | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SAN DIEGO | 2018 | T7 SWCV | Aggregated | 75 | DSL | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SAN DIEGO | 2018 | T7 SWCV | Aggregated | 75 | NG | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SAN DIEGO | 2018 | T7 SWCV | Aggregated | 80 | DSL | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SAN DIEGO | 2018 | T7 SWCV | Aggregated | 80 | NG | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SAN DIEGO | 2018 | T7 SWCV | Aggregated | 85 | DSL | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SAN DIEGO | 2018 | T7 SWCV | Aggregated | 85 | NG | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SAN DIEGO | 2018 | T7 SWCV | Aggregated | 90 | DSL | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SAN DIEGO | 2018 | T7 SWCV | Aggregated | 90 | NG | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SAN DIEGO | 2018 | T7 tractor | Aggregated | 5 | DSL | 1811.47451 | 2.98340402 | 3.39637837 | 5.78559786 | 19.0867429 | 0.03484649 | 3688.43296 | 0.13857139 | 0.39971113 | 0.38241981 | 0.5797703 |
| SAN DIEGO | 2018 | T7 tractor | Aggregated | 10 | DSL | 3868.67579 | 2.26526569 | 2.57883255 | 4.50281067 | 15.465398 | 0.02966301 | 3139.77251 | 0.10521572 | 0.33372596 | 0.31928912 | 0.49352852 |
| SAN DIEGO | 2018 | T7 tractor | Aggregated | 15 | DSL | 4932.69447 | 1.22438725 | 1.39387168 | 3.00338878 | 11.1986528 | 0.02382962 | 2522.31954 | 0.05686962 | 0.22856684 | 0.21867914 | 0.39647351 |
| SAN DIEGO | 2018 | T7 tractor | Aggregated | 20 | DSL | 5636.16176 | 0.62687234 | 0.71364644 | 2.10414023 | 8.928423 | 0.02031177 | 2149.96114 | 0.0291166 | 0.15637333 | 0.14960869 | 0.33794395 |
| SAN DIEGO | 2018 | T7 tractor | Aggregated | 25 | DSL | 6855.81111 | 0.45459302 | 0.51751955 | 1.6639825 | 7.74338362 | 0.0179486 | 1899.82422 | 0.02111467 | 0.12738896 | 0.12187817 | 0.29862591 |
| SAN DIEGO | 2018 | T7 tractor | Aggregated | 30 | DSL | 8658.78477 | 0.3590504 | 0.40875155 | 1.37054281 | 6.83024591 | 0.01604483 | 1698.31438 | 0.01667696 | 0.11181176 | 0.10697483 | 0.26695137 |
| SAN DIEGO | 2018 | T7 tractor | Aggregated | 35 | DSL | 10099.4001 | 0.28610613 | 0.32571005 | 1.13769663 | 6.12429614 | 0.01456395 | 1541.56551 | 0.01328889 | 0.10233071 | 0.09790392 | 0.24231263 |
| SAN DIEGO | 2018 | T7 tractor | Aggregated | 40 | DSL | 12648.3469 | 0.23361739 | 0.26595562 | 0.95964835 | 5.61635836 | 0.01348036 | 1426.86999 | 0.01085092 | 0.09893201 | 0.09465225 | 0.22428409 |
| SAN DIEGO | 2018 | T7 tractor | Aggregated | 45 | DSL | 14907.3827 | 0.19980489 | 0.22746266 | 0.83240146 | 5.305117 | 0.01277646 | 1352.36341 | 0.00928042 | 0.10167269 | 0.09727437 | 0.2125727 |
| SAN DIEGO | 2018 | T7 tractor | Aggregated | 50 | DSL | 22648.2232 | 0.18310593 | 0.20845216 | 0.75335325 | 5.18438918 | 0.01243885 | 1316.62772 | 0.0085048 | 0.11067249 | 0.10588485 | 0.20695554 |
| SAN DIEGO | 2018 | T7 tractor | Aggregated | 55 | DSL | 50846.187 | 0.18206611 | 0.2072684 | 0.72099604 | 5.25601468 | 0.01253083 | 1326.36378 | 0.0084565 | 0.12610986 | 0.1206544 | 0.20848592 |
| SAN DIEGO | 2018 | T7 tractor | Aggregated | 60 | DSL | 160083.284 | 0.18962211 | 0.21587033 | 0.72464754 | 5.49124364 | 0.01300056 | 1376.0841 | 0.00880746 | 0.13810741 | 0.13213294 | 0.21630126 |
| SAN DIEGO | 2018 | T7 tractor | Aggregated | 65 | DSL | 110672.386 | 0.19340332 | 0.22017495 | 0.74341784 | 5.88527642 | 0.01381967 | 1462.7855 | 0.00898308 | 0.14297926 | 0.13679404 | 0.22992951 |
| SAN DIEGO | 2018 | T7 tractor | Aggregated | 70 | DSL | 33428.2942 | 0.19476317 | 0.22172305 | 0.7562228 | 5.90176091 | 0.01381967 | 1462.7855 | 0.00904624 | 0.14297926 | 0.13679404 | 0.22992951 |
| SAN DIEGO | 2018 | T7 tractor | Aggregated | 75 | DSL | 1703.41528 | 0.19645818 | 0.22365268 | 0.77376539 | 5.89982468 | 0.01381967 | 1462.7855 | 0.00912497 | 0.14297926 | 0.13679404 | 0.22992951 |
| SAN DIEGO | 2018 | T7 tractor | Aggregated | 80 | DSL | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SAN DIEGO | 2018 | T7 tractor | Aggregated | 85 | DSL | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SAN DIEGO | 2018 | T7 tractor | Aggregated | 90 | DSL | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SAN DIEGO | 2018 | T7 tractor cor | Aggregated | 5 | DSL | 8190.02645 | 3.61426501 | 4.11456559 | 6.55011756 | 20.6925358 | 0.03524879 | 3731.01584 | 0.16787325 | 0.49515022 | 0.47373024 | 0.58646373 |
| SAN DIEGO | 2018 | T7 tractor cor | Aggregated | 10 | DSL | 5633.39346 | 2.74743239 | 3.12774264 | 5.17566842 | 16.7703053 | 0.03015399 | 3191.74136 | 0.12761112 | 0.41304445 | 0.39517633 | 0.50169729 |
| SAN DIEGO | 2018 | T7 tractor cor | Aggregated | 15 | DSL | 1196.70713 | 1.47746906 | 1.68198606 | 3.48896481 | 12.0960797 | 0.0242919 | 2571.25015 | 0.06862461 | 0.28205626 | 0.26985463 | 0.40416472 |
| SAN DIEGO | 2018 | T7 tractor cor | Aggregated | 20 | DSL | 1192.14185 | 0.74703302 | 0.85044023 | 2.44994226 | 9.60468034 | 0.02067875 | 2188.8058 | 0.03469775 | 0.19206856 | 0.18375976 | 0.34404979 |
| SAN DIEGO | 2018 | T7 tractor cor | Aggregated | 25 | DSL | 1607.95936 | 0.54076421 | 0.61561889 | 1.94433936 | 8.40992807 | 0.01830427 | 1937.47138 | 0.0251171 | 0.15597877 | 0.1492312 | 0.30454352 |
| SAN DIEGO | 2018 | T7 tractor cor | Aggregated | 30 | DSL | 1930.29501 | 0.42781993 | 0.48704043 | 1.61000689 | 7.51248496 | 0.01651724 | 1748.31765 | 0.01987113 | 0.1364097 | 0.13050868 | 0.27481119 |
| SAN DIEGO | 2018 | T7 tractor cor | Aggregated | 35 | DSL | 2492.78063 | 0.34146221 | 0.38872874 | 1.34420985 | 6.81826665 | 0.01512809 | 1601.27851 | 0.01586004 | 0.1242054 | 0.11883233 | 0.25169868 |
| SAN DIEGO | 2018 | T7 tractor cor | Aggregated | 40 | DSL | 3196.12846 | 0.27933685 | 0.31800374 | 1.14061515 | 6.32074091 | 0.01411619 | 1494.17158 | 0.01297447 | 0.11935487 | 0.11419163 | 0.23486296 |
| SAN DIEGO | 2018 | T7 tractor cor | Aggregated | 45 | DSL | 3883.53955 | 0.23946199 | 0.27260925 | 0.99489438 | 6.00956336 | 0.01346947 | 1425.7173 | 0.01112239 | 0.12193231 | 0.11665757 | 0.2241029 |
| SAN DIEGO | 2018 | T7 tractor cor | Aggregated | 50 | DSL | 3902.62303 | 0.22006686 | 0.25052937 | 0.90428029 | 5.88140304 | 0.01318035 | 1395.11479 | 0.01022154 | 0.13208817 | 0.12637409 | 0.21929262 |

| Region | Calendar Year | Vehicle Categ | Model Year | Speed | Fuel | VMT | ROG_RUNEX | TOG_RUNEX | CO_RUNEX | NOx_RUNEX | Sox_RUNEX | CO2_RUNEX | CH4_RUNEX | PM10_RUNEX | PM2_5_RUNEX | N2O_RUNEX |
|-----------|---------------|----------------|------------|-------|------|------------|------------|------------|------------|------------|------------|------------|------------|------------|-------------|------------|
| SAN DIEGO | 2018 | T7 tractor cor | Aggregated | 55 | DSL | 4761.54129 | 0.21947291 | 0.2498532 | 0.86723987 | 5.94396487 | 0.01324391 | 1401.84249 | 0.01019395 | 0.15004464 | 0.14355378 | 0.22035012 |
| SAN DIEGO | 2018 | T7 tractor cor | Aggregated | 60 | DSL | 17476.9833 | 0.22853537 | 0.26017012 | 0.87005366 | 6.16466771 | 0.01368428 | 1448.45455 | 0.01061488 | 0.16352467 | 0.15645067 | 0.22767688 |
| SAN DIEGO | 2018 | T7 tractor cor | Aggregated | 65 | DSL | 8568.56854 | 0.23204085 | 0.26416085 | 0.88714404 | 6.49612739 | 0.01446627 | 1531.22634 | 0.0107777 | 0.16793025 | 0.16066566 | 0.24068746 |
| SAN DIEGO | 2018 | T7 tractor cor | Aggregated | 70 | DSL | 1913.10144 | 0.23334996 | 0.26565116 | 0.8994711 | 6.52004227 | 0.01446627 | 1531.22634 | 0.0108385 | 0.16793025 | 0.16066566 | 0.24068746 |
| SAN DIEGO | 2018 | T7 tractor cor | Aggregated | 75 | DSL | 1517.89636 | 0.2349817 | 0.26750878 | 0.91635897 | 6.52936682 | 0.01446627 | 1531.22634 | 0.01091429 | 0.16793025 | 0.16066566 | 0.24068746 |
| SAN DIEGO | 2018 | T7 tractor cor | Aggregated | 80 | DSL | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SAN DIEGO | 2018 | T7 tractor cor | Aggregated | 85 | DSL | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SAN DIEGO | 2018 | T7 tractor cor | Aggregated | 90 | DSL | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SAN DIEGO | 2018 | T7 utility | Aggregated | 5 | DSL | 34.0916221 | 0.47025173 | 0.5353458 | 1.81783364 | 13.6026171 | 0.03601716 | 3812.34632 | 0.02184197 | 0.03946393 | 0.03775674 | 0.59924775 |
| SAN DIEGO | 2018 | T7 utility | Aggregated | 10 | DSL | 134.015203 | 0.35976353 | 0.40956339 | 1.29452217 | 11.2358188 | 0.03078601 | 3258.63978 | 0.01671008 | 0.03406886 | 0.03259506 | 0.51221279 |
| SAN DIEGO | 2018 | T7 utility | Aggregated | 15 | DSL | 132.027718 | 0.22496916 | 0.25611026 | 0.8108813 | 8.29162853 | 0.02483852 | 2629.1089 | 0.01044923 | 0.02573139 | 0.02461826 | 0.41325931 |
| SAN DIEGO | 2018 | T7 utility | Aggregated | 20 | DSL | 103.359027 | 0.14674731 | 0.16706065 | 0.56286221 | 6.64351969 | 0.02122068 | 2246.16821 | 0.00681603 | 0.0200151 | 0.01914925 | 0.35306636 |
| SAN DIEGO | 2018 | T7 utility | Aggregated | 25 | DSL | 126.161393 | 0.10860753 | 0.1236414 | 0.42559205 | 5.81395859 | 0.01879697 | 1989.62271 | 0.00504454 | 0.01744528 | 0.0166906 | 0.31274098 |
| SAN DIEGO | 2018 | T7 utility | Aggregated | 30 | DSL | 166.340183 | 0.08277716 | 0.0942355 | 0.32743227 | 5.20327356 | 0.01695145 | 1794.27764 | 0.00384478 | 0.01614045 | 0.01544222 | 0.28203546 |
| SAN DIEGO | 2018 | T7 utility | Aggregated | 35 | DSL | 205.716915 | 0.06350794 | 0.07229895 | 0.25205408 | 4.72780842 | 0.01551834 | 1642.58662 | 0.00294978 | 0.01559089 | 0.01491644 | 0.25819174 |
| SAN DIEGO | 2018 | T7 utility | Aggregated | 40 | DSL | 283.069505 | 0.04941447 | 0.05625461 | 0.19564165 | 4.38024286 | 0.01447225 | 1531.85926 | 0.00229517 | 0.01577172 | 0.01508944 | 0.24078694 |
| SAN DIEGO | 2018 | T7 utility | Aggregated | 45 | DSL | 283.822913 | 0.03947199 | 0.04493585 | 0.15538826 | 4.15271015 | 0.01379825 | 1460.51832 | 0.00183337 | 0.01666923 | 0.01594812 | 0.22957314 |
| SAN DIEGO | 2018 | T7 utility | Aggregated | 50 | DSL | 271.874431 | 0.03292048 | 0.03747746 | 0.12923214 | 4.04521001 | 0.01348697 | 1427.56931 | 0.00152907 | 0.01827654 | 0.0174859 | 0.22439401 |
| SAN DIEGO | 2018 | T7 utility | Aggregated | 55 | DSL | 424.647433 | 0.02919404 | 0.03323519 | 0.11566182 | 4.05562206 | 0.01353214 | 1432.35115 | 0.00135599 | 0.02059144 | 0.01970067 | 0.22514565 |
| SAN DIEGO | 2018 | T7 utility | Aggregated | 60 | DSL | 319.379302 | 0.02901093 | 0.03302674 | 0.11645913 | 4.18055637 | 0.01397676 | 1479.41271 | 0.00134748 | 0.02280208 | 0.02181567 | 0.23254308 |
| SAN DIEGO | 2018 | T7 utility | Aggregated | 65 | DSL | 3.09867541 | 0.03095631 | 0.03524141 | 0.1281569 | 4.40182987 | 0.01478371 | 1564.8269 | 0.00143784 | 0.02457269 | 0.02350969 | 0.245969 |
| SAN DIEGO | 2018 | T7 utility | Aggregated | 70 | DSL | 0.00544454 | 0.031788 | 0.03618822 | 0.13598838 | 4.38067439 | 0.01478371 | 1564.8269 | 0.00147647 | 0.02457269 | 0.02350969 | 0.245969 |
| SAN DIEGO | 2018 | T7 utility | Aggregated | 75 | DSL | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SAN DIEGO | 2018 | T7 utility | Aggregated | 80 | DSL | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SAN DIEGO | 2018 | T7 utility | Aggregated | 85 | DSL | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SAN DIEGO | 2018 | T7 utility | Aggregated | 90 | DSL | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SAN DIEGO | 2018 | T7IS | Aggregated | 5 | GAS | 7.14936251 | 6.79631071 | 9.68384321 | 135.942456 | 8.92481088 | 0.05401421 | 5458.29051 | 1.17214687 | 0.01147159 | 0.0106113 | 0.30397258 |
| SAN DIEGO | 2018 | T7IS | Aggregated | 10 | GAS | 34.9426245 | 4.46664899 | 6.35844963 | 108.273971 | 7.94064633 | 0.04377105 | 4423.19018 | 0.76545432 | 0.00761013 | 0.00704151 | 0.26733547 |
| SAN DIEGO | 2018 | T7IS | Aggregated | 15 | GAS | 38.1054821 | 3.08076483 | 4.37944956 | 89.5464806 | 7.25897852 | 0.03578702 | 3616.38079 | 0.52447492 | 0.00531533 | 0.0049195 | 0.24144289 |
| SAN DIEGO | 2018 | T7IS | Aggregated | 20 | GAS | 65.1216174 | 2.23323492 | 3.16937664 | 76.4379328 | 6.79130594 | 0.02976459 | 3007.79684 | 0.37770358 | 0.00390647 | 0.00361644 | 0.22313674 |
| SAN DIEGO | 2018 | T7IS | Aggregated | 25 | GAS | 84.9878651 | 1.7087458 | 2.42229084 | 67.252107 | 6.40284952 | 0.02546253 | 2573.06205 | 0.28738859 | 0.00301945 | 0.00279589 | 0.20791322 |
| SAN DIEGO | 2018 | T7IS | Aggregated | 30 | GAS | 155.20378 | 1.37710791 | 1.95045074 | 60.6805507 | 6.12158797 | 0.02260348 | 2284.14622 | 0.2304784 | 0.00245333 | 0.00227212 | 0.19660167 |
| SAN DIEGO | 2018 | T7IS | Aggregated | 35 | GAS | 276.050741 | 1.16638695 | 1.65048584 | 55.9507608 | 5.94462613 | 0.02094376 | 2116.42723 | 0.19433237 | 0.00209453 | 0.00194015 | 0.18900811 |
| SAN DIEGO | 2018 | T7IS | Aggregated | 40 | GAS | 240.63999 | 1.03863663 | 1.46848338 | 52.748016 | 5.85185012 | 0.02024836 | 2046.1548 | 0.17236067 | 0.00187831 | 0.00174011 | 0.1844305 |
| SAN DIEGO | 2018 | T7IS | Aggregated | 45 | GAS | 254.622805 | 0.96967653 | 1.36929892 | 50.8141028 | 5.86924079 | 0.02028368 | 2049.72376 | 0.16028198 | 0.00176873 | 0.00163879 | 0.1836013 |
| SAN DIEGO | 2018 | T7IS | Aggregated | 50 | GAS | 266.407561 | 0.95385942 | 1.34614515 | 50.434834 | 5.90660374 | 0.02084834 | 2106.78416 | 0.15722772 | 0.00174849 | 0.00162019 | 0.18373385 |
| SAN DIEGO | 2018 | T7IS | Aggregated | 55 | GAS | 391.066564 | 0.9878789 | 1.39406057 | 51.8171739 | 5.97184207 | 0.02169407 | 2192.24821 | 0.162555 | 0.00181419 | 0.00168119 | 0.18507928 |
| SAN DIEGO | 2018 | T7IS | Aggregated | 60 | GAS | 96.5159007 | 1.06728969 | 1.50409868 | 55.0716016 | 6.20618679 | 0.02259385 | 2283.17282 | 0.17515571 | 0.00197538 | 0.00183066 | 0.19189613 |
| SAN DIEGO | 2018 | T7IS | Aggregated | 65 | GAS | 51.7305253 | 1.21929358 | 1.71844489 | 61.7768538 | 6.41717735 | 0.02336799 | 2361.40204 | 0.19997643 | 0.00225696 | 0.00209168 | 0.19842692 |
| SAN DIEGO | 2018 | UBUS | Aggregated | 5 | GAS | 754.707769 | 0.05119529 | 0.07470405 | 0.31967513 | 0.26145057 | 0.02751781 | 2780.75319 | 0.01657836 | 0.0028231 | 0.00259573 | 0.02496549 |
| SAN DIEGO | 2018 | UBUS | Aggregated | 5 | DSL | 38.5530623 | 0.01464742 | 1.04624408 | 1.67829967 | 11.6626597 | 0.03056068 | 3232.70387 | 1.02515325 | 0.01616751 | 0.01546811 | 0.50813603 |
| SAN DIEGO | 2018 | UBUS | Aggregated | 5 | NG | 1451.71113 | 0.87321408 | 14.4265216 | 56.9929588 | 4.22213155 | 0 | 2870.57209 | 13.3740462 | 0.00839148 | 0.00802847 | 0.5851849 |
| SAN DIEGO | 2018 | UBUS | Aggregated | 10 | GAS | 2274.33195 | 0.03282311 | 0.0478954 | 0.30016305 | 0.23485275 | 0.02276275 | 2300.2413 | 0.01060576 | 0.00175599 | 0.00161457 | 0.02225726 |
| SAN DIEGO | 2018 | UBUS | Aggregated | 10 | DSL | 127.702944 | 0.01186286 | 0.8473474 | 1.35924578 | 10.0754267 | 0.02725959 | 2883.51527 | 0.83026605 | 0.01454336 | 0.01391422 | 0.45324845 |
| SAN DIEGO | 2018 | UBUS | Aggregated | 10 | NG | 4808.6397 | 0.70987843 | 11.8744683 | 50.6075326 | 3.62243683 | 0 | 2481.36325 | 11.0182338 | 0.00710294 | 0.00679567 | 0.50584213 |
| SAN DIEGO | 2018 | UBUS | Aggregated | 15 | GAS | 4700.89926 | 0.02109168 | 0.03077693 | 0.25901943 | 0.19284542 | 0.01793977 | 1812.86472 | 0.00684537 | 0.00119181 | 0.00109583 | 0.01854256 |
| SAN DIEGO | 2018 | UBUS | Aggregated | 15 | DSL | 217.583168 | 0.00835474 | 0.59676721 | 0.95728542 | 0.0757496 | 0.02310071 | 2443.58967 | 0.58473721 | 0.01249717 | 0.01195655 | 0.38409827 |
| SAN DIEGO | 2018 | UBUS | Aggregated | 15 | NG | 8193.06918 | 0.51800514 | 9.65249634 | 46.8456489 | 2.94454474 | 0 | 2223.18816 | 9.02347398 | 0.00586324 | 0.0056096 | 0.45321145 |
| SAN DIEGO | 2018 | UBUS | Aggregated | 20 | GAS | 14266.9074 | 0.01918632 | 0.02799663 | 0.36082831 | 0.28623292 | 0.01988276 | 2009.20997 | 0.00603403 | 0.00067198 | 0.00061786 | 0.02522936 |
| SAN DIEGO | 2018 | UBUS | Aggregated | 20 | DSL | 1906.13583 | 0.006044 | 0.43171426 | 0.6925209 | 6.75859598 | 0.02036133 | 2153.81809 | 0.42301149 | 0.01114938 | 0.01066707 | 0.33855021 |
| SAN DIEGO | 2018 | UBUS | Aggregated | 20 | NG | 71775.3256 | 0.39100884 | 8.14516339 | 44.1790785 | 2.49460843 | 0 | 2042.90421 | 7.66668391 | 0.00486751 | 0.00465694 | 0.41645939 |
| SAN DIEGO | 2018 | UBUS | Aggregated | 25 | GAS | 3302.38366 | 0.00936435 | 0.01366443 | 0.16535171 | 0.1130029 | 0.0108332 | 1094.72576 | 0.00310275 | 0.00067061 | 0.0006166 | 0.01182575 |
| SAN DIEGO | 2018 | UBUS | Aggregated | 25 | DSL | 23.0232286 | 0.00442931 | 0.31637928 | 0.5075099 | 6.14100022 | 0.01849891 | 1956.81156 | 0.31000151 | 0.01014271 | 0.00970394 | 0.30758353 |
| SAN DIEGO | 2018 | UBUS | Aggregated | 25 | NG | 866.937028 | 0.30160944 | 7.04491384 | 42.1132451 | 2.26899311 | 0 | 1906.65788 | 6.67257673 | 0.00405352 | 0.00387816 | 0.38868468 |
| SAN DIEGO | 2018 | UBUS | Aggregated | 30 | GAS | 3110.29499 | 0.00731937 | 0.01068041 | 0.1531262 | 0.10552753 | 0.00964566 | 974.721079 | 0.00242403 | 0.00052181 | 0.00047979 | 0.01101977 |
| SAN DIEGO | 2018 | UBUS | Aggregated | 30 | DSL | 24.0653732 | 0.00326408 | 0.23314877 | 0.37399829 | 5.7851792 | 0.01716782 | 1816.00968 | 0.22844881 | 0.00933889 | 0.00893489 | 0.28545143 |
| SAN DIEGO | 2018 | UBUS | Aggregated | 30 | NG | 906.178862 | 0.23646223 | 6.20572073 | 40.4275211 | 2.13008553 | 0 | 1797.94642 | 5.91089169 | 0.00339719 | 0.00325023 | 0.36652314 |
| SAN DIEGO | 2018 | UBUS | Aggregated | 35 | GAS | 1097.68948 | 0.00649575 | 0.00947858 | 0.16381572 | 0.1210527 | 0.00976558 | 986.83942 | 0.00212633 | 0.00041087 | 0.00037778 | 0.01204157 |

| Region | Calendar Year | Vehicle Category | Model Year | Speed | Fuel | VMT | ROG_RUNEX | TOG_RUNEX | CO_RUNEX | NOx_RUNEX | SOx_RUNEX | CO2_RUNEX | CH4_RUNEX | PM10_RUNEX | PM2_5_RUNEX | N2O_RUNEX |
|-----------|---------------|------------------|------------|-------|------|------------|------------|------------|------------|------------|------------|------------|------------|------------|-------------|------------|
| SAN DIEGO | 2050 | All Other Buses | Aggregated | 65 | DSL | 0.01205574 | 0.0091893 | 0.01046131 | 0.05675928 | 1.22520504 | 0.00769207 | 814.191116 | 0.00042682 | 0.0201081 | 0.01923823 | 0.12797951 |
| SAN DIEGO | 2050 | All Other Buses | Aggregated | 70 | DSL | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SAN DIEGO | 2050 | All Other Buses | Aggregated | 75 | DSL | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SAN DIEGO | 2050 | All Other Buses | Aggregated | 80 | DSL | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SAN DIEGO | 2050 | All Other Buses | Aggregated | 85 | DSL | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SAN DIEGO | 2050 | All Other Buses | Aggregated | 90 | DSL | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SAN DIEGO | 2050 | LDA | Aggregated | 5 | GAS | 105408.487 | 0.01096051 | 0.01599355 | 0.67702787 | 0.03035536 | 0.00448405 | 453.12655 | 0.00404973 | 0.00339842 | 0.00312473 | 0.00518737 |
| SAN DIEGO | 2050 | LDA | Aggregated | 5 | DSL | 1316.07879 | 0.07853589 | 0.08940789 | 2.62374523 | 0.04143766 | 0.00366479 | 387.661066 | 0.00364784 | 0.00154722 | 0.00148029 | 0.06093492 |
| SAN DIEGO | 2050 | LDA | Aggregated | 10 | GAS | 354506.968 | 0.00691535 | 0.01009087 | 0.61879495 | 0.02629033 | 0.00364721 | 368.561131 | 0.00255512 | 0.00213828 | 0.00196607 | 0.00449273 |
| SAN DIEGO | 2050 | LDA | Aggregated | 10 | DSL | 4426.20052 | 0.05879113 | 0.06692979 | 1.96411735 | 0.03442619 | 0.00305312 | 322.95826 | 0.00273074 | 0.00145323 | 0.00139037 | 0.05076454 |
| SAN DIEGO | 2050 | LDA | Aggregated | 15 | GAS | 897492.838 | 0.00460278 | 0.00671637 | 0.56662034 | 0.02307817 | 0.00298778 | 301.924092 | 0.00170066 | 0.00141934 | 0.00130503 | 0.00394383 |
| SAN DIEGO | 2050 | LDA | Aggregated | 15 | DSL | 11205.6564 | 0.02870759 | 0.03268169 | 0.95904729 | 0.0230263 | 0.00251118 | 265.63225 | 0.00133341 | 0.00126701 | 0.00121222 | 0.04175369 |
| SAN DIEGO | 2050 | LDA | Aggregated | 20 | GAS | 2689864.37 | 0.00322059 | 0.00469947 | 0.51845972 | 0.02074728 | 0.00248329 | 250.944048 | 0.00118996 | 0.0009939 | 0.00091386 | 0.0035455 |
| SAN DIEGO | 2050 | LDA | Aggregated | 20 | DSL | 33584.3302 | 0.01116206 | 0.01270726 | 0.37286486 | 0.01514659 | 0.00205998 | 217.904695 | 0.00051846 | 0.00108106 | 0.0010343 | 0.03425158 |
| SAN DIEGO | 2050 | LDA | Aggregated | 25 | GAS | 7673731.97 | 0.00237706 | 0.0034686 | 0.47557272 | 0.01895 | 0.00212208 | 214.44241 | 0.00087829 | 0.00073424 | 0.0006751 | 0.00323836 |
| SAN DIEGO | 2050 | LDA | Aggregated | 25 | DSL | 95810.4622 | 0.00670056 | 0.00762814 | 0.22381821 | 0.01149655 | 0.00172676 | 182.656792 | 0.00031123 | 0.00092669 | 0.0008866 | 0.0287111 |
| SAN DIEGO | 2050 | LDA | Aggregated | 30 | GAS | 6699482.29 | 0.00185211 | 0.00270259 | 0.43767914 | 0.01755933 | 0.00188294 | 190.276871 | 0.00068433 | 0.00057222 | 0.00052613 | 0.0030007 |
| SAN DIEGO | 2050 | LDA | Aggregated | 30 | DSL | 83646.4574 | 0.0050615 | 0.00576218 | 0.16906568 | 0.00956276 | 0.00149569 | 158.214298 | 0.0002351 | 0.00082106 | 0.00078554 | 0.02486908 |
| SAN DIEGO | 2050 | LDA | Aggregated | 35 | GAS | 7695092.35 | 0.00152224 | 0.00222125 | 0.40388377 | 0.0165408 | 0.00174514 | 176.35101 | 0.00056244 | 0.00047046 | 0.00043257 | 0.00282664 |
| SAN DIEGO | 2050 | LDA | Aggregated | 35 | DSL | 96077.1573 | 0.00402469 | 0.00458185 | 0.13443147 | 0.00826794 | 0.00135208 | 143.022539 | 0.00018694 | 0.00074238 | 0.00071027 | 0.02248115 |
| SAN DIEGO | 2050 | LDA | Aggregated | 40 | GAS | 4660313.88 | 0.00131973 | 0.00192574 | 0.3736439 | 0.0158339 | 0.00168867 | 170.645153 | 0.00048762 | 0.00040805 | 0.00037519 | 0.00270584 |
| SAN DIEGO | 2050 | LDA | Aggregated | 40 | DSL | 58186.3985 | 0.00331775 | 0.00377704 | 0.11081608 | 0.00734102 | 0.00126524 | 133.837092 | 0.0001541 | 0.00068103 | 0.00065157 | 0.02103733 |
| SAN DIEGO | 2050 | LDA | Aggregated | 45 | GAS | 3419245.67 | 0.00120814 | 0.00176292 | 0.3469129 | 0.01537054 | 0.00169457 | 171.241576 | 0.00044639 | 0.00037338 | 0.00034331 | 0.00262666 |
| SAN DIEGO | 2050 | LDA | Aggregated | 45 | DSL | 42691.0282 | 0.00280886 | 0.0031977 | 0.09381636 | 0.00664359 | 0.00122213 | 129.27635 | 0.00013047 | 0.00063157 | 0.00060425 | 0.02032044 |
| SAN DIEGO | 2050 | LDA | Aggregated | 50 | GAS | 2237255.46 | 0.00116476 | 0.00169962 | 0.32239404 | 0.01521501 | 0.00174263 | 176.098139 | 0.00043036 | 0.00036042 | 0.0003314 | 0.00260007 |
| SAN DIEGO | 2050 | LDA | Aggregated | 50 | DSL | 27933.2769 | 0.00242722 | 0.00276323 | 0.08106656 | 0.00610201 | 0.00122524 | 129.605433 | 0.00011274 | 0.00059067 | 0.00056512 | 0.02037217 |
| SAN DIEGO | 2050 | LDA | Aggregated | 55 | GAS | 1939811.6 | 0.00119137 | 0.00173845 | 0.30202443 | 0.01510383 | 0.00181758 | 183.671434 | 0.00044019 | 0.00036704 | 0.00033748 | 0.0025811 |
| SAN DIEGO | 2050 | LDA | Aggregated | 55 | DSL | 24219.5384 | 0.00213168 | 0.00242677 | 0.07119253 | 0.00566076 | 0.00128211 | 135.62188 | 9.9012E-05 | 0.00055618 | 0.00053212 | 0.02131787 |
| SAN DIEGO | 2050 | LDA | Aggregated | 60 | GAS | 2210576.7 | 0.00127864 | 0.00186579 | 0.28239541 | 0.01545219 | 0.00189001 | 190.991193 | 0.00047244 | 0.00039432 | 0.00036256 | 0.00264062 |
| SAN DIEGO | 2050 | LDA | Aggregated | 60 | DSL | 27600.1789 | 0.00200794 | 0.00228591 | 0.0670576 | 0.00547734 | 0.00138997 | 147.030404 | 9.3265E-05 | 0.00054091 | 0.00051751 | 0.02311113 |
| SAN DIEGO | 2050 | LDA | Aggregated | 65 | GAS | 23592774.6 | 0.00144295 | 0.00210554 | 0.26395329 | 0.01619012 | 0.00194344 | 196.389831 | 0.00053315 | 0.00044691 | 0.00041091 | 0.00276671 |
| SAN DIEGO | 2050 | LDA | Aggregated | 65 | DSL | 294567.838 | 0.00200817 | 0.00228616 | 0.0670634 | 0.00548495 | 0.0015626 | 165.291931 | 9.3275E-05 | 0.00054105 | 0.00051765 | 0.02598159 |
| SAN DIEGO | 2050 | LDT1 | Aggregated | 5 | GAS | 10777.8573 | 0.01175306 | 0.01715003 | 0.68421187 | 0.03331686 | 0.00517654 | 523.104121 | 0.00427661 | 0.00357959 | 0.0032913 | 0.00547282 |
| SAN DIEGO | 2050 | LDT1 | Aggregated | 5 | DSL | 1.51047748 | 0.26814808 | 0.30526876 | 2.83901655 | 0.15525023 | 0.00685573 | 725.1984 | 0.01245497 | 0.00999789 | 0.00956538 | 0.11399109 |
| SAN DIEGO | 2050 | LDT1 | Aggregated | 10 | GAS | 36247.7975 | 0.00741501 | 0.01081997 | 0.62529111 | 0.02885404 | 0.00420918 | 425.349554 | 0.00269812 | 0.00225227 | 0.00207088 | 0.00473976 |
| SAN DIEGO | 2050 | LDT1 | Aggregated | 10 | DSL | 5.07999691 | 0.20069943 | 0.22848295 | 2.12505831 | 0.12945506 | 0.00577093 | 610.447738 | 0.0093221 | 0.00929874 | 0.00889648 | 0.09595388 |
| SAN DIEGO | 2050 | LDT1 | Aggregated | 15 | GAS | 91767.2756 | 0.00493513 | 0.00720133 | 0.57251507 | 0.0253277 | 0.00344723 | 348.352681 | 0.00179576 | 0.001495 | 0.0013746 | 0.00416052 |
| SAN DIEGO | 2050 | LDT1 | Aggregated | 15 | DSL | 12.8608497 | 0.09810749 | 0.11168886 | 1.03864064 | 0.08744679 | 0.00478505 | 506.161782 | 0.00455691 | 0.00806943 | 0.00772035 | 0.07956158 |
| SAN DIEGO | 2050 | LDT1 | Aggregated | 20 | GAS | 275034.534 | 0.00345317 | 0.00503886 | 0.52386633 | 0.02276984 | 0.00286523 | 289.539868 | 0.00125652 | 0.00104689 | 0.00096257 | 0.00374034 |
| SAN DIEGO | 2050 | LDT1 | Aggregated | 20 | DSL | 38.5450891 | 0.03826653 | 0.0435639 | 0.40496837 | 0.05844956 | 0.00393128 | 415.850547 | 0.00177741 | 0.00686775 | 0.00657065 | 0.06536591 |
| SAN DIEGO | 2050 | LDT1 | Aggregated | 25 | GAS | 784627.406 | 0.00254876 | 0.00371915 | 0.48054655 | 0.02079761 | 0.00244857 | 247.434967 | 0.00092743 | 0.00077338 | 0.00071109 | 0.00341636 |
| SAN DIEGO | 2050 | LDT1 | Aggregated | 25 | DSL | 109.962676 | 0.02301987 | 0.02620659 | 0.24361342 | 0.04508264 | 0.00329624 | 348.675693 | 0.00106923 | 0.00587837 | 0.00562407 | 0.05480696 |
| SAN DIEGO | 2050 | LDT1 | Aggregated | 30 | GAS | 685011.859 | 0.0019859 | 0.00289782 | 0.44226078 | 0.01927142 | 0.00217265 | 219.552938 | 0.00072262 | 0.00060272 | 0.00055418 | 0.00316566 |
| SAN DIEGO | 2050 | LDT1 | Aggregated | 30 | DSL | 96.0019192 | 0.01740443 | 0.01981379 | 0.18424278 | 0.03805873 | 0.00285031 | 301.5058 | 0.0008084 | 0.00520233 | 0.00497728 | 0.04739251 |
| SAN DIEGO | 2050 | LDT1 | Aggregated | 35 | GAS | 786811.471 | 0.00163221 | 0.00238172 | 0.40811604 | 0.01815366 | 0.0020137 | 203.490232 | 0.00059392 | 0.00049554 | 0.00045563 | 0.00298204 |
| SAN DIEGO | 2050 | LDT1 | Aggregated | 35 | DSL | 110.268764 | 0.0138521 | 0.0157697 | 0.14670643 | 0.03339768 | 0.00257252 | 272.120572 | 0.0006434 | 0.00470085 | 0.00449749 | 0.04277356 |
| SAN DIEGO | 2050 | LDT1 | Aggregated | 40 | GAS | 476509.996 | 0.00141508 | 0.00206488 | 0.37756526 | 0.01737793 | 0.00194866 | 196.9178 | 0.00051491 | 0.00042981 | 0.00039519 | 0.00285462 |
| SAN DIEGO | 2050 | LDT1 | Aggregated | 40 | DSL | 66.7811418 | 0.01143318 | 0.01301434 | 0.12115517 | 0.03009751 | 0.00240098 | 253.975716 | 0.00053099 | 0.0043121 | 0.00412556 | 0.03992145 |
| SAN DIEGO | 2050 | LDT1 | Aggregated | 45 | GAS | 349612.662 | 0.00129543 | 0.00189028 | 0.35054864 | 0.01686929 | 0.00195547 | 197.60554 | 0.00047137 | 0.00039328 | 0.00036161 | 0.00277106 |
| SAN DIEGO | 2050 | LDT1 | Aggregated | 45 | DSL | 48.9969423 | 0.00969274 | 0.01103454 | 0.10282611 | 0.02764598 | 0.00231496 | 244.875677 | 0.00045021 | 0.0040012 | 0.00382811 | 0.03849105 |
| SAN DIEGO | 2050 | LDT1 | Aggregated | 50 | GAS | 228755.964 | 0.00124894 | 0.00182245 | 0.3257873 | 0.01669888 | 0.00201122 | 203.239546 | 0.00045445 | 0.00037964 | 0.00034906 | 0.00274307 |
| SAN DIEGO | 2050 | LDT1 | Aggregated | 50 | DSL | 32.0593158 | 0.00839289 | 0.00955474 | 0.08916914 | 0.0257722 | 0.0023188 | 245.282471 | 0.00038983 | 0.00374699 | 0.0035849 | 0.03855499 |
| SAN DIEGO | 2050 | LDT1 | Aggregated | 55 | GAS | 198342.782 | 0.00127739 | 0.00186396 | 0.30516066 | 0.01657591 | 0.00209708 | 211.916037 | 0.00046481 | 0.00038661 | 0.00035547 | 0.00272289 |
| SAN DIEGO | 2050 | LDT1 | Aggregated | 55 | DSL | 27.797019 | 0.00739215 | 0.00841547 | 0.07871872 | 0.02426554 | 0.0024245 | 256.462805 | 0.00034335 | 0.00353607 | 0.0033831 | 0.04031238 |
| SAN DIEGO | 2050 | LDT1 | Aggregated | 60 | GAS | 226028.1 | 0.00137097 | 0.00200052 | 0.28533582 | 0.01695842 | 0.00218087 | 220.383602 | 0.00049886 | 0.00041534 | 0.00038189 | 0.00278572 |
| SAN DIEGO | 2050 | LDT1 | Aggregated | 60 | DSL | 31.6770157 | 0.00698328 | 0.00795 | 0.07460457 | 0.02371699 | 0.00262623 | 277.801718 | 0.00032436 | 0.0034486 | 0.00329942 | 0.04366656 |
| SAN DIEGO | 2050 | LDT1 | Aggregated | 65 | GAS | 2412325.26 | 0.00154724 | 0.00225772 | 0.26673692 | 0.01776926 | 0.0022433 | 226.691813 | 0.000563 | 0.00047073 | 0.00043282 | 0.00291889 |
| SAN DIEGO | 2050 | LDT1 | Aggregated | 65 | DSL | 338.078607 | 0.00700519 | 0.00797494 | 0.07516789 | 0.02387687 | 0.00294984 | 312.033847 | 0.00032538 | 0.00346202 | 0.00331225 | 0.04904738 |

| Region | Calendar Year | Vehicle Categ | Model Year | Speed | Fuel | VMT | ROG_RUNEX | TOG_RUNEX | CO_RUNEX | NOx_RUNEX | SOx_RUNEX | CO2_RUNEX | CH4_RUNEX | PM10_RUNEX | PM2_5_RUNEX | N2O_RUNEX |
|-----------|---------------|---------------|------------|-------|------|------------|------------|------------|------------|------------|------------|------------|------------|------------|-------------|------------|
| SAN DIEGO | 2050 | LDT2 | Aggregated | 5 | GAS | 29888.9075 | 0.01554042 | 0.02267654 | 0.77984481 | 0.03024946 | 0.00512455 | 517.850145 | 0.00547252 | 0.0034647 | 0.00318566 | 0.00513811 |
| SAN DIEGO | 2050 | LDT2 | Aggregated | 5 | DSL | 310.746173 | 0.2651557 | 0.30186213 | 2.73508035 | 0.15217467 | 0.00478499 | 506.155106 | 0.01231598 | 0.00935008 | 0.0089456 | 0.07956053 |
| SAN DIEGO | 2050 | LDT2 | Aggregated | 10 | GAS | 100521.564 | 0.00980453 | 0.01430675 | 0.712697 | 0.02619771 | 0.00416651 | 421.038218 | 0.00345265 | 0.00217998 | 0.00200441 | 0.00444991 |
| SAN DIEGO | 2050 | LDT2 | Aggregated | 10 | DSL | 1045.09311 | 0.19849322 | 0.22597134 | 2.04746003 | 0.12641724 | 0.00402784 | 426.064425 | 0.00921963 | 0.00878625 | 0.00840616 | 0.06697139 |
| SAN DIEGO | 2050 | LDT2 | Aggregated | 15 | GAS | 254486.912 | 0.00652554 | 0.00952206 | 0.65255012 | 0.02299616 | 0.00341206 | 344.79831 | 0.00229796 | 0.00144702 | 0.00133048 | 0.00390611 |
| SAN DIEGO | 2050 | LDT2 | Aggregated | 15 | DSL | 2645.82551 | 0.09692226 | 0.11033955 | 0.9997519 | 0.08453975 | 0.00333974 | 353.277628 | 0.00450185 | 0.00766201 | 0.00733055 | 0.05553032 |
| SAN DIEGO | 2050 | LDT2 | Aggregated | 20 | GAS | 762719.486 | 0.004566 | 0.00666269 | 0.59709896 | 0.02067373 | 0.00283618 | 286.604049 | 0.00160791 | 0.00101328 | 0.00093168 | 0.00351162 |
| SAN DIEGO | 2050 | LDT2 | Aggregated | 20 | DSL | 7929.76998 | 0.0376834 | 0.04290004 | 0.38870142 | 0.05559291 | 0.00274385 | 290.244542 | 0.00175032 | 0.00653832 | 0.00625548 | 0.0456224 |
| SAN DIEGO | 2050 | LDT2 | Aggregated | 25 | GAS | 2175910.79 | 0.00337013 | 0.00491768 | 0.54772166 | 0.01888301 | 0.0024239 | 244.941608 | 0.00118678 | 0.00074855 | 0.00068827 | 0.00320745 |
| SAN DIEGO | 2050 | LDT2 | Aggregated | 25 | DSL | 22622.304 | 0.02262054 | 0.02575198 | 0.23332941 | 0.04218296 | 0.00230062 | 243.359586 | 0.00105068 | 0.00560506 | 0.00536259 | 0.03825274 |
| SAN DIEGO | 2050 | LDT2 | Aggregated | 30 | GAS | 1899659.24 | 0.00262587 | 0.00383167 | 0.50408347 | 0.01749731 | 0.00215082 | 217.346189 | 0.0009247 | 0.00058338 | 0.00053639 | 0.00297207 |
| SAN DIEGO | 2050 | LDT2 | Aggregated | 30 | DSL | 19750.1979 | 0.01708698 | 0.01945239 | 0.17625232 | 0.0350773 | 0.00198939 | 210.437171 | 0.00079366 | 0.00496641 | 0.00475157 | 0.03307779 |
| SAN DIEGO | 2050 | LDT2 | Aggregated | 35 | GAS | 2181967.59 | 0.0021582 | 0.00314925 | 0.46516518 | 0.01648243 | 0.00199348 | 201.446644 | 0.00076001 | 0.00047963 | 0.00044101 | 0.00279969 |
| SAN DIEGO | 2050 | LDT2 | Aggregated | 35 | DSL | 22685.2748 | 0.01358665 | 0.0154675 | 0.14014787 | 0.03031876 | 0.0017955 | 189.927635 | 0.00063107 | 0.00449065 | 0.00429639 | 0.02985398 |
| SAN DIEGO | 2050 | LDT2 | Aggregated | 40 | GAS | 1321446.63 | 0.0018711 | 0.0027303 | 0.43034311 | 0.0157781 | 0.00192908 | 194.9393 | 0.0006589 | 0.00041601 | 0.00038251 | 0.00268005 |
| SAN DIEGO | 2050 | LDT2 | Aggregated | 40 | DSL | 13738.6916 | 0.01119994 | 0.01275039 | 0.11553041 | 0.02691162 | 0.00167578 | 177.26336 | 0.00052022 | 0.00411957 | 0.00394136 | 0.02786333 |
| SAN DIEGO | 2050 | LDT2 | Aggregated | 45 | GAS | 969537.846 | 0.00171288 | 0.00249944 | 0.39955058 | 0.0153163 | 0.00193572 | 195.610016 | 0.00060319 | 0.00038066 | 0.00035 | 0.00260161 |
| SAN DIEGO | 2050 | LDT2 | Aggregated | 45 | DSL | 10079.9996 | 0.00948185 | 0.01079445 | 0.09780996 | 0.02434744 | 0.00161573 | 170.911952 | 0.00044041 | 0.00382028 | 0.00365501 | 0.02686498 |
| SAN DIEGO | 2050 | LDT2 | Aggregated | 50 | GAS | 634380.811 | 0.00165141 | 0.00240973 | 0.37132621 | 0.01516154 | 0.00199093 | 201.188752 | 0.00058154 | 0.00036745 | 0.00033786 | 0.00257532 |
| SAN DIEGO | 2050 | LDT2 | Aggregated | 50 | DSL | 6595.47055 | 0.00819327 | 0.0093275 | 0.08452047 | 0.02235573 | 0.00161842 | 171.195875 | 0.00038056 | 0.00357268 | 0.00341813 | 0.02690961 |
| SAN DIEGO | 2050 | LDT2 | Aggregated | 55 | GAS | 550039.67 | 0.00168904 | 0.00246465 | 0.34782146 | 0.01505004 | 0.00207551 | 209.736485 | 0.00059479 | 0.0003742 | 0.00034406 | 0.00255639 |
| SAN DIEGO | 2050 | LDT2 | Aggregated | 55 | DSL | 5718.60053 | 0.00719533 | 0.00819141 | 0.07422971 | 0.02073259 | 0.00169219 | 178.999234 | 0.00033421 | 0.00336371 | 0.0032182 | 0.02813619 |
| SAN DIEGO | 2050 | LDT2 | Aggregated | 60 | GAS | 626815.963 | 0.00181279 | 0.00264521 | 0.32522419 | 0.01539731 | 0.00215844 | 218.116261 | 0.00063837 | 0.00040201 | 0.00036963 | 0.00261538 |
| SAN DIEGO | 2050 | LDT2 | Aggregated | 60 | DSL | 6516.82105 | 0.00677737 | 0.00771558 | 0.06992278 | 0.02005647 | 0.00183298 | 193.892813 | 0.0003148 | 0.00327092 | 0.00312942 | 0.03047725 |
| SAN DIEGO | 2050 | LDT2 | Aggregated | 65 | GAS | 6689805.31 | 0.00204583 | 0.00298528 | 0.30402105 | 0.01613335 | 0.00222049 | 224.386763 | 0.00072044 | 0.00045562 | 0.00041893 | 0.00274038 |
| SAN DIEGO | 2050 | LDT2 | Aggregated | 65 | DSL | 69551.9365 | 0.00677781 | 0.00771608 | 0.06993419 | 0.02008202 | 0.00205885 | 217.785264 | 0.00031482 | 0.00327119 | 0.00312968 | 0.03423281 |
| SAN DIEGO | 2050 | LHD1 | Aggregated | 5 | GAS | 35487.1396 | 0.02075347 | 0.03028341 | 0.21428272 | 0.21414473 | 0.01494257 | 1509.9894 | 0.00666657 | 0.00776075 | 0.00713572 | 0.01460038 |
| SAN DIEGO | 2050 | LHD1 | Aggregated | 5 | DSL | 25844.246 | 0.75872432 | 0.8637572 | 3.55643666 | 0.22716937 | 0.00894604 | 946.31122 | 0.03524129 | 0.01208504 | 0.01156224 | 0.14874695 |
| SAN DIEGO | 2050 | LHD1 | Aggregated | 10 | GAS | 92535.5866 | 0.01309106 | 0.01910244 | 0.19562473 | 0.18536903 | 0.01213026 | 1225.79786 | 0.0042052 | 0.00488304 | 0.00448978 | 0.01263846 |
| SAN DIEGO | 2050 | LHD1 | Aggregated | 10 | DSL | 85943.8973 | 0.56792942 | 0.64654988 | 2.66215184 | 0.18984524 | 0.00752055 | 795.522232 | 0.02637924 | 0.01130765 | 0.01081848 | 0.12504502 |
| SAN DIEGO | 2050 | LHD1 | Aggregated | 15 | GAS | 210716.008 | 0.00868738 | 0.0126766 | 0.17859556 | 0.16373535 | 0.00992015 | 1002.45997 | 0.00279062 | 0.00324125 | 0.00298021 | 0.01116348 |
| SAN DIEGO | 2050 | LHD1 | Aggregated | 15 | DSL | 186129.861 | 0.27745752 | 0.31586694 | 1.30071283 | 0.12902997 | 0.00491155 | 519.542588 | 0.01288737 | 0.00984082 | 0.00941511 | 0.08166486 |
| SAN DIEGO | 2050 | LHD1 | Aggregated | 20 | GAS | 243480.711 | 0.00607216 | 0.00886049 | 0.16323729 | 0.14730664 | 0.00824602 | 833.284073 | 0.00195054 | 0.00226971 | 0.00208691 | 0.01004336 |
| SAN DIEGO | 2050 | LHD1 | Aggregated | 20 | DSL | 204058.447 | 0.10803783 | 0.12299389 | 0.50664939 | 0.08697102 | 0.00418635 | 442.831602 | 0.00501815 | 0.00838838 | 0.00802551 | 0.06960696 |
| SAN DIEGO | 2050 | LHD1 | Aggregated | 25 | GAS | 187555.212 | 0.00446542 | 0.00651593 | 0.14921572 | 0.13524137 | 0.00704829 | 712.249426 | 0.00143441 | 0.00167672 | 0.00154169 | 0.00922072 |
| SAN DIEGO | 2050 | LHD1 | Aggregated | 25 | DSL | 218396.977 | 0.0649182 | 0.07390506 | 0.30455442 | 0.06766798 | 0.00371289 | 392.749457 | 0.00301533 | 0.00718646 | 0.00687557 | 0.06173475 |
| SAN DIEGO | 2050 | LHD1 | Aggregated | 30 | GAS | 165860.361 | 0.00348322 | 0.0050827 | 0.13748665 | 0.12510633 | 0.00625417 | 632.001962 | 0.0011189 | 0.00130673 | 0.00120149 | 0.00852972 |
| SAN DIEGO | 2050 | LHD1 | Aggregated | 30 | DSL | 184354.718 | 0.04905854 | 0.05584988 | 0.23023531 | 0.05755526 | 0.00337171 | 356.658966 | 0.00227868 | 0.00636446 | 0.00608914 | 0.05606182 |
| SAN DIEGO | 2050 | LHD1 | Aggregated | 35 | GAS | 61975.9919 | 0.00284415 | 0.00415018 | 0.12607324 | 0.119007 | 0.00579748 | 585.851949 | 0.00091362 | 0.00107435 | 0.00098783 | 0.00811383 |
| SAN DIEGO | 2050 | LHD1 | Aggregated | 35 | DSL | 97291.1416 | 0.03902601 | 0.04442852 | 0.18323973 | 0.05091584 | 0.00337171 | 356.658966 | 0.00181268 | 0.0057532 | 0.00550432 | 0.05606182 |
| SAN DIEGO | 2050 | LHD1 | Aggregated | 40 | GAS | 18293.8995 | 0.00243363 | 0.00355114 | 0.11517647 | 0.11614685 | 0.00561205 | 567.113824 | 0.00078175 | 0.00093184 | 0.0008568 | 0.00791877 |
| SAN DIEGO | 2050 | LHD1 | Aggregated | 40 | DSL | 53409.6566 | 0.03218777 | 0.03664364 | 0.15123092 | 0.04624566 | 0.00327941 | 346.894985 | 0.00149506 | 0.00527763 | 0.00504933 | 0.05452706 |
| SAN DIEGO | 2050 | LHD1 | Aggregated | 45 | GAS | 22521.4002 | 0.00223442 | 0.00326046 | 0.1072443 | 0.11230042 | 0.00563177 | 569.106008 | 0.00071776 | 0.00085265 | 0.00078398 | 0.00765656 |
| SAN DIEGO | 2050 | LHD1 | Aggregated | 45 | DSL | 57646.5847 | 0.02726947 | 0.03104448 | 0.12824175 | 0.04277837 | 0.0031988 | 338.368763 | 0.00126661 | 0.00489541 | 0.00468364 | 0.05318686 |
| SAN DIEGO | 2050 | LHD1 | Aggregated | 50 | GAS | 166294.881 | 0.00218566 | 0.0031893 | 0.10108056 | 0.10872675 | 0.00579706 | 585.809494 | 0.00070209 | 0.00082307 | 0.00075679 | 0.00741297 |
| SAN DIEGO | 2050 | LHD1 | Aggregated | 50 | DSL | 222591.73 | 0.02358664 | 0.02685182 | 0.11107347 | 0.04013955 | 0.00335352 | 354.73442 | 0.00109555 | 0.00458072 | 0.00438256 | 0.05575931 |
| SAN DIEGO | 2050 | LHD1 | Aggregated | 55 | GAS | 45738.9452 | 0.00218879 | 0.00319387 | 0.09281012 | 0.11189159 | 0.0060351 | 609.863789 | 0.0007031 | 0.00083818 | 0.00077068 | 0.00762865 |
| SAN DIEGO | 2050 | LHD1 | Aggregated | 55 | DSL | 134046.762 | 0.02074234 | 0.02361378 | 0.09788097 | 0.03813281 | 0.00350431 | 370.68488 | 0.00096344 | 0.00431695 | 0.0041302 | 0.0582665 |
| SAN DIEGO | 2050 | LHD2 | Aggregated | 5 | GAS | 6284.70974 | 0.02056563 | 0.03000932 | 0.21511644 | 0.23844902 | 0.01713315 | 1731.35405 | 0.00657551 | 0.00777493 | 0.00714876 | 0.0158065 |
| SAN DIEGO | 2050 | LHD2 | Aggregated | 5 | DSL | 10199.4305 | 0.76180316 | 0.86726225 | 3.60817441 | 0.25434882 | 0.00948961 | 1003.80928 | 0.0353843 | 0.02980436 | 0.02851504 | 0.15778484 |
| SAN DIEGO | 2050 | LHD2 | Aggregated | 10 | GAS | 16387.8889 | 0.01297257 | 0.01892955 | 0.19638586 | 0.2063351 | 0.01390854 | 1405.49761 | 0.00414776 | 0.00489197 | 0.00449798 | 0.01367771 |
| SAN DIEGO | 2050 | LHD2 | Aggregated | 10 | DSL | 33917.7551 | 0.57005146 | 0.64896569 | 2.70020203 | 0.21674236 | 0.00843371 | 892.116666 | 0.0264778 | 0.02776286 | 0.02656186 | 0.14022832 |
| SAN DIEGO | 2050 | LHD2 | Aggregated | 15 | GAS | 37317.4328 | 0.00860875 | 0.01256187 | 0.17929043 | 0.18222486 | 0.0113744 | 1149.41594 | 0.0027525 | 0.00324717 | 0.00298566 | 0.01207947 |
| SAN DIEGO | 2050 | LHD2 | Aggregated | 15 | DSL | 73456.1408 | 0.27907626 | 0.31770977 | 1.3225647 | 0.15488363 | 0.00561407 | 593.855238 | 0.01296256 | 0.02411026 | 0.02306726 | 0.09334577 |
| SAN DIEGO | 2050 | LHD2 | Aggregated | 20 | GAS | 43120.0039 | 0.00601721 | 0.00878029 | 0.16387241 | 0.16402544 | 0.00945482 | 955.437067 | 0.0019239 | 0.00227385 | 0.00209073 | 0.01087305 |
| SAN DIEGO | 2050 | LHD2 | Aggregated | 20 | DSL | 80531.6566 | 0.10932716 | 0.12446171 | 0.51890523 | 0.11241751 | 0.00478839 | 506.51483 | 0.00507804 | 0.02052804 | 0.01964001 | 0.07961708 |
| SAN DIEGO | 2050 | LHD2 | Aggregated | 25 | GAS | 33215.6967 | 0.004425 | 0.00645695 | 0.14979629 | 0.15104061 | 0.00808149 | 816.657971 | 0.00141482 | 0.00167979 | 0.0015445 | 0.0100123 |
| SAN DIEGO | 2050 | LHD2 | Aggregated | 25 | DSL | 86190.35 | | | | | | | | | | |

| Region | Calendar Year | Vehicle Categ | Model Year | Speed | Fuel | VMT | ROG_RUNEX | TOG_RUNEX | CO_RUNEX | NOx_RUNEX | SOx_RUNEX | CO2_RUNEX | CH4_RUNEX | PM10_RUNEX | PM2_5_RUNEX | N2O_RUNEX |
|-----------|---------------|---------------|------------|-------|------|--------------|------------|------------|------------|------------|------------|------------|------------|------------|-------------|------------|
| SAN DIEGO | 2050 | LHD2 | Aggregated | 30 | GAS | 29373.5769 | 0.00345169 | 0.0050367 | 0.13802158 | 0.13965043 | 0.00717096 | 724.646214 | 0.00110362 | 0.00130912 | 0.00120369 | 0.00925726 |
| SAN DIEGO | 2050 | LHD2 | Aggregated | 30 | DSL | 72755.581 | 0.04992935 | 0.05684125 | 0.23780639 | 0.08420333 | 0.00384834 | 407.076336 | 0.00231912 | 0.01555648 | 0.01488351 | 0.06398673 |
| SAN DIEGO | 2050 | LHD2 | Aggregated | 35 | GAS | 10975.8387 | 0.00281841 | 0.00411262 | 0.12656377 | 0.13346351 | 0.00664733 | 671.731707 | 0.00090114 | 0.00107632 | 0.00098963 | 0.00884714 |
| SAN DIEGO | 2050 | LHD2 | Aggregated | 35 | DSL | 38395.9445 | 0.03978875 | 0.04529685 | 0.18993158 | 0.07854421 | 0.00384834 | 407.076336 | 0.00184811 | 0.01405832 | 0.01345016 | 0.06398673 |
| SAN DIEGO | 2050 | LHD2 | Aggregated | 40 | GAS | 3239.81729 | 0.0024116 | 0.003519 | 0.11562459 | 0.13116017 | 0.00643474 | 650.248537 | 0.00077107 | 0.00093355 | 0.00085836 | 0.00869445 |
| SAN DIEGO | 2050 | LHD2 | Aggregated | 40 | DSL | 21078.1185 | 0.03288687 | 0.03743951 | 0.15746263 | 0.07491047 | 0.00370778 | 392.207973 | 0.00152753 | 0.01289587 | 0.012338 | 0.06164963 |
| SAN DIEGO | 2050 | LHD2 | Aggregated | 45 | GAS | 3988.5002 | 0.0022142 | 0.00323095 | 0.10766156 | 0.12630154 | 0.00645736 | 652.534786 | 0.00070795 | 0.00085421 | 0.00078542 | 0.00837238 |
| SAN DIEGO | 2050 | LHD2 | Aggregated | 45 | DSL | 22750.222 | 0.02794009 | 0.03180793 | 0.13435062 | 0.07240997 | 0.00356408 | 377.008197 | 0.00129776 | 0.01196501 | 0.01144741 | 0.05926044 |
| SAN DIEGO | 2050 | LHD2 | Aggregated | 50 | GAS | 29450.5296 | 0.00216587 | 0.00316044 | 0.10147384 | 0.12137583 | 0.00664691 | 671.689123 | 0.0006925 | 0.00082458 | 0.00075817 | 0.00804586 |
| SAN DIEGO | 2050 | LHD2 | Aggregated | 50 | DSL | 87845.8158 | 0.02425991 | 0.0276183 | 0.11738173 | 0.07077378 | 0.00369535 | 390.894044 | 0.00112683 | 0.01120251 | 0.0107179 | 0.0614431 |
| SAN DIEGO | 2050 | LHD2 | Aggregated | 55 | GAS | 8100.2864 | 0.00216898 | 0.00316496 | 0.09317122 | 0.12637069 | 0.00691987 | 699.272645 | 0.00069349 | 0.00083971 | 0.00077209 | 0.00837696 |
| SAN DIEGO | 2050 | LHD2 | Aggregated | 55 | DSL | 52901.5484 | 0.02144971 | 0.02441906 | 0.10475309 | 0.06997362 | 0.00382487 | 404.594163 | 0.0009963 | 0.01056819 | 0.01011101 | 0.06359657 |
| SAN DIEGO | 2050 | MCY | Aggregated | 5 | GAS | 1035.10153 | 12.4835545 | 15.6803667 | 41.2544217 | 1.64885641 | 0.00529167 | 534.73889 | 1.86416776 | 0.0139546 | 0.01300854 | 0.09505495 |
| SAN DIEGO | 2050 | MCY | Aggregated | 10 | GAS | 3481.22543 | 8.06153331 | 10.1257999 | 31.8780453 | 1.47353586 | 0.00419391 | 423.806488 | 1.20379372 | 0.00896994 | 0.00836181 | 0.08494618 |
| SAN DIEGO | 2050 | MCY | Aggregated | 15 | GAS | 8813.29613 | 5.48565985 | 6.89024795 | 25.7275102 | 1.33818344 | 0.0033835 | 341.911964 | 0.81912857 | 0.00608169 | 0.00566938 | 0.07714182 |
| SAN DIEGO | 2050 | MCY | Aggregated | 20 | GAS | 26414.2177 | 3.94447824 | 4.95437588 | 21.7256861 | 1.2431944 | 0.00279506 | 282.448882 | 0.58897901 | 0.00434793 | 0.00405316 | 0.07166453 |
| SAN DIEGO | 2050 | MCY | Aggregated | 25 | GAS | 75355.3337 | 2.9889889 | 3.75420101 | 18.9556675 | 1.17339532 | 0.00238097 | 240.604085 | 0.44629542 | 0.00327661 | 0.00305447 | 0.06763958 |
| SAN DIEGO | 2050 | MCY | Aggregated | 30 | GAS | 65788.2925 | 2.38449498 | 2.99491303 | 17.0031193 | 1.12273771 | 0.00210569 | 212.785801 | 0.35602779 | 0.00260203 | 0.00242563 | 0.06471825 |
| SAN DIEGO | 2050 | MCY | Aggregated | 35 | GAS | 75565.0906 | 2.00345688 | 2.51630253 | 15.6790574 | 1.0895451 | 0.00194301 | 196.346367 | 0.29912848 | 0.00217679 | 0.00202922 | 0.06280386 |
| SAN DIEGO | 2050 | MCY | Aggregated | 40 | GAS | 45763.8485 | 1.77209289 | 2.22569136 | 14.8574438 | 1.07101882 | 0.0018697 | 188.938417 | 0.26457914 | 0.00191785 | 0.00178783 | 0.06173507 |
| SAN DIEGO | 2050 | MCY | Aggregated | 45 | GAS | 33576.6743 | 1.64811311 | 2.06996034 | 14.4650448 | 1.06373724 | 0.00186453 | 188.415742 | 0.24606473 | 0.00177908 | 0.00165846 | 0.06131461 |
| SAN DIEGO | 2050 | MCY | Aggregated | 50 | GAS | 21969.6404 | 1.61517152 | 2.02857117 | 14.5919205 | 1.0712286 | 0.00191162 | 193.174952 | 0.2411428 | 0.00173724 | 0.00161947 | 0.06174584 |
| SAN DIEGO | 2050 | MCY | Aggregated | 55 | GAS | 19048.7694 | 1.65548098 | 2.07919477 | 15.0908631 | 1.07922456 | 0.00198764 | 200.85677 | 0.24716025 | 0.00178539 | 0.00166435 | 0.06220637 |
| SAN DIEGO | 2050 | MCY | Aggregated | 60 | GAS | 21707.6574 | 1.79511387 | 2.25455504 | 16.5172864 | 1.11015332 | 0.00208372 | 210.566338 | 0.26800458 | 0.00193083 | 0.00179993 | 0.06398889 |
| SAN DIEGO | 2050 | MCY | Aggregated | 65 | GAS | 231678.85 | 2.05448766 | 2.58029641 | 19.2086282 | 1.16029591 | 0.00218925 | 221.22951 | 0.30672438 | 0.00219711 | 0.00204816 | 0.06687905 |
| SAN DIEGO | 2050 | MDV | Aggregated | 5 | GAS | 19117.5289 | 0.01567704 | 0.0228759 | 0.78108567 | 0.03142282 | 0.00620663 | 627.197519 | 0.00552236 | 0.00346626 | 0.0031871 | 0.00526123 |
| SAN DIEGO | 2050 | MDV | Aggregated | 5 | DSL | 698.333982 | 0.08543557 | 0.09726271 | 2.850431 | 0.04458207 | 0.00585076 | 618.89234 | 0.00396832 | 0.00171694 | 0.00164266 | 0.09728126 |
| SAN DIEGO | 2050 | MDV | Aggregated | 10 | GAS | 64295.5551 | 0.00989073 | 0.01443253 | 0.71383258 | 0.02721389 | 0.00504493 | 509.804714 | 0.00348409 | 0.00218097 | 0.00200532 | 0.00455654 |
| SAN DIEGO | 2050 | MDV | Aggregated | 10 | DSL | 2348.61793 | 0.06395536 | 0.07280892 | 2.13380786 | 0.03704995 | 0.00496872 | 525.590246 | 0.0029706 | 0.0016104 | 0.00154074 | 0.08261547 |
| SAN DIEGO | 2050 | MDV | Aggregated | 15 | GAS | 162774.798 | 0.00658292 | 0.00960578 | 0.65359106 | 0.02388814 | 0.00413042 | 417.390587 | 0.00231889 | 0.00144767 | 0.00133108 | 0.00399971 |
| SAN DIEGO | 2050 | MDV | Aggregated | 15 | DSL | 5945.91349 | 0.03123181 | 0.03555534 | 1.04192794 | 0.0248019 | 0.00421381 | 445.735824 | 0.00145066 | 0.00140311 | 0.00134242 | 0.07006346 |
| SAN DIEGO | 2050 | MDV | Aggregated | 20 | GAS | 487850.277 | 0.00460614 | 0.00672127 | 0.59805116 | 0.02147563 | 0.0034333 | 346.944312 | 0.00162255 | 0.00101374 | 0.0009321 | 0.00359577 |
| SAN DIEGO | 2050 | MDV | Aggregated | 20 | DSL | 17820.4217 | 0.01214639 | 0.01382786 | 0.40511472 | 0.01633688 | 0.00349955 | 370.181837 | 0.00056418 | 0.00119677 | 0.001145 | 0.05818743 |
| SAN DIEGO | 2050 | MDV | Aggregated | 25 | GAS | 1391755.03 | 0.00339976 | 0.00496092 | 0.5485948 | 0.01961546 | 0.00293427 | 296.516571 | 0.00119759 | 0.00074889 | 0.00068858 | 0.00328431 |
| SAN DIEGO | 2050 | MDV | Aggregated | 25 | DSL | 50838.6748 | 0.00729261 | 0.00830215 | 0.24318892 | 0.01241728 | 0.00295923 | 313.026834 | 0.00033873 | 0.00102566 | 0.00098129 | 0.04920346 |
| SAN DIEGO | 2050 | MDV | Aggregated | 30 | GAS | 1215059.14 | 0.00264896 | 0.00386536 | 0.50488695 | 0.01817601 | 0.00260369 | 263.109905 | 0.00093312 | 0.00058364 | 0.00053663 | 0.00304329 |
| SAN DIEGO | 2050 | MDV | Aggregated | 30 | DSL | 44384.2452 | 0.0055091 | 0.00627174 | 0.18370297 | 0.01034206 | 0.00255585 | 270.357702 | 0.00025589 | 0.0009086 | 0.0008693 | 0.04249647 |
| SAN DIEGO | 2050 | MDV | Aggregated | 35 | GAS | 1395629.08 | 0.00217718 | 0.00317693 | 0.46590653 | 0.01712177 | 0.00241328 | 243.86885 | 0.00076693 | 0.00047985 | 0.0004412 | 0.00286677 |
| SAN DIEGO | 2050 | MDV | Aggregated | 35 | DSL | 50980.1878 | 0.00438091 | 0.00498737 | 0.14607503 | 0.00895356 | 0.00231908 | 245.312228 | 0.00020348 | 0.00082147 | 0.00078593 | 0.03855967 |
| SAN DIEGO | 2050 | MDV | Aggregated | 40 | GAS | 845223.07 | 0.00188755 | 0.00275431 | 0.43102882 | 0.01639012 | 0.00233547 | 236.005463 | 0.0006649 | 0.0004162 | 0.00038268 | 0.00274427 |
| SAN DIEGO | 2050 | MDV | Aggregated | 40 | DSL | 30874.7012 | 0.0036117 | 0.00411168 | 0.12041937 | 0.00796046 | 0.00216918 | 229.455846 | 0.00016776 | 0.00075357 | 0.00072098 | 0.03606726 |
| SAN DIEGO | 2050 | MDV | Aggregated | 45 | GAS | 620135.339 | 0.00172794 | 0.00252141 | 0.40018735 | 0.0159104 | 0.00234354 | 236.821394 | 0.00060868 | 0.00038083 | 0.00035016 | 0.00266395 |
| SAN DIEGO | 2050 | MDV | Aggregated | 45 | DSL | 22652.5919 | 0.00305807 | 0.00348141 | 0.10195243 | 0.00721398 | 0.00208753 | 220.818118 | 0.00014204 | 0.0006989 | 0.00066867 | 0.03470953 |
| SAN DIEGO | 2050 | MDV | Aggregated | 50 | GAS | 405762.354 | 0.00166593 | 0.00243092 | 0.37191767 | 0.01574964 | 0.00241072 | 243.610632 | 0.00058684 | 0.00036762 | 0.00033801 | 0.00263703 |
| SAN DIEGO | 2050 | MDV | Aggregated | 50 | DSL | 14821.8759 | 0.00264297 | 0.00300885 | 0.0881043 | 0.00663504 | 0.00209799 | 221.924631 | 0.00012276 | 0.00065376 | 0.00062548 | 0.03488346 |
| SAN DIEGO | 2050 | MDV | Aggregated | 55 | GAS | 351816.114 | 0.00170389 | 0.00248632 | 0.34837643 | 0.01563381 | 0.00251256 | 253.901853 | 0.00060021 | 0.00037437 | 0.00034422 | 0.00261765 |
| SAN DIEGO | 2050 | MDV | Aggregated | 55 | DSL | 12851.3025 | 0.00232167 | 0.00264306 | 0.07738262 | 0.00616383 | 0.00221411 | 234.208013 | 0.00010784 | 0.00061578 | 0.00058914 | 0.03681424 |
| SAN DIEGO | 2050 | MDV | Aggregated | 60 | GAS | 400923.73 | 0.00182872 | 0.00266847 | 0.32574293 | 0.01599454 | 0.00261322 | 264.073289 | 0.00064418 | 0.00040219 | 0.0003698 | 0.00267805 |
| SAN DIEGO | 2050 | MDV | Aggregated | 60 | DSL | 14645.1284 | 0.00218739 | 0.00249019 | 0.07289883 | 0.00596982 | 0.00239743 | 253.600149 | 0.0001016 | 0.00059911 | 0.00057319 | 0.03986241 |
| SAN DIEGO | 2050 | MDV | Aggregated | 65 | GAS | 4278930.11 | 0.00206382 | 0.00301152 | 0.30450518 | 0.01675915 | 0.00268917 | 271.747871 | 0.000727 | 0.00045583 | 0.00041912 | 0.00280605 |
| SAN DIEGO | 2050 | MDV | Aggregated | 65 | DSL | 156302.748 | 0.00218813 | 0.00249105 | 0.07291809 | 0.00598117 | 0.00269198 | 284.757422 | 0.00010163 | 0.00059957 | 0.00057363 | 0.0447599 |
| SAN DIEGO | 2050 | MH | Aggregated | 5 | GAS | 599.051814 | 0.04052463 | 0.05913345 | 0.2683584 | 0.37203374 | 0.0307948 | 3111.90234 | 0.01451387 | 0.00776421 | 0.00713891 | 0.03070067 |
| SAN DIEGO | 2050 | MH | Aggregated | 5 | DSL | 249.994304 | 0.76516219 | 0.87108628 | 2.15250697 | 10.5920787 | 0.01544976 | 1634.27375 | 0.03554032 | 0.03502568 | 0.03351048 | 0.25688507 |
| SAN DIEGO | 2050 | MH | Aggregated | 10 | GAS | 3011.43875 | 0.02549792 | 0.03720651 | 0.24439418 | 0.32330475 | 0.02499871 | 2526.1913 | 0.00913206 | 0.00488522 | 0.00449178 | 0.02667949 |
| SAN DIEGO | 2050 | MH | Aggregated | 10 | DSL | 1244.37747 | 0.57282229 | 0.65212009 | 1.61204761 | 8.80453537 | 0.01402845 | 1483.92759 | 0.0266065 | 0.0329604 | 0.03153455 | 0.23325275 |
| SAN DIEGO | 2050 | MH | Aggregated | 15 | GAS | 3803.96348 | 0.01696647 | 0.02475743 | 0.22370122 | 0.28400542 | 0.02044378 | 2065.90251 | 0.00607653 | 0.00324269 | 0.00298154 | 0.02343647 |
| SAN DIEGO | 2050 | MH | Aggregated | 15 | DSL | 1679.47768 | 0.279846 | 0.31858606 | 0.78863812 | 5.89155966 | 0.01151858 | 1218.43318 | 0.01299831 | 0.02883478 | 0.0275874 | 0.19152073 |
| SAN DIEGO | 2050 | MH | Aggregated | 20 | GAS | 3945.64433</ | | | | | | | | | | |

| Region | Calendar Year | Vehicle Categ | Model Year | Speed | Fuel | VMT | ROG_RUNEX | TOG_RUNEX | CO_RUNEX | NOx_RUNEX | SOx_RUNEX | CO2_RUNEX | CH4_RUNEX | PM10_RUNEX | PM2_5_RUNEX | N2O_RUNEX |
|-----------|---------------|---------------|------------|-------|------|------------|------------|------------|------------|------------|------------|------------|------------|------------|-------------|------------|
| SAN DIEGO | 2050 | MH | Aggregated | 20 | DSL | 1781.14711 | 0.10914105 | 0.12424983 | 0.30857424 | 3.88137541 | 0.00945236 | 999.869334 | 0.00506939 | 0.02471574 | 0.02364655 | 0.15716554 |
| SAN DIEGO | 2050 | MH | Aggregated | 25 | GAS | 4396.36005 | 0.00876809 | 0.01279437 | 0.18787398 | 0.23261701 | 0.01452508 | 1467.801 | 0.00314028 | 0.00167747 | 0.00154237 | 0.01919583 |
| SAN DIEGO | 2050 | MH | Aggregated | 25 | DSL | 1854.99408 | 0.06584771 | 0.07496324 | 0.18669345 | 2.94963752 | 0.00847838 | 896.842155 | 0.0030585 | 0.02134691 | 0.02042346 | 0.1409711 |
| SAN DIEGO | 2050 | MH | Aggregated | 30 | GAS | 4970.71128 | 0.00683726 | 0.00997692 | 0.17305259 | 0.21543467 | 0.01288851 | 1302.42097 | 0.00244876 | 0.00130732 | 0.00120203 | 0.01777793 |
| SAN DIEGO | 2050 | MH | Aggregated | 30 | DSL | 2230.4801 | 0.04990577 | 0.0568144 | 0.14201195 | 2.45624683 | 0.00795825 | 841.821977 | 0.00231803 | 0.0190985 | 0.01827231 | 0.13232269 |
| SAN DIEGO | 2050 | MH | Aggregated | 35 | GAS | 6177.83999 | 0.00560961 | 0.00818552 | 0.15941913 | 0.20355863 | 0.0119474 | 1207.31884 | 0.00200908 | 0.00107483 | 0.00098827 | 0.0167979 |
| SAN DIEGO | 2050 | MH | Aggregated | 35 | DSL | 2630.0298 | 0.03977789 | 0.04528448 | 0.11376055 | 2.12546312 | 0.00752659 | 796.16205 | 0.00184761 | 0.01749014 | 0.01673352 | 0.12514559 |
| SAN DIEGO | 2050 | MH | Aggregated | 40 | GAS | 7690.77397 | 0.00485419 | 0.00708323 | 0.1472243 | 0.19557444 | 0.01156538 | 1168.715 | 0.00173853 | 0.00093226 | 0.00085718 | 0.01613904 |
| SAN DIEGO | 2050 | MH | Aggregated | 40 | DSL | 3264.77258 | 0.032845 | 0.03739185 | 0.09454704 | 1.88856619 | 0.00718343 | 759.862375 | 0.00152559 | 0.01631797 | 0.01561206 | 0.11943978 |
| SAN DIEGO | 2050 | MH | Aggregated | 45 | GAS | 7013.4603 | 0.004449 | 0.00649197 | 0.13685276 | 0.18936652 | 0.01160611 | 1172.83052 | 0.00159341 | 0.00085303 | 0.00078433 | 0.01562675 |
| SAN DIEGO | 2050 | MH | Aggregated | 45 | DSL | 2673.41584 | 0.02783978 | 0.03169374 | 0.08079436 | 1.70813706 | 0.00692876 | 732.922952 | 0.0012931 | 0.01546686 | 0.01479777 | 0.11520528 |
| SAN DIEGO | 2050 | MH | Aggregated | 50 | GAS | 6825.53825 | 0.00428457 | 0.00625204 | 0.12706659 | 0.18817771 | 0.01194683 | 1207.26184 | 0.00153452 | 0.00082344 | 0.00075712 | 0.01552865 |
| SAN DIEGO | 2050 | MH | Aggregated | 50 | DSL | 2991.98708 | 0.02408127 | 0.02741492 | 0.07058053 | 1.5716423 | 0.00676257 | 715.343781 | 0.00111853 | 0.01486637 | 0.01422326 | 0.11244208 |
| SAN DIEGO | 2050 | MH | Aggregated | 55 | GAS | 8927.18234 | 0.00433969 | 0.00633247 | 0.11795078 | 0.1907777 | 0.01243757 | 1256.8521 | 0.00155426 | 0.00083856 | 0.00077102 | 0.0157432 |
| SAN DIEGO | 2050 | MH | Aggregated | 55 | DSL | 4384.48593 | 0.02117388 | 0.02410506 | 0.06278904 | 1.46276637 | 0.00668487 | 707.124861 | 0.00098349 | 0.01447075 | 0.01384476 | 0.11115018 |
| SAN DIEGO | 2050 | MH | Aggregated | 60 | GAS | 10301.5611 | 0.00464981 | 0.00678499 | 0.11007507 | 0.19512651 | 0.01294197 | 1307.82332 | 0.00166532 | 0.00090088 | 0.00082832 | 0.01610207 |
| SAN DIEGO | 2050 | MH | Aggregated | 60 | DSL | 5268.69461 | 0.01994167 | 0.02270227 | 0.05974574 | 1.41581912 | 0.00669566 | 708.266192 | 0.00092625 | 0.0145517 | 0.0139222 | 0.11132958 |
| SAN DIEGO | 2050 | MH | Aggregated | 65 | GAS | 1609.74932 | 0.00530653 | 0.00774328 | 0.103959 | 0.1993959 | 0.01333733 | 1347.7756 | 0.00190053 | 0.00102102 | 0.00093879 | 0.01645439 |
| SAN DIEGO | 2050 | MH | Aggregated | 65 | DSL | 829.14273 | 0.01992438 | 0.02268258 | 0.06015155 | 1.41346197 | 0.00679494 | 718.767776 | 0.00092545 | 0.01502815 | 0.01437804 | 0.11298028 |
| SAN DIEGO | 2050 | Motor Coach | Aggregated | 5 | DSL | 280.157472 | 0.11231085 | 0.12785736 | 1.91704422 | 11.8826878 | 0.02746914 | 2907.55485 | 0.00521655 | 0.00911988 | 0.00872536 | 0.45702713 |
| SAN DIEGO | 2050 | Motor Coach | Aggregated | 10 | DSL | 637.016899 | 0.07047609 | 0.08023166 | 1.17862445 | 8.94076234 | 0.02271113 | 2403.9296 | 0.00327343 | 0.00802006 | 0.00767311 | 0.37786426 |
| SAN DIEGO | 2050 | Motor Coach | Aggregated | 15 | DSL | 595.717622 | 0.0391808 | 0.04460435 | 0.63859204 | 6.24896549 | 0.01787176 | 1891.69135 | 0.00181985 | 0.00635383 | 0.00607896 | 0.29734754 |
| SAN DIEGO | 2050 | Motor Coach | Aggregated | 20 | DSL | 870.349371 | 0.0266152 | 0.03029938 | 0.42649476 | 4.93527178 | 0.0152622 | 1615.47468 | 0.00123621 | 0.00539882 | 0.00516527 | 0.25393012 |
| SAN DIEGO | 2050 | Motor Coach | Aggregated | 25 | DSL | 765.51238 | 0.02090131 | 0.02379455 | 0.32597028 | 3.84108661 | 0.01331908 | 1409.79905 | 0.00097081 | 0.00515503 | 0.00493203 | 0.22160078 |
| SAN DIEGO | 2050 | Motor Coach | Aggregated | 30 | DSL | 423.107062 | 0.01690499 | 0.01924504 | 0.25006834 | 2.85950139 | 0.01170131 | 1238.56053 | 0.00078519 | 0.00562247 | 0.00537924 | 0.19468447 |
| SAN DIEGO | 2050 | Motor Coach | Aggregated | 35 | DSL | 565.65523 | 0.01392231 | 0.01584949 | 0.18849514 | 2.07165637 | 0.01045859 | 1107.02105 | 0.00064666 | 0.00680112 | 0.00650691 | 0.17400829 |
| SAN DIEGO | 2050 | Motor Coach | Aggregated | 40 | DSL | 523.596099 | 0.01195328 | 0.01360789 | 0.14125068 | 1.47973553 | 0.00959092 | 1015.18061 | 0.0005552 | 0.008691 | 0.00831503 | 0.15957225 |
| SAN DIEGO | 2050 | Motor Coach | Aggregated | 45 | DSL | 697.502004 | 0.01099788 | 0.01252025 | 0.10833496 | 1.08486437 | 0.00909832 | 963.039196 | 0.00051082 | 0.0112921 | 0.01080361 | 0.15137635 |
| SAN DIEGO | 2050 | Motor Coach | Aggregated | 50 | DSL | 1026.64388 | 0.01105614 | 0.01258657 | 0.08974798 | 0.88662082 | 0.00898077 | 950.596822 | 0.00051353 | 0.01460442 | 0.01397264 | 0.14942058 |
| SAN DIEGO | 2050 | Motor Coach | Aggregated | 55 | DSL | 2464.67331 | 0.01212803 | 0.01380684 | 0.08548975 | 0.88406894 | 0.00923827 | 977.853485 | 0.00056332 | 0.01862796 | 0.01782212 | 0.15370495 |
| SAN DIEGO | 2050 | Motor Coach | Aggregated | 60 | DSL | 8993.70385 | 0.01421357 | 0.01618107 | 0.09556026 | 1.0771231 | 0.00987084 | 1044.80919 | 0.00066018 | 0.02336272 | 0.02235206 | 0.16422945 |
| SAN DIEGO | 2050 | Motor Coach | Aggregated | 65 | DSL | 16477.7466 | 0.01731275 | 0.01970925 | 0.11995951 | 1.46580162 | 0.01087846 | 1151.46392 | 0.00080413 | 0.0288087 | 0.02756245 | 0.18099409 |
| SAN DIEGO | 2050 | Motor Coach | Aggregated | 70 | DSL | 202.502887 | 0.02142481 | 0.02439051 | 0.1586802 | 1.46276617 | 0.01087846 | 1151.46392 | 0.00099513 | 0.0288087 | 0.02756245 | 0.18099409 |
| SAN DIEGO | 2050 | Motor Coach | Aggregated | 75 | DSL | 0.06416185 | 0.02655031 | 0.03022551 | 0.21172694 | 1.46327033 | 0.01087846 | 1151.46392 | 0.00123319 | 0.0288087 | 0.02756245 | 0.18099409 |
| SAN DIEGO | 2050 | Motor Coach | Aggregated | 80 | DSL | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SAN DIEGO | 2050 | Motor Coach | Aggregated | 85 | DSL | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SAN DIEGO | 2050 | Motor Coach | Aggregated | 90 | DSL | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SAN DIEGO | 2050 | OBUS | Aggregated | 5 | GAS | 513.547962 | 0.04112667 | 0.06001195 | 0.29941023 | 0.84576423 | 0.03079801 | 3112.22735 | 0.01166802 | 0.00771897 | 0.00709731 | 0.04140156 |
| SAN DIEGO | 2050 | OBUS | Aggregated | 10 | GAS | 2581.61013 | 0.02587672 | 0.03775925 | 0.27267311 | 0.73498601 | 0.02500137 | 2526.45953 | 0.00734146 | 0.00485676 | 0.00446561 | 0.03597879 |
| SAN DIEGO | 2050 | OBUS | Aggregated | 15 | GAS | 3261.01624 | 0.01721852 | 0.02512523 | 0.24958575 | 0.64564474 | 0.02044599 | 2066.12599 | 0.00488505 | 0.0032238 | 0.00296417 | 0.03160538 |
| SAN DIEGO | 2050 | OBUS | Aggregated | 20 | GAS | 3382.4747 | 0.01205224 | 0.01758659 | 0.22843641 | 0.57965699 | 0.01699537 | 1717.43043 | 0.00341933 | 0.00225749 | 0.00207568 | 0.02837517 |
| SAN DIEGO | 2050 | OBUS | Aggregated | 25 | GAS | 3768.85888 | 0.00889835 | 0.01298445 | 0.20961293 | 0.52882071 | 0.0145267 | 1467.96487 | 0.00252454 | 0.0016677 | 0.00153339 | 0.02588665 |
| SAN DIEGO | 2050 | OBUS | Aggregated | 30 | GAS | 4261.23181 | 0.00693884 | 0.01012514 | 0.19307656 | 0.48975918 | 0.01288996 | 1302.56748 | 0.00196861 | 0.0012997 | 0.00119502 | 0.02397453 |
| SAN DIEGO | 2050 | OBUS | Aggregated | 35 | GAS | 5296.06465 | 0.00569294 | 0.00830713 | 0.17786557 | 0.46276074 | 0.01194874 | 1207.45442 | 0.00161514 | 0.00106857 | 0.00098251 | 0.02265291 |
| SAN DIEGO | 2050 | OBUS | Aggregated | 40 | GAS | 6593.05457 | 0.00492631 | 0.00718846 | 0.16425967 | 0.44460985 | 0.01156667 | 1168.84491 | 0.00139764 | 0.00092683 | 0.00085218 | 0.02176439 |
| SAN DIEGO | 2050 | OBUS | Aggregated | 45 | GAS | 6012.41522 | 0.00451509 | 0.00658841 | 0.15268804 | 0.43049705 | 0.01160738 | 1172.95887 | 0.00128097 | 0.00084806 | 0.00077976 | 0.02107355 |
| SAN DIEGO | 2050 | OBUS | Aggregated | 50 | GAS | 5851.31566 | 0.00434822 | 0.00634492 | 0.1417695 | 0.42779448 | 0.01194812 | 1207.39141 | 0.00123363 | 0.00081864 | 0.00075271 | 0.02094125 |
| SAN DIEGO | 2050 | OBUS | Aggregated | 55 | GAS | 7652.98792 | 0.00440416 | 0.00642654 | 0.1315989 | 0.43370516 | 0.01243888 | 1256.98435 | 0.0012495 | 0.00083367 | 0.00076653 | 0.02123059 |
| SAN DIEGO | 2050 | OBUS | Aggregated | 60 | GAS | 8831.19885 | 0.00471889 | 0.00688579 | 0.12281189 | 0.44359155 | 0.01294331 | 1307.95862 | 0.00133879 | 0.00089563 | 0.0008235 | 0.02171454 |
| SAN DIEGO | 2050 | OBUS | Aggregated | 65 | GAS | 1379.98661 | 0.00538537 | 0.00785831 | 0.11598813 | 0.45329739 | 0.0133387 | 1347.91334 | 0.00152788 | 0.00101507 | 0.00093332 | 0.02218966 |
| SAN DIEGO | 2050 | PTO | Aggregated | 20 | DSL | 37085.7293 | 0.02570501 | 0.0292632 | 0.41190946 | 4.67209315 | 0.01398422 | 1480.2029 | 0.00119393 | 0.00498408 | 0.00476847 | 0.23266728 |
| SAN DIEGO | 2050 | SBUS | Aggregated | 5 | GAS | 475.636456 | 0.04858828 | 0.07089991 | 0.31751461 | 0.3020372 | 0.01477159 | 1492.71111 | 0.01128735 | 0.00780034 | 0.00717213 | 0.02327751 |
| SAN DIEGO | 2050 | SBUS | Aggregated | 5 | DSL | 827.85399 | 0.05233902 | 0.05958399 | 0.79600933 | 7.16473419 | 0.01806276 | 1911.90824 | 0.00243101 | 0.00483264 | 0.00462358 | 0.30052535 |
| SAN DIEGO | 2050 | SBUS | Aggregated | 10 | GAS | 1667.0814 | 0.03061282 | 0.04467015 | 0.28953673 | 0.26167144 | 0.01199141 | 1211.76583 | 0.00711154 | 0.00490796 | 0.00451269 | 0.02016659 |
| SAN DIEGO | 2050 | SBUS | Aggregated | 10 | DSL | 2037.96034 | 0.03284561 | 0.03739223 | 0.4894043 | 5.38879141 | 0.01493409 | 1580.74435 | 0.00152559 | 0.00424986 | 0.00406601 | 0.248471 |
| SAN DIEGO | 2050 | SBUS | Aggregated | 15 | GAS | 3334.1628 | 0.02032006 | 0.02965098 | 0.26439554 | 0.23104176 | 0.00980662 | 990.987424 | 0.00472047 | 0.00325778 | 0.00299541 | 0.01780601 |
| SAN DIEGO | 2050 | SBUS | Aggregated | 15 | DSL | 2617.69515 | 0.0182619 | 0.02078978 | 0.26516955 | 3.76523319 | 0.0117519 | 1243.91578 | 0.00084822 | 0.00336696 | 0.00322131 | 0.19552624 |
| SAN DIEGO | 2050 | SBUS | Aggregated | 20 | GAS | 4525.58372 | 0.01423127 | 0.02076624 | 0.24212381 | 0.20722077 | 0.00815171 | 823.753337 | 0.00330601 | 0.00228129 | 0.00209756 | 0.01597017 |

| Region | Calendar Year | Vehicle Categ | Model Year | Speed | Fuel | VMT | ROG_RUNEX | TOG_RUNEX | CO_RUNEX | NOx_RUNEX | SOx_RUNEX | CO2_RUNEX | CH4_RUNEX | PM10_RUNEX | PM2_5_RUNEX | N2O_RUNEX |
|-----------|---------------|-----------------|------------|-------|------|------------|------------|------------|------------|------------|------------|------------|------------|------------|-------------|------------|
| SAN DIEGO | 2050 | T6 CAIRP heav | Aggregated | 90 | DSL | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SAN DIEGO | 2050 | T6 CAIRP sma | Aggregated | 5 | DSL | 27.7681159 | 0.04923934 | 0.05605524 | 0.74921902 | 6.41119925 | 0.01778233 | 1882.22507 | 0.00228704 | 0.00417885 | 0.00399807 | 0.29585957 |
| SAN DIEGO | 2050 | T6 CAIRP sma | Aggregated | 10 | DSL | 63.0585481 | 0.03089814 | 0.03517518 | 0.46062989 | 4.8243272 | 0.01470221 | 1556.1999 | 0.00143514 | 0.00367489 | 0.00351592 | 0.24461295 |
| SAN DIEGO | 2050 | T6 CAIRP sma | Aggregated | 15 | DSL | 61.5395384 | 0.01717765 | 0.01955545 | 0.24957448 | 3.37082454 | 0.0115694 | 1224.59904 | 0.00079786 | 0.00291141 | 0.00278546 | 0.19248992 |
| SAN DIEGO | 2050 | T6 CAIRP sma | Aggregated | 20 | DSL | 79.5723641 | 0.01166864 | 0.01328386 | 0.16668264 | 2.66248043 | 0.00988009 | 1045.78833 | 0.00054198 | 0.00247381 | 0.00236679 | 0.16438336 |
| SAN DIEGO | 2050 | T6 CAIRP sma | Aggregated | 25 | DSL | 68.4061871 | 0.00916356 | 0.01043201 | 0.12739567 | 2.07193852 | 0.0086222 | 912.642839 | 0.00042562 | 0.0023621 | 0.00225992 | 0.14345475 |
| SAN DIEGO | 2050 | T6 CAIRP sma | Aggregated | 30 | DSL | 43.4141734 | 0.00741149 | 0.00843741 | 0.09773168 | 1.5417336 | 0.00757492 | 801.79044 | 0.00034424 | 0.00257629 | 0.00246484 | 0.12603029 |
| SAN DIEGO | 2050 | T6 CAIRP sma | Aggregated | 35 | DSL | 62.4207845 | 0.00610382 | 0.00694874 | 0.07366765 | 1.11653919 | 0.00677044 | 716.637478 | 0.00028351 | 0.00311636 | 0.00298155 | 0.11264543 |
| SAN DIEGO | 2050 | T6 CAIRP sma | Aggregated | 40 | DSL | 61.0469966 | 0.00524056 | 0.00596597 | 0.05520357 | 0.79759134 | 0.00620875 | 657.183951 | 0.00024341 | 0.00398233 | 0.00381006 | 0.10330017 |
| SAN DIEGO | 2050 | T6 CAIRP sma | Aggregated | 45 | DSL | 77.9878087 | 0.00482169 | 0.00548913 | 0.04233946 | 0.58446858 | 0.00588986 | 623.429861 | 0.00022396 | 0.00517419 | 0.00495035 | 0.09799449 |
| SAN DIEGO | 2050 | T6 CAIRP sma | Aggregated | 50 | DSL | 104.280289 | 0.00484723 | 0.00551821 | 0.0350753 | 0.4773312 | 0.00581376 | 615.375207 | 0.00022514 | 0.00669193 | 0.00640244 | 0.09672841 |
| SAN DIEGO | 2050 | T6 CAIRP sma | Aggregated | 55 | DSL | 245.169498 | 0.00531717 | 0.0060532 | 0.0334111 | 0.47592443 | 0.00598046 | 633.01999 | 0.00024697 | 0.00853557 | 0.00816633 | 0.09950193 |
| SAN DIEGO | 2050 | T6 CAIRP sma | Aggregated | 60 | DSL | 852.118529 | 0.00623152 | 0.00709411 | 0.03734685 | 0.57988296 | 0.00638995 | 676.36421 | 0.00028944 | 0.0107051 | 0.010242 | 0.10631503 |
| SAN DIEGO | 2050 | T6 CAIRP sma | Aggregated | 65 | DSL | 1643.67055 | 0.00759026 | 0.00864093 | 0.04688256 | 0.7893091 | 0.00704224 | 745.407866 | 0.00035255 | 0.01320052 | 0.01262947 | 0.11716774 |
| SAN DIEGO | 2050 | T6 CAIRP sma | Aggregated | 70 | DSL | 19.6871169 | 0.00939326 | 0.01069351 | 0.06201699 | 0.78768276 | 0.00704224 | 745.407866 | 0.00043629 | 0.01320052 | 0.01262947 | 0.11716774 |
| SAN DIEGO | 2050 | T6 CAIRP sma | Aggregated | 75 | DSL | 0.00736881 | 0.01164062 | 0.01325196 | 0.08275091 | 0.78771268 | 0.00704224 | 745.407866 | 0.00054068 | 0.01320052 | 0.01262947 | 0.11716774 |
| SAN DIEGO | 2050 | T6 CAIRP sma | Aggregated | 80 | DSL | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SAN DIEGO | 2050 | T6 CAIRP sma | Aggregated | 85 | DSL | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SAN DIEGO | 2050 | T6 CAIRP sma | Aggregated | 90 | DSL | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SAN DIEGO | 2050 | T6 instate cor | Aggregated | 5 | DSL | 11154.6697 | 0.05781752 | 0.06582084 | 0.87747928 | 8.36192404 | 0.01849253 | 1957.3984 | 0.00268547 | 0.00597471 | 0.00571625 | 0.30767577 |
| SAN DIEGO | 2050 | T6 instate cor | Aggregated | 10 | DSL | 8241.51246 | 0.0363038 | 0.04132912 | 0.53953914 | 6.29180036 | 0.01528965 | 1618.37931 | 0.00168622 | 0.00525483 | 0.00502751 | 0.25438669 |
| SAN DIEGO | 2050 | T6 instate cor | Aggregated | 15 | DSL | 2158.07459 | 0.02018602 | 0.02298024 | 0.29235144 | 4.40373907 | 0.01203181 | 1273.54348 | 0.00093759 | 0.00416419 | 0.00398405 | 0.2001833 |
| SAN DIEGO | 2050 | T6 instate cor | Aggregated | 20 | DSL | 1876.32992 | 0.01370588 | 0.0156031 | 0.19525133 | 3.48200139 | 0.01027495 | 1087.5836 | 0.0006366 | 0.0035388 | 0.00338572 | 0.170953 |
| SAN DIEGO | 2050 | T6 instate cor | Aggregated | 25 | DSL | 2492.84765 | 0.01076219 | 0.01225193 | 0.1492329 | 2.71219053 | 0.00896685 | 949.123547 | 0.00049988 | 0.00337882 | 0.00323265 | 0.149189 |
| SAN DIEGO | 2050 | T6 instate cor | Aggregated | 30 | DSL | 2868.91583 | 0.00870416 | 0.00990902 | 0.11448974 | 2.01985213 | 0.00787782 | 833.85157 | 0.00040429 | 0.00368422 | 0.00352484 | 0.13106985 |
| SAN DIEGO | 2050 | T6 instate cor | Aggregated | 35 | DSL | 3617.56881 | 0.00716795 | 0.00816016 | 0.08630656 | 1.46705712 | 0.00704125 | 745.303128 | 0.00033293 | 0.00445492 | 0.0042622 | 0.11715127 |
| SAN DIEGO | 2050 | T6 instate cor | Aggregated | 40 | DSL | 4315.06071 | 0.00615325 | 0.007005 | 0.06468259 | 1.0534625 | 0.00645716 | 683.477766 | 0.0002858 | 0.00569092 | 0.00544473 | 0.10743319 |
| SAN DIEGO | 2050 | T6 instate cor | Aggregated | 45 | DSL | 5193.90761 | 0.00565982 | 0.00644328 | 0.04961728 | 0.77846611 | 0.00612553 | 648.375218 | 0.00026288 | 0.00739221 | 0.00707242 | 0.10191556 |
| SAN DIEGO | 2050 | T6 instate cor | Aggregated | 50 | DSL | 5817.54586 | 0.00568752 | 0.0064748 | 0.04111102 | 0.64221283 | 0.00604636 | 639.995314 | 0.00026417 | 0.00955878 | 0.00914527 | 0.10059835 |
| SAN DIEGO | 2050 | T6 instate cor | Aggregated | 55 | DSL | 7081.19287 | 0.0062362 | 0.00709943 | 0.03916105 | 0.64502433 | 0.00621965 | 658.337942 | 0.00028966 | 0.01219064 | 0.01166328 | 0.10348156 |
| SAN DIEGO | 2050 | T6 instate cor | Aggregated | 60 | DSL | 22496.442 | 0.00730628 | 0.00831765 | 0.04376916 | 0.78716186 | 0.00664541 | 703.4038 | 0.00033936 | 0.01528714 | 0.01462583 | 0.11056528 |
| SAN DIEGO | 2050 | T6 instate cor | Aggregated | 65 | DSL | 13204.9866 | 0.00889739 | 0.01012901 | 0.05493356 | 1.06695878 | 0.00732363 | 775.191718 | 0.00041326 | 0.01884813 | 0.01803277 | 0.12184934 |
| SAN DIEGO | 2050 | T6 instate cor | Aggregated | 70 | DSL | 1904.87507 | 0.0109407 | 0.01245515 | 0.07208514 | 1.06659725 | 0.00732363 | 775.191718 | 0.00050817 | 0.01884813 | 0.01803277 | 0.12184934 |
| SAN DIEGO | 2050 | T6 instate cor | Aggregated | 75 | DSL | 1153.80645 | 0.0134876 | 0.0153546 | 0.09558253 | 1.06782509 | 0.00732363 | 775.191718 | 0.00062646 | 0.01884813 | 0.01803277 | 0.12184934 |
| SAN DIEGO | 2050 | T6 instate cor | Aggregated | 80 | DSL | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SAN DIEGO | 2050 | T6 instate cor | Aggregated | 85 | DSL | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SAN DIEGO | 2050 | T6 instate cor | Aggregated | 90 | DSL | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SAN DIEGO | 2050 | T6 instate cor | Aggregated | 5 | DSL | 29174.7608 | 0.05168915 | 0.05884416 | 0.78645838 | 7.01916434 | 0.0178149 | 1885.67211 | 0.00240083 | 0.00469889 | 0.00449562 | 0.2964014 |
| SAN DIEGO | 2050 | T6 instate cor | Aggregated | 10 | DSL | 21555.4705 | 0.03243583 | 0.03692572 | 0.48352616 | 5.27188213 | 0.01472913 | 1559.05025 | 0.00150656 | 0.00413223 | 0.00395347 | 0.24506099 |
| SAN DIEGO | 2050 | T6 instate cor | Aggregated | 15 | DSL | 5644.39032 | 0.01803268 | 0.02052884 | 0.26198051 | 3.68087672 | 0.0115906 | 1226.84228 | 0.00083757 | 0.00327374 | 0.00313212 | 0.19284252 |
| SAN DIEGO | 2050 | T6 instate cor | Aggregated | 20 | DSL | 4907.49414 | 0.01224943 | 0.01394504 | 0.1749683 | 2.90547327 | 0.00989819 | 1047.70405 | 0.00056895 | 0.00278169 | 0.00266136 | 0.16468449 |
| SAN DIEGO | 2050 | T6 instate cor | Aggregated | 25 | DSL | 6519.98093 | 0.00961962 | 0.01095121 | 0.13372839 | 2.26141957 | 0.00863799 | 914.314764 | 0.00044681 | 0.00265608 | 0.00254118 | 0.14371755 |
| SAN DIEGO | 2050 | T6 instate cor | Aggregated | 30 | DSL | 7503.57788 | 0.00778033 | 0.00885731 | 0.10258986 | 1.68234477 | 0.0075888 | 803.259455 | 0.00036138 | 0.0028969 | 0.00277159 | 0.1262612 |
| SAN DIEGO | 2050 | T6 instate cor | Aggregated | 35 | DSL | 9461.66108 | 0.00640756 | 0.00729452 | 0.07732968 | 1.21917663 | 0.00678284 | 717.950618 | 0.00029761 | 0.00350417 | 0.00335258 | 0.11285184 |
| SAN DIEGO | 2050 | T6 instate cor | Aggregated | 40 | DSL | 11285.9338 | 0.0055013 | 0.00626282 | 0.05794782 | 0.871629 | 0.00622013 | 658.388243 | 0.00025552 | 0.00447786 | 0.00428415 | 0.10348946 |
| SAN DIEGO | 2050 | T6 instate cor | Aggregated | 45 | DSL | 13584.536 | 0.00506156 | 0.0057622 | 0.04444427 | 0.63920304 | 0.00590065 | 624.572323 | 0.0002351 | 0.005818 | 0.00556631 | 0.09817407 |
| SAN DIEGO | 2050 | T6 instate cor | Aggregated | 50 | DSL | 15215.6462 | 0.00508832 | 0.00579267 | 0.03681902 | 0.52202226 | 0.00582441 | 616.502853 | 0.00023634 | 0.00752457 | 0.00719906 | 0.09690566 |
| SAN DIEGO | 2050 | T6 instate cor | Aggregated | 55 | DSL | 18520.6835 | 0.00558159 | 0.00635421 | 0.03507205 | 0.52034823 | 0.00599142 | 634.179831 | 0.00025925 | 0.00959757 | 0.00918239 | 0.09968424 |
| SAN DIEGO | 2050 | T6 instate cor | Aggregated | 60 | DSL | 58838.8837 | 0.00654136 | 0.00744684 | 0.03920339 | 0.6343875 | 0.00640166 | 677.60328 | 0.00030383 | 0.01203701 | 0.01151629 | 0.1065098 |
| SAN DIEGO | 2050 | T6 instate cor | Aggregated | 65 | DSL | 34537.3134 | 0.00796764 | 0.00907055 | 0.04921299 | 0.86280586 | 0.00705514 | 746.773183 | 0.00037008 | 0.01484288 | 0.01420078 | 0.11738234 |
| SAN DIEGO | 2050 | T6 instate cor | Aggregated | 70 | DSL | 4982.15328 | 0.00985823 | 0.01122284 | 0.06508268 | 0.8625135 | 0.00705514 | 746.773183 | 0.00045789 | 0.01484288 | 0.01420078 | 0.11738234 |
| SAN DIEGO | 2050 | T6 instate cor | Aggregated | 75 | DSL | 3017.75201 | 0.01221477 | 0.01390559 | 0.0868239 | 0.86350641 | 0.00705514 | 746.773183 | 0.00056734 | 0.01484288 | 0.01420078 | 0.11738234 |
| SAN DIEGO | 2050 | T6 instate cor | Aggregated | 80 | DSL | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SAN DIEGO | 2050 | T6 instate cor | Aggregated | 85 | DSL | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SAN DIEGO | 2050 | T6 instate cor | Aggregated | 90 | DSL | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SAN DIEGO | 2050 | T6 instate heav | Aggregated | 5 | DSL | 9947.39093 | 0.05381254 | 0.06126148 | 0.8188043 | 7.46818733 | 0.016482 | 1744.58752 | 0.00249945 | 0.00514922 | 0.00492647 | 0.27422486 |
| SAN DIEGO | 2050 | T6 instate heav | Aggregated | 10 | DSL | 22566.0452 | 0.03376786 | 0.03844214 | 0.50341185 | 5.62398433 | 0.01362711 | 1442.40292 | 0.00156843 | 0.00452825 | 0.00433236 | 0.22672565 |
| SAN DIEGO | 2050 | T6 instate heav | Aggregated | 15 | DSL | 28823.6303 | 0.01877306 | 0.0213717 | 0.27275422 | 3.93331308 | 0.01072339 | 1135.05034 | 0.00087196 | 0.00358747 | 0.00343228 | 0.17841411 |

| Region | Calendar Year | Vehicle Category | Model Year | Speed | Fuel | VMT | ROG_RUNEX | TOG_RUNEX | CO_RUNEX | NOx_RUNEX | SOx_RUNEX | CO2_RUNEX | CH4_RUNEX | PM10_RUNEX | PM2_5_RUNEX | N2O_RUNEX |
|-----------|---------------|------------------|------------|-------|------|------------|------------|------------|------------|------------|------------|------------|------------|------------|-------------|------------|
| SAN DIEGO | 2050 | T6 instate heavy | Aggregated | 20 | DSL | 38020.2322 | 0.01275239 | 0.01451762 | 0.18216363 | 3.10827724 | 0.00915696 | 969.24677 | 0.00059232 | 0.00304826 | 0.00291639 | 0.15235209 |
| SAN DIEGO | 2050 | T6 instate heavy | Aggregated | 25 | DSL | 53126.9825 | 0.01001464 | 0.0114009 | 0.13922781 | 2.41899084 | 0.0079906 | 845.789783 | 0.00046515 | 0.00291061 | 0.0027847 | 0.13294638 |
| SAN DIEGO | 2050 | T6 instate heavy | Aggregated | 30 | DSL | 67732.1942 | 0.00809984 | 0.00922106 | 0.10680871 | 1.80072208 | 0.00701933 | 742.982461 | 0.00037622 | 0.00317453 | 0.0030372 | 0.1167865 |
| SAN DIEGO | 2050 | T6 instate heavy | Aggregated | 35 | DSL | 56688.6745 | 0.00667073 | 0.00759411 | 0.08050969 | 1.30642674 | 0.00627298 | 663.982659 | 0.00030984 | 0.00384002 | 0.0036739 | 0.10436883 |
| SAN DIEGO | 2050 | T6 instate heavy | Aggregated | 40 | DSL | 34354.9466 | 0.00572728 | 0.00652008 | 0.06033072 | 0.93595569 | 0.00575039 | 608.667509 | 0.00026602 | 0.00490707 | 0.00469479 | 0.09567406 |
| SAN DIEGO | 2050 | T6 instate heavy | Aggregated | 45 | DSL | 25388.0106 | 0.00526952 | 0.00599895 | 0.04627182 | 0.68907063 | 0.00545477 | 577.37666 | 0.00024476 | 0.00637569 | 0.00609988 | 0.09075557 |
| SAN DIEGO | 2050 | T6 instate heavy | Aggregated | 50 | DSL | 52433.8192 | 0.00529743 | 0.00603072 | 0.03833299 | 0.56578167 | 0.00538268 | 569.746266 | 0.00024605 | 0.00824588 | 0.00788917 | 0.08955618 |
| SAN DIEGO | 2050 | T6 instate heavy | Aggregated | 55 | DSL | 131027.81 | 0.00581102 | 0.0066154 | 0.03651422 | 0.5659639 | 0.005535 | 585.869046 | 0.00026991 | 0.01051763 | 0.01006264 | 0.09209046 |
| SAN DIEGO | 2050 | T6 instate heavy | Aggregated | 60 | DSL | 88984.8016 | 0.00681028 | 0.00775299 | 0.04081552 | 0.68944971 | 0.0059114 | 625.709818 | 0.00031632 | 0.01319095 | 0.01262031 | 0.09835287 |
| SAN DIEGO | 2050 | T6 instate heavy | Aggregated | 65 | DSL | 34631.1778 | 0.00829522 | 0.00944348 | 0.05123688 | 0.93639373 | 0.00651483 | 689.582644 | 0.00038529 | 0.01626583 | 0.01556218 | 0.10839279 |
| SAN DIEGO | 2050 | T6 instate heavy | Aggregated | 70 | DSL | 2955.13648 | 0.01023951 | 0.01165691 | 0.06755734 | 0.93703683 | 0.00651483 | 689.582644 | 0.0004756 | 0.01626583 | 0.01556218 | 0.10839279 |
| SAN DIEGO | 2050 | T6 instate heavy | Aggregated | 75 | DSL | 88.0864853 | 0.012663 | 0.01441586 | 0.08991611 | 0.94037544 | 0.00651483 | 689.582644 | 0.00058816 | 0.01626583 | 0.01556218 | 0.10839279 |
| SAN DIEGO | 2050 | T6 instate heavy | Aggregated | 80 | DSL | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SAN DIEGO | 2050 | T6 instate heavy | Aggregated | 85 | DSL | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SAN DIEGO | 2050 | T6 instate heavy | Aggregated | 90 | DSL | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SAN DIEGO | 2050 | T6 instate small | Aggregated | 5 | DSL | 13025.9318 | 0.05163121 | 0.05877821 | 0.7856135 | 6.98097392 | 0.01780141 | 1884.24448 | 0.00239814 | 0.00468702 | 0.00448426 | 0.29617699 |
| SAN DIEGO | 2050 | T6 instate small | Aggregated | 10 | DSL | 29549.8355 | 0.03239906 | 0.03688386 | 0.4830057 | 5.25317389 | 0.01471798 | 1557.86952 | 0.00150485 | 0.00412179 | 0.00394348 | 0.24487539 |
| SAN DIEGO | 2050 | T6 instate small | Aggregated | 15 | DSL | 37744.032 | 0.01801208 | 0.02050538 | 0.26169794 | 3.67024931 | 0.01158182 | 1225.9129 | 0.00083661 | 0.00326545 | 0.00312419 | 0.19269644 |
| SAN DIEGO | 2050 | T6 instate small | Aggregated | 20 | DSL | 49786.819 | 0.01223546 | 0.01392914 | 0.1747795 | 2.89830873 | 0.00989069 | 1046.91035 | 0.00056831 | 0.00277464 | 0.00265461 | 0.16455973 |
| SAN DIEGO | 2050 | T6 instate small | Aggregated | 25 | DSL | 69568.8402 | 0.00960869 | 0.01093876 | 0.13358411 | 2.25491754 | 0.00863145 | 913.622002 | 0.0004463 | 0.00264935 | 0.00253474 | 0.14360866 |
| SAN DIEGO | 2050 | T6 instate small | Aggregated | 30 | DSL | 88694.1055 | 0.00777151 | 0.00884727 | 0.10247915 | 1.677897 | 0.00758305 | 802.650671 | 0.00036097 | 0.00288958 | 0.00276458 | 0.12616551 |
| SAN DIEGO | 2050 | T6 instate small | Aggregated | 35 | DSL | 74232.8126 | 0.00640032 | 0.00728628 | 0.07724617 | 1.21623848 | 0.0067777 | 717.406349 | 0.00029728 | 0.00349533 | 0.00334413 | 0.11276629 |
| SAN DIEGO | 2050 | T6 instate small | Aggregated | 40 | DSL | 44987.1925 | 0.00549512 | 0.00625578 | 0.05788517 | 0.86980193 | 0.00621541 | 657.889035 | 0.00025523 | 0.00446661 | 0.00427338 | 0.10341099 |
| SAN DIEGO | 2050 | T6 instate small | Aggregated | 45 | DSL | 33245.149 | 0.00505591 | 0.00575577 | 0.04439616 | 0.63836402 | 0.00589618 | 624.098731 | 0.00023483 | 0.0058034 | 0.00555235 | 0.09809963 |
| SAN DIEGO | 2050 | T6 instate small | Aggregated | 50 | DSL | 68661.1552 | 0.00508269 | 0.00578626 | 0.03677913 | 0.5219332 | 0.00582 | 616.035435 | 0.00023608 | 0.00750572 | 0.00718102 | 0.09683219 |
| SAN DIEGO | 2050 | T6 instate small | Aggregated | 55 | DSL | 171578.59 | 0.00557546 | 0.00634724 | 0.03503409 | 0.52039705 | 0.00598688 | 633.699149 | 0.00025897 | 0.00957355 | 0.00915941 | 0.09960868 |
| SAN DIEGO | 2050 | T6 instate small | Aggregated | 60 | DSL | 116524.018 | 0.00653422 | 0.00743871 | 0.03916103 | 0.6336061 | 0.00639681 | 677.089873 | 0.0003035 | 0.01200691 | 0.0114875 | 0.1064291 |
| SAN DIEGO | 2050 | T6 instate small | Aggregated | 65 | DSL | 45348.9124 | 0.00795897 | 0.00906068 | 0.04915995 | 0.86170153 | 0.0070498 | 746.207605 | 0.00036967 | 0.01480579 | 0.0141653 | 0.11729344 |
| SAN DIEGO | 2050 | T6 instate small | Aggregated | 70 | DSL | 3869.69875 | 0.00984825 | 0.01121148 | 0.06501864 | 0.86229333 | 0.0070498 | 746.207605 | 0.00045743 | 0.01480579 | 0.0141653 | 0.11729344 |
| SAN DIEGO | 2050 | T6 instate small | Aggregated | 75 | DSL | 115.347688 | 0.01220316 | 0.01389237 | 0.08674479 | 0.86536564 | 0.0070498 | 746.207605 | 0.00056681 | 0.01480579 | 0.0141653 | 0.11729344 |
| SAN DIEGO | 2050 | T6 instate small | Aggregated | 80 | DSL | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SAN DIEGO | 2050 | T6 instate small | Aggregated | 85 | DSL | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SAN DIEGO | 2050 | T6 instate small | Aggregated | 90 | DSL | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SAN DIEGO | 2050 | T6 OOS heavy | Aggregated | 5 | DSL | 110.016871 | 0.04828799 | 0.0549722 | 0.73474341 | 6.17915194 | 0.01604593 | 1698.43067 | 0.00224285 | 0.0039767 | 0.00380467 | 0.26696965 |
| SAN DIEGO | 2050 | T6 OOS heavy | Aggregated | 10 | DSL | 249.83705 | 0.03030116 | 0.03449556 | 0.45173009 | 4.64971212 | 0.01326657 | 1404.24101 | 0.00140741 | 0.00349712 | 0.00334584 | 0.22072713 |
| SAN DIEGO | 2050 | T6 OOS heavy | Aggregated | 15 | DSL | 243.818755 | 0.01684576 | 0.01917762 | 0.24475246 | 3.24881558 | 0.01043968 | 1105.02012 | 0.00078244 | 0.00277057 | 0.00265071 | 0.17369377 |
| SAN DIEGO | 2050 | T6 OOS heavy | Aggregated | 20 | DSL | 315.264549 | 0.01144319 | 0.0130272 | 0.16346217 | 2.56610873 | 0.00891532 | 943.669368 | 0.00053151 | 0.00235414 | 0.0022523 | 0.14833168 |
| SAN DIEGO | 2050 | T6 OOS heavy | Aggregated | 25 | DSL | 271.024318 | 0.00898651 | 0.01023045 | 0.12493427 | 1.99694167 | 0.00778025 | 823.524875 | 0.0004174 | 0.00224784 | 0.0021506 | 0.12944664 |
| SAN DIEGO | 2050 | T6 OOS heavy | Aggregated | 30 | DSL | 172.006323 | 0.00726829 | 0.0082744 | 0.09584341 | 1.48592775 | 0.00683524 | 723.496529 | 0.00033759 | 0.00245166 | 0.0023456 | 0.11372358 |
| SAN DIEGO | 2050 | T6 OOS heavy | Aggregated | 35 | DSL | 247.31024 | 0.00598589 | 0.00681448 | 0.07224432 | 1.07612316 | 0.0061093 | 646.658054 | 0.00027803 | 0.00296561 | 0.00283732 | 0.10164564 |
| SAN DIEGO | 2050 | T6 OOS heavy | Aggregated | 40 | DSL | 241.867312 | 0.0051393 | 0.00585071 | 0.05413699 | 0.76871922 | 0.00560245 | 593.008649 | 0.00023871 | 0.00378969 | 0.00362575 | 0.0932127 |
| SAN DIEGO | 2050 | T6 OOS heavy | Aggregated | 45 | DSL | 308.986563 | 0.00472853 | 0.00538308 | 0.04152142 | 0.56330972 | 0.0053147 | 562.550526 | 0.00021963 | 0.00492389 | 0.00471088 | 0.08842511 |
| SAN DIEGO | 2050 | T6 OOS heavy | Aggregated | 50 | DSL | 413.156988 | 0.00475358 | 0.00541159 | 0.03439761 | 0.46004914 | 0.00524602 | 555.281317 | 0.00022079 | 0.00636822 | 0.00609273 | 0.08728249 |
| SAN DIEGO | 2050 | T6 OOS heavy | Aggregated | 55 | DSL | 971.357982 | 0.00521444 | 0.00593624 | 0.03276556 | 0.45869193 | 0.00539643 | 571.201626 | 0.0002422 | 0.00812267 | 0.00777129 | 0.08978494 |
| SAN DIEGO | 2050 | T6 OOS heavy | Aggregated | 60 | DSL | 3376.08121 | 0.00611112 | 0.00695704 | 0.03662527 | 0.558886 | 0.00576592 | 610.311224 | 0.00028385 | 0.01018725 | 0.00974655 | 0.09593243 |
| SAN DIEGO | 2050 | T6 OOS heavy | Aggregated | 65 | DSL | 6512.19882 | 0.00744361 | 0.00847398 | 0.04597675 | 0.76072998 | 0.00635451 | 672.612152 | 0.00034574 | 0.01256195 | 0.01201853 | 0.10572526 |
| SAN DIEGO | 2050 | T6 OOS heavy | Aggregated | 70 | DSL | 78.0000707 | 0.00921179 | 0.01048692 | 0.06081894 | 0.75916253 | 0.00635451 | 672.612152 | 0.00042786 | 0.01256195 | 0.01201853 | 0.10572526 |
| SAN DIEGO | 2050 | T6 OOS heavy | Aggregated | 75 | DSL | 0.02919512 | 0.01141576 | 0.01299597 | 0.08115251 | 0.75919136 | 0.00635451 | 672.612152 | 0.00053023 | 0.01256195 | 0.01201853 | 0.10572526 |
| SAN DIEGO | 2050 | T6 OOS heavy | Aggregated | 80 | DSL | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SAN DIEGO | 2050 | T6 OOS heavy | Aggregated | 85 | DSL | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SAN DIEGO | 2050 | T6 OOS heavy | Aggregated | 90 | DSL | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SAN DIEGO | 2050 | T6 OOS small | Aggregated | 5 | DSL | 16.084206 | 0.04944308 | 0.05628719 | 0.75231919 | 6.45892678 | 0.0178044 | 1884.56157 | 0.0022965 | 0.00422208 | 0.00403944 | 0.29622684 |
| SAN DIEGO | 2050 | T6 OOS small | Aggregated | 10 | DSL | 36.525585 | 0.03102599 | 0.03532073 | 0.46253591 | 4.86042942 | 0.01472046 | 1558.13169 | 0.00144108 | 0.00371291 | 0.0035523 | 0.2449166 |
| SAN DIEGO | 2050 | T6 OOS small | Aggregated | 15 | DSL | 35.6457246 | 0.01724873 | 0.01963636 | 0.25060718 | 3.39622894 | 0.01158377 | 1226.1192 | 0.00080116 | 0.00294153 | 0.00281428 | 0.19272886 |
| SAN DIEGO | 2050 | T6 OOS small | Aggregated | 20 | DSL | 46.0909304 | 0.01171692 | 0.01333883 | 0.16737235 | 2.68264678 | 0.00989235 | 1047.08653 | 0.00054422 | 0.0024994 | 0.00239128 | 0.16458742 |
| SAN DIEGO | 2050 | T6 OOS small | Aggregated | 25 | DSL | 39.6231134 | 0.00920147 | 0.01047518 | 0.12792282 | 2.08766412 | 0.0086329 | 913.775751 | 0.00042738 | 0.00238654 | 0.0022833 | 0.14363282 |
| SAN DIEGO | 2050 | T6 OOS small | Aggregated | 30 | DSL | 25.1469171 | 0.00744215 | 0.00847233 | 0.09813608 | 1.55346821 | 0.00758432 | 802.785746 | 0.00034567 | 0.00260294 | 0.00249034 | 0.12618674 |
| SAN DIEGO | 2050 | T6 OOS small | Aggregated | 35 | DSL | 36.1561714 | 0.00612908 | 0.00697749 | 0.07397248 | 1.12508953 | 0.00677884 | 717.527078 | 0.00028468 | 0.00314861 | 0.0030124 | 0.11278526 |

| Region | Calendar Year | Vehicle Categ | Model Year | Speed | Fuel | VMT | ROG_RUNEX | TOG_RUNEX | CO_RUNEX | NOx_RUNEX | SOx_RUNEX | CO2_RUNEX | CH4_RUNEX | PM10_RUNEX | PM2_5_RUNEX | N2O_RUNEX |
|-----------|---------------|---------------|------------|-------|------|------------|------------|------------|------------|------------|------------|------------|------------|------------|-------------|------------|
| SAN DIEGO | 2050 | T6 OOS small | Aggregated | 40 | DSL | 35.3604282 | 0.00526224 | 0.00599066 | 0.055432 | 0.80377351 | 0.00621646 | 657.999748 | 0.00024442 | 0.00402353 | 0.00384947 | 0.1034284 |
| SAN DIEGO | 2050 | T6 OOS small | Aggregated | 45 | DSL | 45.1731038 | 0.00484165 | 0.00551184 | 0.04251465 | 0.58909547 | 0.00589717 | 624.203758 | 0.00022488 | 0.00522772 | 0.00500157 | 0.09811614 |
| SAN DIEGO | 2050 | T6 OOS small | Aggregated | 50 | DSL | 60.4025732 | 0.00486729 | 0.00554104 | 0.03522043 | 0.48121704 | 0.00582098 | 616.139105 | 0.00022607 | 0.00676117 | 0.00646868 | 0.09684849 |
| SAN DIEGO | 2050 | T6 OOS small | Aggregated | 55 | DSL | 142.010237 | 0.00533918 | 0.00607824 | 0.03354935 | 0.47988164 | 0.00598788 | 633.805791 | 0.00024799 | 0.00862388 | 0.00825082 | 0.09962544 |
| SAN DIEGO | 2050 | T6 OOS small | Aggregated | 60 | DSL | 493.575078 | 0.0062573 | 0.00712346 | 0.03750139 | 0.58472089 | 0.00639789 | 677.203817 | 0.00029064 | 0.01081586 | 0.01034797 | 0.10644701 |
| SAN DIEGO | 2050 | T6 OOS small | Aggregated | 65 | DSL | 952.068044 | 0.00762167 | 0.00867669 | 0.04707655 | 0.79583791 | 0.00705099 | 746.333181 | 0.00035401 | 0.01333709 | 0.01276014 | 0.11731318 |
| SAN DIEGO | 2050 | T6 OOS small | Aggregated | 70 | DSL | 11.4034256 | 0.00943102 | 0.0107365 | 0.06226431 | 0.79419812 | 0.00705099 | 746.333181 | 0.00043805 | 0.01333709 | 0.01276014 | 0.11731318 |
| SAN DIEGO | 2050 | T6 OOS small | Aggregated | 75 | DSL | 0.00426826 | 0.0116863 | 0.01330396 | 0.0830713 | 0.79422829 | 0.00705099 | 746.333181 | 0.0005428 | 0.01333709 | 0.01276014 | 0.11731318 |
| SAN DIEGO | 2050 | T6 OOS small | Aggregated | 80 | DSL | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SAN DIEGO | 2050 | T6 OOS small | Aggregated | 85 | DSL | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SAN DIEGO | 2050 | T6 OOS small | Aggregated | 90 | DSL | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SAN DIEGO | 2050 | T6 Public | Aggregated | 5 | DSL | 1603.39594 | 0.04742764 | 0.05399276 | 0.67314602 | 5.11505185 | 0.01801209 | 1906.54514 | 0.00220289 | 0.00324067 | 0.00310048 | 0.29968235 |
| SAN DIEGO | 2050 | T6 Public | Aggregated | 10 | DSL | 3050.80187 | 0.03035017 | 0.03455136 | 0.41537912 | 3.8518195 | 0.01489864 | 1576.99233 | 0.00140969 | 0.00285631 | 0.00273275 | 0.24788123 |
| SAN DIEGO | 2050 | T6 Public | Aggregated | 15 | DSL | 2440.1617 | 0.01719595 | 0.01957628 | 0.22601177 | 2.69761532 | 0.01172877 | 1241.46777 | 0.00079871 | 0.00227758 | 0.00217906 | 0.19514145 |
| SAN DIEGO | 2050 | T6 Public | Aggregated | 20 | DSL | 1820.47679 | 0.01171061 | 0.01333164 | 0.15114164 | 2.13122865 | 0.01001745 | 1060.32742 | 0.00054393 | 0.00194277 | 0.00185873 | 0.1666687 |
| SAN DIEGO | 2050 | T6 Public | Aggregated | 25 | DSL | 2579.4603 | 0.00913461 | 0.01039906 | 0.11544795 | 1.66195012 | 0.0087442 | 925.556984 | 0.00042428 | 0.00184948 | 0.00176947 | 0.14548467 |
| SAN DIEGO | 2050 | T6 Public | Aggregated | 30 | DSL | 3581.39424 | 0.00733108 | 0.00834587 | 0.08853938 | 1.24198526 | 0.00768501 | 813.443595 | 0.00034051 | 0.00199636 | 0.00191 | 0.12786201 |
| SAN DIEGO | 2050 | T6 Public | Aggregated | 35 | DSL | 4570.02726 | 0.00598588 | 0.00681447 | 0.0667543 | 0.90547476 | 0.00687131 | 727.315146 | 0.00027803 | 0.00238237 | 0.00227931 | 0.11432381 |
| SAN DIEGO | 2050 | T6 Public | Aggregated | 40 | DSL | 5255.17282 | 0.0050833 | 0.00578695 | 0.05005385 | 0.65239141 | 0.00630285 | 667.144532 | 0.00023611 | 0.00300711 | 0.00287702 | 0.10486583 |
| SAN DIEGO | 2050 | T6 Public | Aggregated | 45 | DSL | 4866.52214 | 0.00461177 | 0.00525015 | 0.03840938 | 0.48348113 | 0.00597948 | 632.915863 | 0.0002142 | 0.00387032 | 0.00370289 | 0.09948556 |
| SAN DIEGO | 2050 | T6 Public | Aggregated | 50 | DSL | 3501.46684 | 0.00456276 | 0.00519436 | 0.03179977 | 0.39854678 | 0.00590109 | 624.619102 | 0.00021193 | 0.00497185 | 0.00475677 | 0.09818142 |
| SAN DIEGO | 2050 | T6 Public | Aggregated | 55 | DSL | 4122.61371 | 0.00492998 | 0.00561241 | 0.03020948 | 0.39743027 | 0.00606764 | 642.247544 | 0.00022898 | 0.00631156 | 0.00603853 | 0.10095237 |
| SAN DIEGO | 2050 | T6 Public | Aggregated | 60 | DSL | 4735.35846 | 0.00572656 | 0.00651925 | 0.03366166 | 0.48007429 | 0.00647962 | 685.854784 | 0.00026598 | 0.00788759 | 0.00754637 | 0.10780682 |
| SAN DIEGO | 2050 | T6 Public | Aggregated | 65 | DSL | 2014.60242 | 0.0069413 | 0.00790214 | 0.04212841 | 0.64653127 | 0.00713684 | 755.420187 | 0.00032241 | 0.00969873 | 0.00927917 | 0.11874153 |
| SAN DIEGO | 2050 | T6 Public | Aggregated | 70 | DSL | 853.498358 | 0.00853086 | 0.00971173 | 0.05547123 | 0.64749917 | 0.00713684 | 755.420187 | 0.00039624 | 0.00969873 | 0.00927917 | 0.11874153 |
| SAN DIEGO | 2050 | T6 Public | Aggregated | 75 | DSL | 207.752937 | 0.01051218 | 0.01196732 | 0.07375069 | 0.64855182 | 0.00713684 | 755.420187 | 0.00048826 | 0.00969873 | 0.00927917 | 0.11874153 |
| SAN DIEGO | 2050 | T6 Public | Aggregated | 80 | DSL | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SAN DIEGO | 2050 | T6 Public | Aggregated | 85 | DSL | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SAN DIEGO | 2050 | T6 Public | Aggregated | 90 | DSL | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SAN DIEGO | 2050 | T6 utility | Aggregated | 5 | DSL | 91.7861734 | 0.04156471 | 0.04731826 | 0.6324429 | 4.53731496 | 0.0177379 | 1877.5226 | 0.00193057 | 0.00254809 | 0.00243786 | 0.29512041 |
| SAN DIEGO | 2050 | T6 utility | Aggregated | 10 | DSL | 329.753957 | 0.02608224 | 0.02969264 | 0.38883436 | 3.41736291 | 0.01466547 | 1552.31196 | 0.00121145 | 0.0022408 | 0.00214386 | 0.24400182 |
| SAN DIEGO | 2050 | T6 utility | Aggregated | 15 | DSL | 350.880044 | 0.01450028 | 0.01650746 | 0.21067485 | 2.38485239 | 0.0115405 | 1221.53956 | 0.0006735 | 0.00177525 | 0.00169846 | 0.19200901 |
| SAN DIEGO | 2050 | T6 utility | Aggregated | 20 | DSL | 295.719628 | 0.00984992 | 0.01121339 | 0.14070285 | 1.88158886 | 0.00985541 | 1043.17559 | 0.0004575 | 0.00150843 | 0.00144317 | 0.16397267 |
| SAN DIEGO | 2050 | T6 utility | Aggregated | 25 | DSL | 351.977022 | 0.00773529 | 0.00880604 | 0.1075393 | 1.46448699 | 0.00860066 | 910.362735 | 0.00035928 | 0.00144031 | 0.00137801 | 0.14309634 |
| SAN DIEGO | 2050 | T6 utility | Aggregated | 30 | DSL | 456.099807 | 0.00625631 | 0.00712233 | 0.08249885 | 1.08984527 | 0.00755599 | 799.787285 | 0.00029059 | 0.00157091 | 0.00150296 | 0.12571542 |
| SAN DIEGO | 2050 | T6 utility | Aggregated | 35 | DSL | 556.398356 | 0.00515246 | 0.00586568 | 0.06218553 | 0.78996611 | 0.00675352 | 714.847064 | 0.00023932 | 0.00190023 | 0.00181803 | 0.112364 |
| SAN DIEGO | 2050 | T6 utility | Aggregated | 40 | DSL | 732.561356 | 0.00442374 | 0.0050361 | 0.04659934 | 0.56480161 | 0.00619324 | 655.542073 | 0.00020547 | 0.00242826 | 0.00232321 | 0.10304208 |
| SAN DIEGO | 2050 | T6 utility | Aggregated | 45 | DSL | 753.548844 | 0.00407017 | 0.00463357 | 0.03574027 | 0.41421351 | 0.00587514 | 621.872313 | 0.00018905 | 0.003155 | 0.00301852 | 0.09774967 |
| SAN DIEGO | 2050 | T6 utility | Aggregated | 50 | DSL | 697.699325 | 0.00409172 | 0.00465812 | 0.02960833 | 0.33817311 | 0.00579923 | 613.837782 | 0.00019005 | 0.00408046 | 0.00390394 | 0.09648675 |
| SAN DIEGO | 2050 | T6 utility | Aggregated | 55 | DSL | 1085.23941 | 0.00448842 | 0.00510972 | 0.02820351 | 0.33700851 | 0.00596552 | 631.438482 | 0.00020848 | 0.00520464 | 0.00497949 | 0.09925334 |
| SAN DIEGO | 2050 | T6 utility | Aggregated | 60 | DSL | 732.722175 | 0.00526025 | 0.00598839 | 0.03152583 | 0.41050419 | 0.00637399 | 674.674413 | 0.00024432 | 0.00652753 | 0.00624515 | 0.10604942 |
| SAN DIEGO | 2050 | T6 utility | Aggregated | 65 | DSL | 5.54953129 | 0.00640721 | 0.00729412 | 0.03957527 | 0.56015653 | 0.00702465 | 743.545574 | 0.0002976 | 0.00804913 | 0.00770093 | 0.11687501 |
| SAN DIEGO | 2050 | T6 utility | Aggregated | 70 | DSL | 0.00098061 | 0.00792931 | 0.00902692 | 0.05235183 | 0.55866289 | 0.00702465 | 743.545574 | 0.0003683 | 0.00804913 | 0.00770093 | 0.11687501 |
| SAN DIEGO | 2050 | T6 utility | Aggregated | 75 | DSL | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SAN DIEGO | 2050 | T6 utility | Aggregated | 80 | DSL | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SAN DIEGO | 2050 | T6 utility | Aggregated | 85 | DSL | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SAN DIEGO | 2050 | T6 utility | Aggregated | 90 | DSL | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SAN DIEGO | 2050 | T6TS | Aggregated | 5 | GAS | 2507.51794 | 0.04244377 | 0.06193385 | 0.30520007 | 0.15056117 | 0.03062765 | 3095.01154 | 0.01168027 | 0.00779696 | 0.00716901 | 0.01461266 |
| SAN DIEGO | 2050 | T6TS | Aggregated | 10 | GAS | 12605.3148 | 0.02670543 | 0.03896851 | 0.27794592 | 0.13084067 | 0.02486307 | 2512.48395 | 0.00734917 | 0.00490583 | 0.00451073 | 0.0126987 |
| SAN DIEGO | 2050 | T6TS | Aggregated | 15 | GAS | 15922.6739 | 0.01776995 | 0.02592987 | 0.25441211 | 0.11493632 | 0.02033289 | 2054.69724 | 0.00489018 | 0.00325637 | 0.00299411 | 0.01115511 |
| SAN DIEGO | 2050 | T6TS | Aggregated | 20 | GAS | 16515.7232 | 0.01243821 | 0.01814981 | 0.2328538 | 0.10318932 | 0.01690136 | 1707.93095 | 0.00342292 | 0.0022803 | 0.00209665 | 0.01001501 |
| SAN DIEGO | 2050 | T6TS | Aggregated | 25 | GAS | 18402.3342 | 0.00918332 | 0.01340028 | 0.21366632 | 0.09413955 | 0.01444636 | 1459.84558 | 0.00252719 | 0.00168455 | 0.00154888 | 0.00913668 |
| SAN DIEGO | 2050 | T6TS | Aggregated | 30 | GAS | 20806.4602 | 0.00716106 | 0.0104494 | 0.19681017 | 0.0871859 | 0.01281867 | 1295.36312 | 0.00197068 | 0.00131283 | 0.0012071 | 0.0084618 |
| SAN DIEGO | 2050 | T6TS | Aggregated | 35 | GAS | 25859.2733 | 0.00587526 | 0.00857317 | 0.18130504 | 0.0823797 | 0.01188265 | 1200.77596 | 0.00161684 | 0.00107937 | 0.00099244 | 0.00799533 |
| SAN DIEGO | 2050 | T6TS | Aggregated | 40 | GAS | 32192.1297 | 0.00508407 | 0.00741867 | 0.16743604 | 0.07914851 | 0.01150269 | 1162.37959 | 0.00139911 | 0.00093619 | 0.00086079 | 0.00768173 |
| SAN DIEGO | 2050 | T6TS | Aggregated | 45 | GAS | 29357.0224 | 0.00465969 | 0.00679941 | 0.15564064 | 0.07663618 | 0.01154317 | 1166.47024 | 0.00128232 | 0.00085663 | 0.00078764 | 0.0074379 |
| SAN DIEGO | 2050 | T6TS | Aggregated | 50 | GAS | 28570.4161 | 0.00448748 | 0.00654812 | 0.14451097 | 0.07615508 | 0.01188202 | 1200.71165 | 0.00123493 | 0.00082691 | 0.00076032 | 0.00739121 |
| SAN DIEGO | 2050 | T6TS | Aggregated | 55 | GAS | 37367.502 | 0.00454521 | 0.00663236 | 0.13414369 | 0.07720728 | 0.01237006 | 1250.02958 | 0.00125081 | 0.00084209 | 0.00077427 | 0.00749333 |

| Region | Calendar Year | Vehicle Categ | Model Year | Speed | Fuel | VMT | ROG_RUNEX | TOG_RUNEX | CO_RUNEX | NOx_RUNEX | SOx_RUNEX | CO2_RUNEX | CH4_RUNEX | PM10_RUNEX | PM2_5_RUNEX | N2O_RUNEX |
|-----------|---------------|---------------|------------|-------|------|------------|------------|------------|------------|------------|------------|------------|------------|------------|-------------|------------|
| SAN DIEGO | 2050 | T6TS | Aggregated | 60 | GAS | 43120.3922 | 0.00487001 | 0.00710631 | 0.12518676 | 0.07896724 | 0.01287169 | 1300.72128 | 0.0013402 | 0.00090468 | 0.00083182 | 0.00766414 |
| SAN DIEGO | 2050 | T6TS | Aggregated | 65 | GAS | 6738.10712 | 0.00555784 | 0.00810998 | 0.11823105 | 0.08069505 | 0.01326488 | 1340.45458 | 0.00152948 | 0.00102533 | 0.00094275 | 0.00783183 |
| SAN DIEGO | 2050 | T7 Ag | Aggregated | 5 | DSL | 0.00489463 | 0.17307538 | 0.19703315 | 2.95424104 | 15.5973281 | 0.04022009 | 4257.21895 | 0.0080389 | 0.01972473 | 0.01887145 | 0.66917553 |
| SAN DIEGO | 2050 | T7 Ag | Aggregated | 10 | DSL | 0.01640355 | 0.10860639 | 0.12364011 | 1.81630694 | 12.5932816 | 0.03325347 | 3519.81482 | 0.00504449 | 0.01734601 | 0.01659562 | 0.55326587 |
| SAN DIEGO | 2050 | T7 Ag | Aggregated | 15 | DSL | 0.01612478 | 0.06037913 | 0.06873704 | 0.98409562 | 9.6205675 | 0.02616769 | 2769.79961 | 0.00280445 | 0.01374224 | 0.01314776 | 0.43537393 |
| SAN DIEGO | 2050 | T7 Ag | Aggregated | 20 | DSL | 0.01229225 | 0.04101506 | 0.04669252 | 0.65724531 | 8.05744593 | 0.0223468 | 2365.36533 | 0.00190504 | 0.01167672 | 0.01117159 | 0.37180249 |
| SAN DIEGO | 2050 | T7 Ag | Aggregated | 25 | DSL | 0.01234588 | 0.03220973 | 0.03666833 | 0.5023331 | 6.4160653 | 0.0195017 | 2064.21668 | 0.00149606 | 0.01114945 | 0.01066713 | 0.32446612 |
| SAN DIEGO | 2050 | T7 Ag | Aggregated | 30 | DSL | 0.01581511 | 0.02605124 | 0.02965736 | 0.38536521 | 4.92776479 | 0.01713296 | 1813.49059 | 0.00121001 | 0.01216043 | 0.01163438 | 0.28505547 |
| SAN DIEGO | 2050 | T7 Ag | Aggregated | 35 | DSL | 0.02181998 | 0.02145482 | 0.02442468 | 0.29047847 | 3.81039578 | 0.01531338 | 1620.89152 | 0.00099652 | 0.01470966 | 0.01407333 | 0.25478157 |
| SAN DIEGO | 2050 | T7 Ag | Aggregated | 40 | DSL | 0.02523232 | 0.01842046 | 0.02097029 | 0.21767289 | 3.06371373 | 0.01404295 | 1486.41946 | 0.00085558 | 0.01879714 | 0.01798399 | 0.23364444 |
| SAN DIEGO | 2050 | T7 Ag | Aggregated | 45 | DSL | 0.03161281 | 0.01694817 | 0.01929242 | 0.16694846 | 2.68990629 | 0.01332168 | 1410.07442 | 0.0007872 | 0.02442287 | 0.02336635 | 0.22164406 |
| SAN DIEGO | 2050 | T7 Ag | Aggregated | 50 | DSL | 0.04131914 | 0.01703793 | 0.01939639 | 0.1383052 | 2.68857516 | 0.01314957 | 1391.85639 | 0.00079137 | 0.03158685 | 0.03022042 | 0.21878044 |
| SAN DIEGO | 2050 | T7 Ag | Aggregated | 55 | DSL | 0.11831921 | 0.01868977 | 0.02127688 | 0.13174309 | 3.05886366 | 0.01352661 | 1431.76538 | 0.00086809 | 0.04028908 | 0.03854619 | 0.22505358 |
| SAN DIEGO | 2050 | T7 Ag | Aggregated | 60 | DSL | 0.60323581 | 0.02190366 | 0.02493565 | 0.14726214 | 3.80301289 | 0.01445281 | 1529.80139 | 0.00101737 | 0.05052955 | 0.04834367 | 0.24046348 |
| SAN DIEGO | 2050 | T7 Ag | Aggregated | 65 | DSL | 0.38361235 | 0.02667963 | 0.03037272 | 0.18486235 | 4.91181246 | 0.01592816 | 1685.96442 | 0.0012392 | 0.06230828 | 0.05961285 | 0.26501013 |
| SAN DIEGO | 2050 | T7 Ag | Aggregated | 70 | DSL | 0.00243266 | 0.02668787 | 0.0303821 | 0.18493993 | 4.9194608 | 0.01592816 | 1685.96442 | 0.00123958 | 0.06230828 | 0.05961285 | 0.26501013 |
| SAN DIEGO | 2050 | T7 Ag | Aggregated | 75 | DSL | 4.2792E-05 | 0.02669814 | 0.03039379 | 0.18504622 | 4.93345818 | 0.01592816 | 1685.96442 | 0.00124006 | 0.06230828 | 0.05961285 | 0.26501013 |
| SAN DIEGO | 2050 | T7 Ag | Aggregated | 80 | DSL | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SAN DIEGO | 2050 | T7 Ag | Aggregated | 85 | DSL | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SAN DIEGO | 2050 | T7 Ag | Aggregated | 90 | DSL | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SAN DIEGO | 2050 | T7 CAIRP | Aggregated | 5 | DSL | 3821.10395 | 0.12364397 | 0.14075925 | 2.11048999 | 13.7117189 | 0.0221623 | 2345.83674 | 0.00574294 | 0.01117578 | 0.01069232 | 0.36873287 |
| SAN DIEGO | 2050 | T7 CAIRP | Aggregated | 10 | DSL | 8688.35578 | 0.07758772 | 0.08832772 | 1.2975575 | 10.3172369 | 0.01832351 | 1939.50817 | 0.00360375 | 0.00982803 | 0.00940287 | 0.30486367 |
| SAN DIEGO | 2050 | T7 CAIRP | Aggregated | 15 | DSL | 8125.0696 | 0.04313447 | 0.04910531 | 0.70303131 | 7.21128841 | 0.01441907 | 1526.23056 | 0.00200348 | 0.00778618 | 0.00744935 | 0.23990219 |
| SAN DIEGO | 2050 | T7 CAIRP | Aggregated | 20 | DSL | 11870.8075 | 0.0293009 | 0.03335685 | 0.46953164 | 5.69543733 | 0.01231359 | 1303.36938 | 0.00136095 | 0.00661588 | 0.00632968 | 0.20487152 |
| SAN DIEGO | 2050 | T7 CAIRP | Aggregated | 25 | DSL | 10440.9222 | 0.02301043 | 0.02619562 | 0.3588634 | 4.43276534 | 0.01074581 | 1137.42351 | 0.00106877 | 0.00631714 | 0.00604386 | 0.17878714 |
| SAN DIEGO | 2050 | T7 CAIRP | Aggregated | 30 | DSL | 5770.81187 | 0.01861085 | 0.02118703 | 0.27530232 | 3.30002611 | 0.00944052 | 999.260295 | 0.00086443 | 0.00688995 | 0.00659189 | 0.1570698 |
| SAN DIEGO | 2050 | T7 CAIRP | Aggregated | 35 | DSL | 7715.04476 | 0.01532719 | 0.01744884 | 0.20751587 | 2.39088506 | 0.0084378 | 893.125163 | 0.00071191 | 0.00833431 | 0.00797377 | 0.14038684 |
| SAN DIEGO | 2050 | T7 CAIRP | Aggregated | 40 | DSL | 7141.39483 | 0.01315946 | 0.01498105 | 0.15550405 | 1.70786248 | 0.00773755 | 819.00459 | 0.00061122 | 0.01065022 | 0.0101895 | 0.12873612 |
| SAN DIEGO | 2050 | T7 CAIRP | Aggregated | 45 | DSL | 9513.31993 | 0.01210766 | 0.01378365 | 0.11926686 | 1.25225741 | 0.00734011 | 776.935963 | 0.00056237 | 0.01383769 | 0.01323908 | 0.12212351 |
| SAN DIEGO | 2050 | T7 CAIRP | Aggregated | 50 | DSL | 14002.5285 | 0.01217179 | 0.01385666 | 0.09880431 | 1.02358302 | 0.00724509 | 766.879231 | 0.00056535 | 0.01789671 | 0.0171225 | 0.12054274 |
| SAN DIEGO | 2050 | T7 CAIRP | Aggregated | 55 | DSL | 33615.9977 | 0.01335185 | 0.01520007 | 0.09411638 | 1.020759 | 0.00745261 | 788.844601 | 0.00062016 | 0.02282728 | 0.02183978 | 0.12399539 |
| SAN DIEGO | 2050 | T7 CAIRP | Aggregated | 60 | DSL | 122666.289 | 0.01564784 | 0.01781388 | 0.10520309 | 1.24368624 | 0.00796262 | 842.828201 | 0.0007268 | 0.0286294 | 0.02739091 | 0.13248086 |
| SAN DIEGO | 2050 | T7 CAIRP | Aggregated | 65 | DSL | 224742.115 | 0.01905976 | 0.02169808 | 0.13206442 | 1.69238584 | 0.00877545 | 928.864599 | 0.00088528 | 0.03530308 | 0.03377588 | 0.14600458 |
| SAN DIEGO | 2050 | T7 CAIRP | Aggregated | 70 | DSL | 2761.96304 | 0.02358468 | 0.02684936 | 0.17467285 | 1.68888116 | 0.00877545 | 928.864599 | 0.00109545 | 0.03530308 | 0.03377588 | 0.14600458 |
| SAN DIEGO | 2050 | T7 CAIRP | Aggregated | 75 | DSL | 0.87511173 | 0.02922481 | 0.03327022 | 0.23304573 | 1.68946325 | 0.00877545 | 928.864599 | 0.00135742 | 0.03530308 | 0.03377588 | 0.14600458 |
| SAN DIEGO | 2050 | T7 CAIRP | Aggregated | 80 | DSL | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SAN DIEGO | 2050 | T7 CAIRP | Aggregated | 85 | DSL | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SAN DIEGO | 2050 | T7 CAIRP | Aggregated | 90 | DSL | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SAN DIEGO | 2050 | T7 CAIRP cons | Aggregated | 5 | DSL | 8160.16409 | 0.12455339 | 0.14179455 | 2.12601292 | 13.8817055 | 0.02457432 | 2601.14371 | 0.00578518 | 0.01134079 | 0.0108502 | 0.40886357 |
| SAN DIEGO | 2050 | T7 CAIRP cons | Aggregated | 10 | DSL | 5612.85306 | 0.07815839 | 0.08897738 | 1.30710121 | 10.4222839 | 0.02031773 | 2150.59275 | 0.00363025 | 0.00997314 | 0.0095417 | 0.33804323 |
| SAN DIEGO | 2050 | T7 CAIRP cons | Aggregated | 15 | DSL | 1192.34371 | 0.04345173 | 0.04946649 | 0.7082022 | 7.28655892 | 0.01598836 | 1692.33646 | 0.00201822 | 0.00790114 | 0.00755934 | 0.26601172 |
| SAN DIEGO | 2050 | T7 CAIRP cons | Aggregated | 20 | DSL | 1187.79508 | 0.02951641 | 0.03360219 | 0.47298511 | 5.7559764 | 0.0136538 | 1445.22873 | 0.00137096 | 0.00671357 | 0.00642314 | 0.22716983 |
| SAN DIEGO | 2050 | T7 CAIRP cons | Aggregated | 25 | DSL | 1602.09644 | 0.02317967 | 0.02638829 | 0.36150289 | 4.48058192 | 0.01191546 | 1261.22812 | 0.00107664 | 0.00641041 | 0.0061331 | 0.1982475 |
| SAN DIEGO | 2050 | T7 CAIRP cons | Aggregated | 30 | DSL | 1923.2568 | 0.01874773 | 0.02134286 | 0.2773272 | 3.3340031 | 0.01046817 | 1108.03548 | 0.00087078 | 0.00699168 | 0.00668922 | 0.17416775 |
| SAN DIEGO | 2050 | T7 CAIRP cons | Aggregated | 35 | DSL | 2483.69148 | 0.01543992 | 0.01757718 | 0.20904218 | 2.41647862 | 0.00935641 | 990.35822 | 0.00071714 | 0.00845737 | 0.0080915 | 0.15567052 |
| SAN DIEGO | 2050 | T7 CAIRP cons | Aggregated | 40 | DSL | 3184.47478 | 0.01325625 | 0.01509123 | 0.1566478 | 1.72802966 | 0.00858019 | 908.196331 | 0.00061572 | 0.01080747 | 0.01033995 | 0.14275582 |
| SAN DIEGO | 2050 | T7 CAIRP cons | Aggregated | 45 | DSL | 3869.37945 | 0.01219672 | 0.01388503 | 0.12014409 | 1.26702785 | 0.0081395 | 861.549817 | 0.00056651 | 0.014042 | 0.01343455 | 0.13542363 |
| SAN DIEGO | 2050 | T7 CAIRP cons | Aggregated | 50 | DSL | 3888.39334 | 0.01226132 | 0.01395858 | 0.09953102 | 1.03398254 | 0.00803433 | 850.418676 | 0.00056951 | 0.01816095 | 0.01737532 | 0.13367397 |
| SAN DIEGO | 2050 | T7 CAIRP cons | Aggregated | 55 | DSL | 4744.17983 | 0.01345006 | 0.01531187 | 0.09480862 | 1.03047563 | 0.0082647 | 874.80291 | 0.00062472 | 0.02316432 | 0.02216225 | 0.13750684 |
| SAN DIEGO | 2050 | T7 CAIRP cons | Aggregated | 60 | DSL | 17413.259 | 0.01576293 | 0.0179449 | 0.10597687 | 1.25708942 | 0.00883061 | 934.702519 | 0.00073215 | 0.02905212 | 0.02779534 | 0.14692222 |
| SAN DIEGO | 2050 | T7 CAIRP cons | Aggregated | 65 | DSL | 8537.32595 | 0.01919994 | 0.02185768 | 0.13303577 | 1.70888433 | 0.00973204 | 1030.1175 | 0.00089179 | 0.03582433 | 0.03427459 | 0.16192013 |
| SAN DIEGO | 2050 | T7 CAIRP cons | Aggregated | 70 | DSL | 1906.12592 | 0.02375853 | 0.02704728 | 0.1759612 | 1.71517543 | 0.00973204 | 1030.1175 | 0.00110352 | 0.03582433 | 0.03427459 | 0.16192013 |
| SAN DIEGO | 2050 | T7 CAIRP cons | Aggregated | 75 | DSL | 1512.36183 | 0.02944062 | 0.03351591 | 0.23476836 | 1.71762836 | 0.00973204 | 1030.1175 | 0.00136744 | 0.03582433 | 0.03427459 | 0.16192013 |
| SAN DIEGO | 2050 | T7 CAIRP cons | Aggregated | 80 | DSL | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SAN DIEGO | 2050 | T7 CAIRP cons | Aggregated | 85 | DSL | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SAN DIEGO | 2050 | T7 CAIRP cons | Aggregated | 90 | DSL | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SAN DIEGO | 2050 | T7 NNOOS | Aggregated | 5 | DSL | 4657.73658 | 0.11623817 | 0.13232831 | 1.98407987 | 12.515312 | 0.02233122 | 2363.71591 | 0.00539896 | 0.00983224 | 0.0094069 | 0.37154322 |
| SAN DIEGO | 2050 | T7 NNOOS | Aggregated | 10 | DSL | 10590.6756 | 0.07294052 | 0.08303723 | 1.21983887 | 9.4170249 | 0.01846317 | 1954.29044 | 0.0033879 | 0.00864651 | 0.00827246 | 0.30718724 |

| Region | Calendar Year | Vehicle Categ | Model Year | Speed | Fuel | VMT | ROG_RUNEX | TOG_RUNEX | CO_RUNEX | NOx_RUNEX | SOx_RUNEX | CO2_RUNEX | CH4_RUNEX | PM10_RUNEX | PM2_5_RUNEX | N2O_RUNEX |
|-----------|---------------|---------------|------------|-------|------|------------|------------|------------|------------|------------|------------|------------|------------|------------|-------------|------------|
| SAN DIEGO | 2050 | T7 NNOOS | Aggregated | 15 | DSL | 9904.05766 | 0.04055088 | 0.04616409 | 0.66092248 | 6.58209148 | 0.01452897 | 1537.86297 | 0.00188348 | 0.00685013 | 0.00655379 | 0.24173064 |
| SAN DIEGO | 2050 | T7 NNOOS | Aggregated | 20 | DSL | 14469.9268 | 0.02754589 | 0.0313589 | 0.44140853 | 5.19850716 | 0.01240745 | 1313.30479 | 0.00127944 | 0.00582052 | 0.00556873 | 0.20643322 |
| SAN DIEGO | 2050 | T7 NNOOS | Aggregated | 25 | DSL | 12726.9674 | 0.02163219 | 0.02462661 | 0.33736888 | 4.04600602 | 0.01082774 | 1146.09522 | 0.00100476 | 0.0055577 | 0.00531727 | 0.18015021 |
| SAN DIEGO | 2050 | T7 NNOOS | Aggregated | 30 | DSL | 7034.33402 | 0.01749613 | 0.01991801 | 0.25881278 | 3.01210048 | 0.00951251 | 1006.88037 | 0.00081265 | 0.00606164 | 0.00579942 | 0.15826757 |
| SAN DIEGO | 2050 | T7 NNOOS | Aggregated | 35 | DSL | 9404.25768 | 0.01440915 | 0.01640372 | 0.19508648 | 2.18228476 | 0.00850217 | 899.937991 | 0.00066927 | 0.00733236 | 0.00701517 | 0.14145772 |
| SAN DIEGO | 2050 | T7 NNOOS | Aggregated | 40 | DSL | 8705.00681 | 0.01237126 | 0.01408374 | 0.14618996 | 1.55885924 | 0.00779662 | 825.257278 | 0.00057461 | 0.00936986 | 0.00896452 | 0.12971895 |
| SAN DIEGO | 2050 | T7 NNOOS | Aggregated | 45 | DSL | 11596.2661 | 0.01138246 | 0.01295807 | 0.11212324 | 1.14300964 | 0.00739615 | 782.868133 | 0.00052869 | 0.01217413 | 0.01164748 | 0.12305597 |
| SAN DIEGO | 2050 | T7 NNOOS | Aggregated | 50 | DSL | 17068.3892 | 0.01144275 | 0.0130267 | 0.09288631 | 0.93429161 | 0.00730045 | 772.738518 | 0.00053149 | 0.01574518 | 0.01506405 | 0.12146373 |
| SAN DIEGO | 2050 | T7 NNOOS | Aggregated | 55 | DSL | 40976.2372 | 0.01255213 | 0.01428964 | 0.08847918 | 0.93171907 | 0.0075096 | 794.876598 | 0.00058301 | 0.020083 | 0.01921422 | 0.12494353 |
| SAN DIEGO | 2050 | T7 NNOOS | Aggregated | 60 | DSL | 149524.134 | 0.0147106 | 0.01674689 | 0.09890183 | 1.13520158 | 0.00802357 | 849.279276 | 0.00068327 | 0.02518759 | 0.02409799 | 0.13349488 |
| SAN DIEGO | 2050 | T7 NNOOS | Aggregated | 65 | DSL | 273949.514 | 0.01791815 | 0.02039845 | 0.12415428 | 1.54475836 | 0.00884262 | 935.974204 | 0.00083225 | 0.03105896 | 0.02971537 | 0.14712211 |
| SAN DIEGO | 2050 | T7 NNOOS | Aggregated | 70 | DSL | 3366.69623 | 0.02217204 | 0.02524118 | 0.16421057 | 1.5415594 | 0.00884262 | 935.974204 | 0.00102983 | 0.03105896 | 0.02971537 | 0.14712211 |
| SAN DIEGO | 2050 | T7 NNOOS | Aggregated | 75 | DSL | 1.06671788 | 0.02747434 | 0.03127744 | 0.21908704 | 1.54209072 | 0.00884262 | 935.974204 | 0.00127611 | 0.03105896 | 0.02971537 | 0.14712211 |
| SAN DIEGO | 2050 | T7 NNOOS | Aggregated | 80 | DSL | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SAN DIEGO | 2050 | T7 NNOOS | Aggregated | 85 | DSL | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SAN DIEGO | 2050 | T7 NNOOS | Aggregated | 90 | DSL | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SAN DIEGO | 2050 | T7 NOOS | Aggregated | 5 | DSL | 1501.31317 | 0.12379685 | 0.14093329 | 2.11309952 | 13.7359111 | 0.02216957 | 2346.60599 | 0.00575004 | 0.01120348 | 0.01071883 | 0.36885378 |
| SAN DIEGO | 2050 | T7 NOOS | Aggregated | 10 | DSL | 3413.65824 | 0.07768366 | 0.08843693 | 1.29916187 | 10.3355105 | 0.01832952 | 1940.14417 | 0.0036082 | 0.00985239 | 0.00942618 | 0.30496365 |
| SAN DIEGO | 2050 | T7 NOOS | Aggregated | 15 | DSL | 3192.34289 | 0.0431878 | 0.04916603 | 0.70390058 | 7.22412812 | 0.0144238 | 1526.73104 | 0.00200596 | 0.00780548 | 0.00746782 | 0.23998086 |
| SAN DIEGO | 2050 | T7 NOOS | Aggregated | 20 | DSL | 4664.04472 | 0.02933713 | 0.03339809 | 0.4701122 | 5.70561573 | 0.01231761 | 1303.79557 | 0.00136263 | 0.00663228 | 0.00634537 | 0.20493851 |
| SAN DIEGO | 2050 | T7 NOOS | Aggregated | 25 | DSL | 4102.24226 | 0.02303888 | 0.02622801 | 0.35930712 | 4.44069928 | 0.01074932 | 1137.79444 | 0.0010701 | 0.0063328 | 0.00605884 | 0.17884544 |
| SAN DIEGO | 2050 | T7 NOOS | Aggregated | 30 | DSL | 2267.35415 | 0.01863386 | 0.02121323 | 0.27564272 | 3.30594507 | 0.00944358 | 999.584834 | 0.00086549 | 0.00690702 | 0.00660823 | 0.15712082 |
| SAN DIEGO | 2050 | T7 NOOS | Aggregated | 35 | DSL | 3031.24398 | 0.01534614 | 0.01747041 | 0.20777245 | 2.3951929 | 0.00844053 | 893.413593 | 0.00071279 | 0.00835497 | 0.00799353 | 0.14043218 |
| SAN DIEGO | 2050 | T7 NOOS | Aggregated | 40 | DSL | 2805.85671 | 0.01317573 | 0.01499957 | 0.15569632 | 1.71096756 | 0.00774001 | 819.265009 | 0.00061198 | 0.01067662 | 0.01021475 | 0.12877705 |
| SAN DIEGO | 2050 | T7 NOOS | Aggregated | 45 | DSL | 3737.78697 | 0.01212263 | 0.0138007 | 0.11941433 | 1.25457044 | 0.00734243 | 777.182497 | 0.00056306 | 0.01387199 | 0.01327189 | 0.12216227 |
| SAN DIEGO | 2050 | T7 NOOS | Aggregated | 50 | DSL | 5501.59871 | 0.01218684 | 0.01387379 | 0.09892647 | 1.02551391 | 0.00724737 | 767.119548 | 0.00056605 | 0.01794107 | 0.01716494 | 0.12058051 |
| SAN DIEGO | 2050 | T7 NOOS | Aggregated | 55 | DSL | 13207.7381 | 0.01336836 | 0.01521886 | 0.09423275 | 1.02271567 | 0.00745491 | 789.088016 | 0.00062093 | 0.02288386 | 0.02189391 | 0.12403365 |
| SAN DIEGO | 2050 | T7 NOOS | Aggregated | 60 | DSL | 48195.6308 | 0.01566719 | 0.0178359 | 0.10533316 | 1.24607638 | 0.00796503 | 843.083402 | 0.0007277 | 0.02870036 | 0.0274588 | 0.13252097 |
| SAN DIEGO | 2050 | T7 NOOS | Aggregated | 65 | DSL | 88301.2612 | 0.01908332 | 0.02172491 | 0.13222771 | 1.69561713 | 0.00877811 | 929.145851 | 0.00088637 | 0.03539058 | 0.0338596 | 0.14604879 |
| SAN DIEGO | 2050 | T7 NOOS | Aggregated | 70 | DSL | 1085.17631 | 0.02361332 | 0.02688197 | 0.17488394 | 1.69210576 | 0.00877811 | 929.145851 | 0.00109678 | 0.03539058 | 0.0338596 | 0.14604879 |
| SAN DIEGO | 2050 | T7 NOOS | Aggregated | 75 | DSL | 0.34383173 | 0.02925978 | 0.03331003 | 0.23332229 | 1.69268897 | 0.00877811 | 929.145851 | 0.00135904 | 0.03539058 | 0.0338596 | 0.14604879 |
| SAN DIEGO | 2050 | T7 NOOS | Aggregated | 80 | DSL | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SAN DIEGO | 2050 | T7 NOOS | Aggregated | 85 | DSL | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SAN DIEGO | 2050 | T7 NOOS | Aggregated | 90 | DSL | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SAN DIEGO | 2050 | T7 other port | Aggregated | 5 | DSL | 6162.30583 | 0.13115326 | 0.14930801 | 2.23866672 | 14.9951976 | 0.02369282 | 2507.83924 | 0.00609173 | 0.01253832 | 0.01199591 | 0.39419741 |
| SAN DIEGO | 2050 | T7 other port | Aggregated | 10 | DSL | 11208.8032 | 0.08229988 | 0.09369214 | 1.37636227 | 11.2599781 | 0.01958893 | 2073.44979 | 0.00382262 | 0.01102624 | 0.01054925 | 0.32591743 |
| SAN DIEGO | 2050 | T7 other port | Aggregated | 15 | DSL | 10363.4217 | 0.04575416 | 0.05208763 | 0.74572863 | 7.85857881 | 0.01541484 | 1631.63141 | 0.00212516 | 0.00873546 | 0.00835756 | 0.25646974 |
| SAN DIEGO | 2050 | T7 other port | Aggregated | 20 | DSL | 8013.65885 | 0.03108044 | 0.03538271 | 0.49804778 | 6.19885613 | 0.01316403 | 1393.38757 | 0.00144361 | 0.00742248 | 0.00710139 | 0.21902112 |
| SAN DIEGO | 2050 | T7 other port | Aggregated | 25 | DSL | 8328.06671 | 0.02440793 | 0.02778657 | 0.38065831 | 4.8246779 | 0.01148804 | 1215.98717 | 0.00113368 | 0.00708731 | 0.00678072 | 0.19113625 |
| SAN DIEGO | 2050 | T7 other port | Aggregated | 30 | DSL | 10319.9926 | 0.01974114 | 0.02247379 | 0.2920223 | 3.59123316 | 0.01009267 | 1068.28963 | 0.00091692 | 0.00772996 | 0.00739556 | 0.16792025 |
| SAN DIEGO | 2050 | T7 other port | Aggregated | 35 | DSL | 12740.0015 | 0.01625806 | 0.01850856 | 0.22011896 | 2.60254547 | 0.00902079 | 954.83352 | 0.00075514 | 0.00935041 | 0.00894592 | 0.15008653 |
| SAN DIEGO | 2050 | T7 other port | Aggregated | 40 | DSL | 15808.6401 | 0.01395868 | 0.01589089 | 0.1649483 | 1.86075948 | 0.00827241 | 875.618824 | 0.00064834 | 0.01194868 | 0.01143179 | 0.13763509 |
| SAN DIEGO | 2050 | T7 other port | Aggregated | 45 | DSL | 16545.0703 | 0.012843 | 0.01462078 | 0.12651032 | 1.3649288 | 0.00784753 | 830.645546 | 0.00059652 | 0.01552476 | 0.01485316 | 0.13056591 |
| SAN DIEGO | 2050 | T7 other port | Aggregated | 50 | DSL | 16815.5814 | 0.01291103 | 0.01469822 | 0.104805 | 1.11395439 | 0.00774614 | 819.913685 | 0.00059968 | 0.02007865 | 0.01921005 | 0.12887901 |
| SAN DIEGO | 2050 | T7 other port | Aggregated | 55 | DSL | 14745.0048 | 0.01416275 | 0.01612322 | 0.09983236 | 1.10908685 | 0.00796824 | 843.423243 | 0.00065782 | 0.02561034 | 0.02450245 | 0.13257439 |
| SAN DIEGO | 2050 | T7 other port | Aggregated | 60 | DSL | 9732.13753 | 0.01659818 | 0.01889577 | 0.1115924 | 1.35032469 | 0.00851385 | 901.17422 | 0.00077094 | 0.03211985 | 0.03073036 | 0.14165204 |
| SAN DIEGO | 2050 | T7 other port | Aggregated | 65 | DSL | 3828.11128 | 0.02021732 | 0.02301588 | 0.14008511 | 1.83670244 | 0.00938295 | 993.166614 | 0.00093904 | 0.03960717 | 0.03789378 | 0.15611196 |
| SAN DIEGO | 2050 | T7 other port | Aggregated | 70 | DSL | 87.5042042 | 0.02502015 | 0.02848354 | 0.1853105 | 1.83310641 | 0.00938295 | 993.166614 | 0.00116212 | 0.03960717 | 0.03789378 | 0.15611196 |
| SAN DIEGO | 2050 | T7 other port | Aggregated | 75 | DSL | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SAN DIEGO | 2050 | T7 other port | Aggregated | 80 | DSL | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SAN DIEGO | 2050 | T7 other port | Aggregated | 85 | DSL | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SAN DIEGO | 2050 | T7 other port | Aggregated | 90 | DSL | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SAN DIEGO | 2050 | T7 POLA | Aggregated | 5 | DSL | 3712.81749 | 0.13088049 | 0.14899747 | 2.23401067 | 14.9507839 | 0.02376921 | 2515.92523 | 0.00607906 | 0.01248882 | 0.01194856 | 0.39546841 |
| SAN DIEGO | 2050 | T7 POLA | Aggregated | 10 | DSL | 6753.35527 | 0.08212871 | 0.09349728 | 1.37349967 | 11.2266464 | 0.01965209 | 2080.13518 | 0.00381467 | 0.01098272 | 0.01050761 | 0.32696828 |
| SAN DIEGO | 2050 | T7 POLA | Aggregated | 15 | DSL | 6244.00905 | 0.045659 | 0.0519793 | 0.74417764 | 7.83533392 | 0.01546455 | 1636.89225 | 0.00212074 | 0.00870097 | 0.00832457 | 0.25729667 |
| SAN DIEGO | 2050 | T7 POLA | Aggregated | 20 | DSL | 4828.26617 | 0.0310158 | 0.03530912 | 0.49701193 | 6.18053058 | 0.01320648 | 1397.88025 | 0.0014406 | 0.00739318 | 0.00707335 | 0.21972731 |
| SAN DIEGO | 2050 | T7 POLA | Aggregated | 25 | DSL | 5017.69834 | 0.02435716 | 0.02772878 | 0.3798666 | 4.81041803 | 0.01152508 | 1219.90785 | 0.00113133 | 0.00705934 | 0.00675395 | 0.19175253 |
| SAN DIEGO | 2050 | T7 POLA | Aggregated | 30 | DSL | 6217.84279 | 0.01970008 | 0.02242705 | 0.29141494 | 3.58062219 | 0.01012521 | 1071.7341 | 0.00091502 | 0.00769944 | 0.00736637 | 0.16846168 |

| Region | Calendar Year | Vehicle Categ | Model Year | Speed | Fuel | VMT | ROG_RUNEX | TOG_RUNEX | CO_RUNEX | NOx_RUNEX | SOx_RUNEX | CO2_RUNEX | CH4_RUNEX | PM10_RUNEX | PM2_5_RUNEX | N2O_RUNEX |
|-----------|---------------|----------------|------------|-------|------|------------|------------|------------|------------|------------|------------|------------|------------|------------|-------------|------------|
| SAN DIEGO | 2050 | T7 POLA | Aggregated | 35 | DSL | 7675.90929 | 0.01622424 | 0.01847007 | 0.21966115 | 2.59486098 | 0.00904988 | 957.912174 | 0.00075357 | 0.0093135 | 0.0089106 | 0.15057045 |
| SAN DIEGO | 2050 | T7 POLA | Aggregated | 40 | DSL | 9524.77806 | 0.01392965 | 0.01585784 | 0.16460524 | 1.85527269 | 0.00829909 | 878.442067 | 0.000647 | 0.01190151 | 0.01138666 | 0.13807886 |
| SAN DIEGO | 2050 | T7 POLA | Aggregated | 45 | DSL | 9968.48065 | 0.01281629 | 0.01459037 | 0.1262472 | 1.36091376 | 0.00787283 | 833.323783 | 0.00059528 | 0.01546347 | 0.01479453 | 0.13098689 |
| SAN DIEGO | 2050 | T7 POLA | Aggregated | 50 | DSL | 10131.4648 | 0.01288417 | 0.01466765 | 0.10458703 | 1.11068836 | 0.00777111 | 822.557319 | 0.00059844 | 0.01999938 | 0.01913422 | 0.12929456 |
| SAN DIEGO | 2050 | T7 POLA | Aggregated | 55 | DSL | 8883.93294 | 0.01413333 | 0.01608968 | 0.09962473 | 1.10584338 | 0.00799394 | 846.142679 | 0.00065646 | 0.02550924 | 0.02440572 | 0.13300185 |
| SAN DIEGO | 2050 | T7 POLA | Aggregated | 60 | DSL | 5863.65744 | 0.01656366 | 0.01885647 | 0.11136031 | 1.34637737 | 0.0085413 | 904.079861 | 0.00076934 | 0.03199305 | 0.03060905 | 0.14210876 |
| SAN DIEGO | 2050 | T7 POLA | Aggregated | 65 | DSL | 2306.45458 | 0.02017527 | 0.02296801 | 0.13979376 | 1.83132768 | 0.0094132 | 996.368864 | 0.00093709 | 0.03945082 | 0.03774419 | 0.15661531 |
| SAN DIEGO | 2050 | T7 POLA | Aggregated | 70 | DSL | 52.7216838 | 0.02496798 | 0.02842415 | 0.1849238 | 1.82774218 | 0.0094132 | 996.368864 | 0.0011597 | 0.03945082 | 0.03774419 | 0.15661531 |
| SAN DIEGO | 2050 | T7 POLA | Aggregated | 75 | DSL | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SAN DIEGO | 2050 | T7 POLA | Aggregated | 80 | DSL | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SAN DIEGO | 2050 | T7 POLA | Aggregated | 85 | DSL | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SAN DIEGO | 2050 | T7 POLA | Aggregated | 90 | DSL | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SAN DIEGO | 2050 | T7 Public | Aggregated | 5 | DSL | 1066.81131 | 0.14251578 | 0.16224336 | 1.62731375 | 8.67039088 | 0.02568828 | 2719.05467 | 0.00661949 | 0.00746898 | 0.00714588 | 0.42739753 |
| SAN DIEGO | 2050 | T7 Public | Aggregated | 10 | DSL | 1872.10643 | 0.09831952 | 0.11192929 | 1.02592694 | 6.5970928 | 0.0213222 | 2256.91303 | 0.00456669 | 0.00664753 | 0.00635996 | 0.3547553 |
| SAN DIEGO | 2050 | T7 Public | Aggregated | 15 | DSL | 1437.87073 | 0.05957227 | 0.06781849 | 0.57196208 | 4.66817432 | 0.01683879 | 1782.35361 | 0.00276698 | 0.00544275 | 0.0052073 | 0.28016117 |
| SAN DIEGO | 2050 | T7 Public | Aggregated | 20 | DSL | 1073.61602 | 0.04094257 | 0.04661 | 0.38536408 | 3.70393332 | 0.01439389 | 1523.56503 | 0.00190168 | 0.00471429 | 0.00451035 | 0.23948321 |
| SAN DIEGO | 2050 | T7 Public | Aggregated | 25 | DSL | 1785.02525 | 0.03121372 | 0.03553444 | 0.29330987 | 2.93127604 | 0.01258815 | 1332.43122 | 0.0014498 | 0.00443715 | 0.0042452 | 0.20943963 |
| SAN DIEGO | 2050 | T7 Public | Aggregated | 30 | DSL | 2900.546 | 0.02437768 | 0.02775214 | 0.2244861 | 2.24817569 | 0.01109642 | 1174.53496 | 0.00113228 | 0.00459589 | 0.00439708 | 0.18462054 |
| SAN DIEGO | 2050 | T7 Public | Aggregated | 35 | DSL | 3403.5074 | 0.01928971 | 0.02195987 | 0.1693905 | 1.69899745 | 0.00994962 | 1053.14832 | 0.00089596 | 0.00517807 | 0.00495407 | 0.16554025 |
| SAN DIEGO | 2050 | T7 Public | Aggregated | 40 | DSL | 3555.88092 | 0.01571148 | 0.01788633 | 0.12736522 | 1.28590256 | 0.00914464 | 967.942122 | 0.00072976 | 0.00617906 | 0.00591176 | 0.15214702 |
| SAN DIEGO | 2050 | T7 Public | Aggregated | 45 | DSL | 3730.55814 | 0.01346735 | 0.01533155 | 0.0979255 | 1.01082949 | 0.00867964 | 918.723383 | 0.00062552 | 0.00759599 | 0.00726739 | 0.14441052 |
| SAN DIEGO | 2050 | T7 Public | Aggregated | 50 | DSL | 2442.84512 | 0.01242789 | 0.01414821 | 0.08071408 | 0.86932265 | 0.00855349 | 905.370209 | 0.00057724 | 0.00942694 | 0.00901913 | 0.14231159 |
| SAN DIEGO | 2050 | T7 Public | Aggregated | 55 | DSL | 2437.66865 | 0.01249773 | 0.01422771 | 0.0754677 | 0.86268295 | 0.00876541 | 927.80117 | 0.00058049 | 0.01167058 | 0.01116572 | 0.14583742 |
| SAN DIEGO | 2050 | T7 Public | Aggregated | 60 | DSL | 2858.18699 | 0.01387545 | 0.01579614 | 0.08259246 | 0.99391074 | 0.00932148 | 986.660392 | 0.00064448 | 0.01429897 | 0.0136804 | 0.15508927 |
| SAN DIEGO | 2050 | T7 Public | Aggregated | 65 | DSL | 1277.67486 | 0.01639187 | 0.0186609 | 0.10162138 | 1.26145516 | 0.01021908 | 1081.67005 | 0.00076136 | 0.01729683 | 0.01654858 | 0.17002347 |
| SAN DIEGO | 2050 | T7 Public | Aggregated | 70 | DSL | 697.227057 | 0.01951514 | 0.0222165 | 0.13103129 | 1.26493908 | 0.01021908 | 1081.67005 | 0.00090643 | 0.01729683 | 0.01654858 | 0.17002347 |
| SAN DIEGO | 2050 | T7 Public | Aggregated | 75 | DSL | 203.670744 | 0.02340816 | 0.02664841 | 0.1713224 | 1.26673609 | 0.01021908 | 1081.67005 | 0.00108725 | 0.01729683 | 0.01654858 | 0.17002347 |
| SAN DIEGO | 2050 | T7 Public | Aggregated | 80 | DSL | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SAN DIEGO | 2050 | T7 Public | Aggregated | 85 | DSL | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SAN DIEGO | 2050 | T7 Public | Aggregated | 90 | DSL | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SAN DIEGO | 2050 | T7 Single | Aggregated | 5 | DSL | 2519.9465 | 0.10847003 | 0.12348487 | 1.85148499 | 11.1987224 | 0.02516901 | 2664.09073 | 0.00503815 | 0.00841929 | 0.00805507 | 0.41875796 |
| SAN DIEGO | 2050 | T7 Single | Aggregated | 10 | DSL | 5871.69268 | 0.06806594 | 0.07748789 | 1.13831776 | 8.43620523 | 0.02080942 | 2202.63654 | 0.00316149 | 0.00740396 | 0.00708366 | 0.34622379 |
| SAN DIEGO | 2050 | T7 Single | Aggregated | 15 | DSL | 7302.13479 | 0.03784089 | 0.04307897 | 0.61675342 | 5.9002364 | 0.01637527 | 1733.29057 | 0.00175761 | 0.00586573 | 0.00561198 | 0.27244914 |
| SAN DIEGO | 2050 | T7 Single | Aggregated | 20 | DSL | 9329.53938 | 0.02570501 | 0.0292632 | 0.41190946 | 4.66202309 | 0.01398422 | 1480.2029 | 0.00119393 | 0.00498408 | 0.00476847 | 0.23266728 |
| SAN DIEGO | 2050 | T7 Single | Aggregated | 25 | DSL | 12825.0515 | 0.02018652 | 0.02298082 | 0.31482272 | 3.6280275 | 0.01220381 | 1291.74952 | 0.00093761 | 0.00475902 | 0.00455315 | 0.20304504 |
| SAN DIEGO | 2050 | T7 Single | Aggregated | 30 | DSL | 16167.7999 | 0.01632687 | 0.0185869 | 0.24151648 | 2.70068303 | 0.0107215 | 1134.84966 | 0.00075834 | 0.00519055 | 0.00496601 | 0.17838256 |
| SAN DIEGO | 2050 | T7 Single | Aggregated | 35 | DSL | 13934.7698 | 0.01344619 | 0.01530747 | 0.18204896 | 1.96007454 | 0.00958284 | 1014.32464 | 0.00062454 | 0.00627866 | 0.00600705 | 0.15943771 |
| SAN DIEGO | 2050 | T7 Single | Aggregated | 40 | DSL | 8924.34118 | 0.0115445 | 0.01314253 | 0.13642017 | 1.40518702 | 0.00878783 | 930.174451 | 0.00053621 | 0.00802336 | 0.00767627 | 0.14621047 |
| SAN DIEGO | 2050 | T7 Single | Aggregated | 45 | DSL | 7151.62865 | 0.01062178 | 0.01209208 | 0.10463011 | 1.03556546 | 0.00833647 | 882.399103 | 0.00049335 | 0.01042464 | 0.00997367 | 0.13870085 |
| SAN DIEGO | 2050 | T7 Single | Aggregated | 50 | DSL | 16905.9445 | 0.01067804 | 0.01215613 | 0.08667878 | 0.85140705 | 0.00822876 | 870.998591 | 0.00049597 | 0.01348251 | 0.01289926 | 0.13690885 |
| SAN DIEGO | 2050 | T7 Single | Aggregated | 55 | DSL | 43518.4612 | 0.01171328 | 0.01333467 | 0.08256616 | 0.85233544 | 0.00846471 | 895.972918 | 0.00054405 | 0.01719696 | 0.01645302 | 0.14083447 |
| SAN DIEGO | 2050 | T7 Single | Aggregated | 60 | DSL | 31378.1931 | 0.01372749 | 0.01562771 | 0.09229228 | 1.03901526 | 0.0090443 | 957.322082 | 0.00063761 | 0.02156799 | 0.02063497 | 0.1504777 |
| SAN DIEGO | 2050 | T7 Single | Aggregated | 65 | DSL | 10033.3868 | 0.01672069 | 0.01903523 | 0.11585712 | 1.40895896 | 0.00996755 | 1055.04608 | 0.00077663 | 0.02659562 | 0.0254451 | 0.16583855 |
| SAN DIEGO | 2050 | T7 Single | Aggregated | 70 | DSL | 875.840261 | 0.02063462 | 0.02349095 | 0.15271224 | 1.40997326 | 0.00996755 | 1055.04608 | 0.00095842 | 0.02659562 | 0.0254451 | 0.16583855 |
| SAN DIEGO | 2050 | T7 Single | Aggregated | 75 | DSL | 32.415612 | 0.02551318 | 0.02904481 | 0.20320318 | 1.41411087 | 0.00996755 | 1055.04608 | 0.00118502 | 0.02659562 | 0.0254451 | 0.16583855 |
| SAN DIEGO | 2050 | T7 Single | Aggregated | 80 | DSL | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SAN DIEGO | 2050 | T7 Single | Aggregated | 85 | DSL | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SAN DIEGO | 2050 | T7 Single | Aggregated | 90 | DSL | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SAN DIEGO | 2050 | T7 single cons | Aggregated | 5 | DSL | 20243.8662 | 0.10838294 | 0.12338573 | 1.84771015 | 11.1985386 | 0.02510206 | 2657.00428 | 0.00503411 | 0.00838668 | 0.00802388 | 0.41764407 |
| SAN DIEGO | 2050 | T7 single cons | Aggregated | 10 | DSL | 13924.4561 | 0.06803214 | 0.07744941 | 1.13604825 | 8.41439642 | 0.02075429 | 2196.80086 | 0.00315992 | 0.0073758 | 0.00705673 | 0.3453065 |
| SAN DIEGO | 2050 | T7 single cons | Aggregated | 15 | DSL | 2957.98544 | 0.03782487 | 0.04306073 | 0.61554643 | 5.88896725 | 0.016332 | 1728.71025 | 0.00175687 | 0.00584429 | 0.00559147 | 0.27172918 |
| SAN DIEGO | 2050 | T7 single cons | Aggregated | 20 | DSL | 2946.70113 | 0.02568828 | 0.02924416 | 0.41110302 | 4.65535373 | 0.01394724 | 1476.28842 | 0.00119315 | 0.00496627 | 0.00475143 | 0.23205198 |
| SAN DIEGO | 2050 | T7 single cons | Aggregated | 25 | DSL | 3974.5066 | 0.02017226 | 0.02296459 | 0.31420827 | 3.62504928 | 0.01217159 | 1288.3389 | 0.00093695 | 0.00474187 | 0.00453674 | 0.20250893 |
| SAN DIEGO | 2050 | T7 single cons | Aggregated | 30 | DSL | 4771.24638 | 0.01631507 | 0.01857347 | 0.24105026 | 2.69871204 | 0.01069328 | 1131.86313 | 0.00075779 | 0.00517108 | 0.00494738 | 0.17791312 |
| SAN DIEGO | 2050 | T7 single cons | Aggregated | 35 | DSL | 6161.58175 | 0.01343606 | 0.01529593 | 0.18170415 | 1.95798258 | 0.00955769 | 1011.6634 | 0.00062407 | 0.00625383 | 0.00598329 | 0.1590194 |
| SAN DIEGO | 2050 | T7 single cons | Aggregated | 40 | DSL | 7900.0962 | 0.01153495 | 0.01313166 | 0.13616918 | 1.40287855 | 0.00876482 | 927.739407 | 0.00053577 | 0.00799013 | 0.00764448 | 0.14582772 |
| SAN DIEGO | 2050 | T7 single cons | Aggregated | 45 | DSL | 9599.21871 | 0.01061153 | 0.01208042 | 0.10444477 | 1.03207775 | 0.00831466 | 880.090941 | 0.00049288 | 0.01037996 | 0.00993092 | 0.13833804 |
| SAN DIEGO | 2050 | T7 single cons | Aggregated | 50 | DSL | 9646.38869 | 0.01066564 | 0.01214202 | 0.08653052 | 0.84598626 | 0.00820722 | 868.717883 | 0.00049539 | 0.01342332 | 0.01284263 | 0.13655035 |

| Region | Calendar Year | Vehicle Categ | Model Year | Speed | Fuel | VMT | ROG_RUNEX | TOG_RUNEX | CO_RUNEX | NOx_RUNEX | SOx_RUNEX | CO2_RUNEX | CH4_RUNEX | PM10_RUNEX | PM2_5_RUNEX | N2O_RUNEX |
|-----------|---------------|----------------|------------|-------|------|------------|------------|------------|------------|------------|------------|------------|------------|------------|-------------|------------|
| SAN DIEGO | 2050 | T7 single cons | Aggregated | 55 | DSL | 11769.4376 | 0.01169719 | 0.01331636 | 0.08242612 | 0.84589673 | 0.00844248 | 893.620152 | 0.0005433 | 0.01712021 | 0.01637959 | 0.14046464 |
| SAN DIEGO | 2050 | T7 single cons | Aggregated | 60 | DSL | 43199.0928 | 0.01370654 | 0.01560385 | 0.09213098 | 1.03229422 | 0.00902046 | 954.798204 | 0.00063663 | 0.02147011 | 0.02054133 | 0.15008098 |
| SAN DIEGO | 2050 | T7 single cons | Aggregated | 65 | DSL | 21179.5354 | 0.01669335 | 0.01900411 | 0.11564416 | 1.40111147 | 0.00994115 | 1052.25099 | 0.00077536 | 0.02647289 | 0.02532769 | 0.1653992 |
| SAN DIEGO | 2050 | T7 single cons | Aggregated | 70 | DSL | 4728.74781 | 0.02060776 | 0.02346036 | 0.15250374 | 1.40626953 | 0.00994115 | 1052.25099 | 0.00095718 | 0.02647289 | 0.02532769 | 0.1653992 |
| SAN DIEGO | 2050 | T7 single cons | Aggregated | 75 | DSL | 3751.89153 | 0.0254869 | 0.0290149 | 0.20300078 | 1.40828069 | 0.00994115 | 1052.25099 | 0.0011838 | 0.02647289 | 0.02532769 | 0.1653992 |
| SAN DIEGO | 2050 | T7 single cons | Aggregated | 80 | DSL | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SAN DIEGO | 2050 | T7 single cons | Aggregated | 85 | DSL | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SAN DIEGO | 2050 | T7 single cons | Aggregated | 90 | DSL | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SAN DIEGO | 2050 | T7 SWCV | Aggregated | 5 | DSL | 21.8102488 | 0.19772978 | 0.2251003 | 0.56722336 | 18.4080167 | 0.07432729 | 7867.39905 | 0.00918404 | 0.01557227 | 0.01489862 | 1.23664557 |
| SAN DIEGO | 2050 | T7 SWCV | Aggregated | 5 | NG | 2382.88766 | 0.17582405 | 12.5405466 | 45.3370902 | 1.19905626 | 0 | 4089.32154 | 12.2874556 | 0.00487272 | 0.00466193 | 0.83363495 |
| SAN DIEGO | 2050 | T7 SWCV | Aggregated | 10 | DSL | 57.022613 | 0.14956578 | 0.17026925 | 0.42735887 | 15.9027805 | 0.06628083 | 7015.69787 | 0.00694694 | 0.01429896 | 0.0136804 | 1.10277001 |
| SAN DIEGO | 2050 | T7 SWCV | Aggregated | 10 | NG | 6230.02893 | 0.14239894 | 10.1565205 | 36.7182629 | 0.96447662 | 0 | 3625.93278 | 9.95154355 | 0.00438322 | 0.0041936 | 0.73917012 |
| SAN DIEGO | 2050 | T7 SWCV | Aggregated | 15 | DSL | 61.0198366 | 0.09912127 | 0.11284202 | 0.28319447 | 12.3745218 | 0.05528998 | 5852.33721 | 0.00460393 | 0.01249994 | 0.0119592 | 0.91990591 |
| SAN DIEGO | 2050 | T7 SWCV | Aggregated | 15 | NG | 6666.74723 | 0.10028829 | 7.15300291 | 25.8598248 | 0.66887492 | 0 | 3042.13199 | 7.00864234 | 0.00376652 | 0.00360358 | 0.62015851 |
| SAN DIEGO | 2050 | T7 SWCV | Aggregated | 20 | DSL | 51.2734497 | 0.07019868 | 0.07991585 | 0.20090433 | 10.0382724 | 0.04754133 | 5032.15781 | 0.00326055 | 0.01119263 | 0.01070844 | 0.79098513 |
| SAN DIEGO | 2050 | T7 SWCV | Aggregated | 20 | NG | 5601.90173 | 0.07255071 | 5.17463642 | 18.7075544 | 0.47396775 | 0 | 2657.59225 | 5.07020288 | 0.00336031 | 0.00321495 | 0.54176756 |
| SAN DIEGO | 2050 | T7 SWCV | Aggregated | 25 | DSL | 62.2555092 | 0.05220304 | 0.05942919 | 0.14893617 | 8.9255 | 0.04290138 | 4541.02777 | 0.0024247 | 0.01036185 | 0.0099136 | 0.71378633 |
| SAN DIEGO | 2050 | T7 SWCV | Aggregated | 25 | NG | 6801.75114 | 0.05316836 | 3.79220214 | 13.7097222 | 0.33735855 | 0 | 2452.78149 | 3.71566863 | 0.00305691 | 0.00292467 | 0.50001555 |
| SAN DIEGO | 2050 | T7 SWCV | Aggregated | 30 | DSL | 64.7691752 | 0.03935039 | 0.04479742 | 0.1114482 | 8.23470293 | 0.03980598 | 4213.38547 | 0.00182772 | 0.00994146 | 0.0095114 | 0.66228552 |
| SAN DIEGO | 2050 | T7 SWCV | Aggregated | 30 | NG | 7076.38275 | 0.03918126 | 2.79458018 | 10.103079 | 0.25569671 | 0 | 2322.40939 | 2.73818048 | 0.00281465 | 0.00269289 | 0.47343835 |
| SAN DIEGO | 2050 | T7 SWCV | Aggregated | 35 | DSL | 70.5381968 | 0.02984312 | 0.03397412 | 0.08337322 | 7.67708074 | 0.03736082 | 3954.57014 | 0.00138614 | 0.00984816 | 0.00942213 | 0.62160336 |
| SAN DIEGO | 2050 | T7 SWCV | Aggregated | 35 | NG | 7706.67956 | 0.02887377 | 2.05940456 | 7.44524246 | 0.20302586 | 0 | 2219.17897 | 2.01784204 | 0.00261297 | 0.00249993 | 0.45239415 |
| SAN DIEGO | 2050 | T7 SWCV | Aggregated | 40 | DSL | 77.3153756 | 0.02293786 | 0.0261113 | 0.06257123 | 7.23193417 | 0.0354235 | 3749.50851 | 0.0010654 | 0.01006032 | 0.00962511 | 0.58937052 |
| SAN DIEGO | 2050 | T7 SWCV | Aggregated | 40 | NG | 8447.12301 | 0.02127789 | 1.51763301 | 5.4866081 | 0.16662204 | 0 | 2134.40709 | 1.48700442 | 0.00244021 | 0.00233465 | 0.43511285 |
| SAN DIEGO | 2050 | T7 SWCV | Aggregated | 45 | DSL | 85.5512749 | 0.01808677 | 0.02059041 | 0.04746523 | 6.89023712 | 0.03391053 | 3589.36416 | 0.00084008 | 0.01056448 | 0.01010747 | 0.56419806 |
| SAN DIEGO | 2050 | T7 SWCV | Aggregated | 45 | NG | 9346.93956 | 0.01568027 | 1.11838635 | 4.04323548 | 0.14022824 | 0 | 2062.92051 | 1.09581529 | 0.0022891 | 0.00219008 | 0.42053984 |
| SAN DIEGO | 2050 | T7 SWCV | Aggregated | 50 | DSL | 79.1684244 | 0.01488616 | 0.01694676 | 0.03689309 | 6.64296707 | 0.03276919 | 3468.55548 | 0.00069142 | 0.01135171 | 0.01086064 | 0.54520862 |
| SAN DIEGO | 2050 | T7 SWCV | Aggregated | 50 | NG | 8649.57862 | 0.01155523 | 0.82417029 | 2.97957369 | 0.12033336 | 0 | 2001.40603 | 0.80753704 | 0.00215483 | 0.00206161 | 0.40799971 |
| SAN DIEGO | 2050 | T7 SWCV | Aggregated | 55 | DSL | 63.0623247 | 0.01303853 | 0.01484337 | 0.02999838 | 6.4840523 | 0.03196425 | 3383.35367 | 0.00060561 | 0.01241575 | 0.01187865 | 0.53181608 |
| SAN DIEGO | 2050 | T7 SWCV | Aggregated | 55 | NG | 6889.9001 | 0.00851538 | 0.60735421 | 2.19573147 | 0.10486869 | 0 | 1947.62332 | 0.59509671 | 0.002034 | 0.00194601 | 0.39703575 |
| SAN DIEGO | 2050 | T7 SWCV | Aggregated | 60 | DSL | 91.1984866 | 0.01313152 | 0.01494924 | 0.02830181 | 6.44838869 | 0.03176115 | 3361.85583 | 0.00060993 | 0.01334726 | 0.01276987 | 0.52843692 |
| SAN DIEGO | 2050 | T7 SWCV | Aggregated | 60 | NG | 9963.92799 | 0.00730998 | 0.52138027 | 1.88491501 | 0.09843598 | 0 | 1923.11886 | 0.51085788 | 0.00197784 | 0.00189228 | 0.39204036 |
| SAN DIEGO | 2050 | T7 SWCV | Aggregated | 65 | DSL | 17.4389368 | 0.01466964 | 0.01670026 | 0.03036074 | 6.4695455 | 0.03198645 | 3385.70388 | 0.00068137 | 0.01400612 | 0.01340022 | 0.5321855 |
| SAN DIEGO | 2050 | T7 SWCV | Aggregated | 65 | NG | 1905.29817 | 0.00730998 | 0.52138027 | 1.88491501 | 0.09843269 | 0 | 1923.11886 | 0.51085788 | 0.00197784 | 0.00189228 | 0.39204036 |
| SAN DIEGO | 2050 | T7 SWCV | Aggregated | 70 | DSL | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SAN DIEGO | 2050 | T7 SWCV | Aggregated | 70 | NG | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SAN DIEGO | 2050 | T7 SWCV | Aggregated | 75 | DSL | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SAN DIEGO | 2050 | T7 SWCV | Aggregated | 75 | NG | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SAN DIEGO | 2050 | T7 SWCV | Aggregated | 80 | DSL | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SAN DIEGO | 2050 | T7 SWCV | Aggregated | 80 | NG | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SAN DIEGO | 2050 | T7 SWCV | Aggregated | 85 | DSL | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SAN DIEGO | 2050 | T7 SWCV | Aggregated | 85 | NG | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SAN DIEGO | 2050 | T7 SWCV | Aggregated | 90 | DSL | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SAN DIEGO | 2050 | T7 SWCV | Aggregated | 90 | NG | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SAN DIEGO | 2050 | T7 tractor | Aggregated | 5 | DSL | 2901.60689 | 0.12374601 | 0.14087542 | 2.11223181 | 13.7257804 | 0.02229051 | 2359.40758 | 0.00574768 | 0.01119384 | 0.0107096 | 0.37086602 |
| SAN DIEGO | 2050 | T7 tractor | Aggregated | 10 | DSL | 6196.81715 | 0.07765176 | 0.08840062 | 1.2986284 | 10.3281275 | 0.01842951 | 1950.72837 | 0.00360672 | 0.0098439 | 0.00941806 | 0.30662733 |
| SAN DIEGO | 2050 | T7 tractor | Aggregated | 15 | DSL | 7901.15465 | 0.04317007 | 0.04914584 | 0.70361154 | 7.2185205 | 0.01450249 | 1535.05992 | 0.00200514 | 0.00779876 | 0.00746139 | 0.24129004 |
| SAN DIEGO | 2050 | T7 tractor | Aggregated | 20 | DSL | 9027.9635 | 0.02932508 | 0.03338438 | 0.46991915 | 5.70195512 | 0.01238465 | 1310.89157 | 0.00136207 | 0.00662657 | 0.00633991 | 0.2060539 |
| SAN DIEGO | 2050 | T7 tractor | Aggregated | 25 | DSL | 10981.5891 | 0.02302942 | 0.02621724 | 0.35915958 | 4.43692047 | 0.01080769 | 1143.97319 | 0.00106966 | 0.00632734 | 0.00605363 | 0.17981665 |
| SAN DIEGO | 2050 | T7 tractor | Aggregated | 30 | DSL | 13869.5794 | 0.0186262 | 0.02120452 | 0.27552953 | 3.30184639 | 0.00949469 | 1004.99472 | 0.00086514 | 0.00690108 | 0.00660254 | 0.15797117 |
| SAN DIEGO | 2050 | T7 tractor | Aggregated | 35 | DSL | 16177.1466 | 0.01533984 | 0.01746324 | 0.20768714 | 2.39349711 | 0.008486 | 898.226308 | 0.0007125 | 0.00834777 | 0.00798665 | 0.14118867 |
| SAN DIEGO | 2050 | T7 tractor | Aggregated | 40 | DSL | 20260.0313 | 0.01317032 | 0.01499341 | 0.15563239 | 1.71100348 | 0.00778117 | 823.622183 | 0.00061173 | 0.01066743 | 0.01020596 | 0.12946194 |
| SAN DIEGO | 2050 | T7 tractor | Aggregated | 45 | DSL | 23878.5387 | 0.01211766 | 0.01379503 | 0.1193653 | 1.25534121 | 0.00738142 | 781.30887 | 0.00056283 | 0.01386004 | 0.01326046 | 0.12281087 |
| SAN DIEGO | 2050 | T7 tractor | Aggregated | 50 | DSL | 36277.7616 | 0.01218184 | 0.0138681 | 0.09888585 | 1.02556119 | 0.00728545 | 771.15083 | 0.00056581 | 0.01792562 | 0.01715017 | 0.12121417 |
| SAN DIEGO | 2050 | T7 tractor | Aggregated | 55 | DSL | 81445.0578 | 0.01336287 | 0.01521261 | 0.09419406 | 1.02240678 | 0.0074936 | 793.182603 | 0.00062067 | 0.02286416 | 0.02187506 | 0.12467726 |
| SAN DIEGO | 2050 | T7 tractor | Aggregated | 60 | DSL | 256420.257 | 0.01566076 | 0.01782858 | 0.10528991 | 1.24544766 | 0.00800573 | 847.391084 | 0.0007274 | 0.02867565 | 0.02743516 | 0.13319808 |
| SAN DIEGO | 2050 | T7 tractor | Aggregated | 65 | DSL | 177274.235 | 0.01907549 | 0.02171599 | 0.13217342 | 1.69865379 | 0.00882296 | 933.893264 | 0.00088601 | 0.03536011 | 0.03383045 | 0.14679502 |
| SAN DIEGO | 2050 | T7 tractor | Aggregated | 70 | DSL | 53545.2021 | 0.02359735 | 0.02686379 | 0.17475305 | 1.70341167 | 0.00882296 | 933.893264 | 0.00109604 | 0.03536011 | 0.03383045 | 0.14679502 |

R-C3 – CalEEMod Analysis Data

Cumulative Analysis - Near Term

Average Annual Construction Emissions (2018-2027)

| Component | ROG tons/yr | NOx tons/yr | CO tons/yr | SO2 tons/yr | PM10 Total tons/yr | PM2.5 Total tons/yr | CO2e metric tons/yr |
|----------------------|----------------|----------------|---------------|----------------|-----------------------|------------------------|------------------------|
| Hotel | 14.50 | 29.45 | 25.51 | 0.12 | 7.40 | 2.29 | 11,161 |
| Office | 3.30 | 3.65 | 3.00 | 0.01 | 0.71 | 0.26 | 1,096 |
| Residential | 2.86 | 0.90 | 1.11 | 0.00 | 0.27 | 0.10 | 312 |
| Restaurants | 0.23 | 0.32 | 0.29 | 0.00 | 0.03 | 0.02 | 52 |
| Warehouse Facilities | 0.33 | 0.36 | 0.33 | 0.00 | 0.05 | 0.03 | 62 |
| Additional Dev. | 1.15 | 0.66 | 0.56 | 0.00 | 0.10 | 0.05 | 146 |
| Total | 22.36 | 35.34 | 30.80 | 0.14 | 8.56 | 2.75 | 12,830 |

Daily Construction Emissions (2018-2027)

| Component | ROG lb/day | NOx lb/day | CO lb/day | SO2 lb/day | PM10 Total lb/day | PM2.5 Total lb/day | CO2e lb/day |
|----------------------|---------------|---------------|---------------|---------------|----------------------|-----------------------|----------------|
| Hotel | 111.26 | 225.91 | 195.70 | 0.91 | 56.77 | 17.57 | 85,620 |
| Office | 25.28 | 27.97 | 23.02 | 0.09 | 5.45 | 2.02 | 8,409 |
| Residential | 21.96 | 6.90 | 8.52 | 0.03 | 2.05 | 0.74 | 2,397 |
| Restaurants | 1.73 | 2.45 | 2.25 | 0.00 | 0.25 | 0.16 | 396 |
| Warehouse Facilities | 2.53 | 2.79 | 2.52 | 0.01 | 0.37 | 0.22 | 477 |
| Additional Dev. | 8.80 | 5.10 | 4.26 | 0.01 | 0.77 | 0.37 | 1,120 |
| Total | 171.56 | 271.12 | 236.27 | 1.04 | 65.66 | 21.08 | 98,418 |

Average Annual Operational Emissions

| Component | ROG tons/yr | NOx tons/yr | CO tons/yr | SO2 tons/yr | PM10 Total tons/yr | PM2.5 Total tons/yr | CO2e metric tons/yr |
|-------------------------------------|----------------|----------------|---------------|----------------|-----------------------|------------------------|------------------------|
| Hotel | 55.35 | 60.53 | 111.52 | 0.48 | 35.72 | 11.11 | 97,339 |
| Office | 15.63 | 18.27 | 45.50 | 0.18 | 17.48 | 4.89 | 32,205 |
| Residential | 108.49 | 8.43 | 149.73 | 0.29 | 24.02 | 18.98 | 12,485 |
| Restaurants | 2.99 | 9.70 | 19.54 | 0.07 | 5.97 | 1.70 | 9,226 |
| Warehouse Facilities ^[A] | - | - | - | - | - | - | - |
| Additional Dev. | 5.86 | 7.44 | 17.99 | 0.07 | 6.88 | 1.95 | 13,384 |
| Total | 188.33 | 104.37 | 344.28 | 1.09 | 90.06 | 38.63 | 164,639 |

[A] Included in the operation of other components.

Daily Operational Emissions

| Component | ROG lb/day | NOx lb/day | CO lb/day | SO2 lb/day | PM10 Total lb/day | PM2.5 Total lb/day | CO2e lb/day |
|-------------------------------------|-----------------|---------------|-----------------|---------------|----------------------|-----------------------|----------------|
| Hotel | 308.84 | 339.66 | 642.07 | 2.80 | 208.78 | 64.33 | 366,775 |
| Office | 94.19 | 127.77 | 333.98 | 1.33 | 129.07 | 35.78 | 143,352 |
| Residential | 2,453.17 | 84.90 | 3,184.97 | 5.78 | 456.29 | 426.38 | 108,370 |
| Restaurants | 18.20 | 56.33 | 117.32 | 0.41 | 35.93 | 10.18 | 46,479 |
| Warehouse Facilities ^[A] | - | - | - | - | - | - | - |
| Additional Dev. | 35.56 | 52.24 | 134.20 | 0.54 | 51.76 | 14.48 | 59,940 |
| Total | 2,909.96 | 660.90 | 4,412.55 | 10.86 | 881.83 | 551.15 | 724,916 |

[A] Included in the operation of other components.

Cumulative Analysis - Long Term

Daily Construction Emissions (2028-2048)

| Component | ROG lb/day | NOx lb/day | CO lb/day | SO2 lb/day | PM10 Total lb/day | PM2.5 Total lb/day | CO2e lb/day |
|----------------|---------------|---------------|--------------|---------------|----------------------|-----------------------|----------------|
| Long-Term Dev. | 53.95 | 111.07 | 90.14 | 0.58 | 41.84 | 11.87 | 55,713 |
| Total | 53.95 | 111.07 | 90.14 | 0.58 | 41.84 | 11.87 | 55,713 |

Average Annual Operational Emissions

| Component | ROG tons/yr | NOx tons/yr | CO tons/yr | SO2 tons/yr | PM10 Total tons/yr | PM2.5 Total tons/yr | CO2e metric tons/yr |
|----------------|----------------|----------------|---------------|----------------|-----------------------|------------------------|------------------------|
| Long-Term Dev. | 62.36 | 71.68 | 119.65 | 0.56 | 47.24 | 14.36 | 115,391 |
| Total | 62.36 | 71.68 | 119.65 | 0.56 | 47.24 | 14.36 | 115,391 |

Daily Operational Emissions

| Component | ROG lb/day | NOx lb/day | CO lb/day | SO2 lb/day | PM10 Total lb/day | PM2.5 Total lb/day | CO2e lb/day |
|----------------|---------------|---------------|---------------|---------------|----------------------|-----------------------|----------------|
| Long-Term Dev. | 348.71 | 409.57 | 706.56 | 3.35 | 285.34 | 85.67 | 435,855 |
| Total | 348.71 | 409.57 | 706.56 | 3.35 | 285.34 | 85.67 | 435,855 |

Long-Term Operational

ANNUAL

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|--------------|----------------|---------------|-----------------|---------------|----------------|---------------|----------------|----------------|---------------|---------------|-----------------|-------------------|-------------------|----------------|---------------|-------------------|
| Category | tons/yr | | | | | | | | | | | | | | | |
| Area | 50.3544 | 5.80E-04 | 0.0646 | 0 | 2.30E-04 | 2.30E-04 | | 2.30E-04 | 2.30E-04 | 0 | 0.1264 | 0.1264 | 3.30E-04 | 0 | 0 | 0.1345 |
| Energy | 3.1108 | 28.2756 | 23.7548 | 0.1697 | 2.1492 | 2.1492 | | 2.1492 | 2.1492 | 0 | 74.34022 | 74.34022 | 2.3432 | 0.9271 | | 74.67507 |
| Mobile | 8.8954 | 43.0335 | 95.8303 | 0.3915 | 44.8856 | 0.2056 | 45.0914 | 12.0153 | 0.1912 | 12.2066 | 0 | 36.5622 | 36.5622 | 8.8482 | 0 | 36.60822 |
| Waste | | | | | 0 | 0 | | 0 | 0 | 0 | 841.5944 | 0 | 841.5944 | 49.7388 | 0 | 2,085.01 |
| Water | | | | | 0 | 0 | | 0 | 0 | 0 | 96.1208 | 1,604.53 | 1,700.65 | 9.9371 | 0.2465 | 2,022.53 |
| Total | 62.3606 | 71.684 | 119.6497 | 0.5612 | 44.8856 | 2.3553 | 47.2409 | 12.0153 | 2.3407 | 14.356 | 937.7152 | 112,506.89 | 113,444.61 | 63.8656 | 1.1736 | 115,390.98 |

WINTER

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|--------------|-----------------|-----------------|----------------|---------------|-----------------|----------------|-----------------|----------------|----------------|----------------|-----------|-------------------|-------------------|----------------|--------------|-------------------|
| Category | lb/day | | | | | | | | | | | | | | | |
| Area | 275.948 | 6.45E-03 | 0.7179 | 5.00E-05 | 2.55E-03 | 2.55E-03 | | 2.55E-03 | 2.55E-03 | 0 | 1.5477 | 1.5477 | 3.99E-03 | 0 | 0 | 1.6474 |
| Energy | 17.0452 | 154.9563 | 130.1633 | 0.9297 | 11.7767 | 11.7767 | | 11.7767 | 11.7767 | 0 | 185.94751 | 185.94751 | 3.564 | 3.409 | | 187.05250 |
| Mobile | 53.8322 | 254.6077 | 575.6808 | 2.293 | 272.3378 | 1.2221 | 273.5599 | 72.7595 | 1.1355 | 73.895 | 0 | 235.95624 | 235.95624 | 12.2228 | 0 | 236.26181 |
| Total | 346.8254 | 409.5705 | 706.562 | 3.2228 | 272.3378 | 13.0013 | 285.3392 | 72.7595 | 12.9147 | 85.6742 | 0 | 421,905.30 | 421,905.30 | 15.7908 | 3.409 | 423,315.96 |

SUMMER

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|--------------|-----------------|----------------|-----------------|---------------|-----------------|----------------|-----------------|----------------|----------------|--------------|-----------|-------------------|-------------------|----------------|--------------|-------------------|
| Category | lb/day | | | | | | | | | | | | | | | |
| Area | 275.948 | 6.45E-03 | 0.7179 | 5.00E-05 | 2.55E-03 | 2.55E-03 | | 2.55E-03 | 2.55E-03 | 0 | 1.5477 | 1.5477 | 3.99E-03 | 0 | 0 | 1.6474 |
| Energy | 17.0452 | 154.9563 | 130.1633 | 0.9297 | 11.7767 | 11.7767 | | 11.7767 | 11.7767 | 0 | 185.94751 | 185.94751 | 3.564 | 3.409 | | 187.05250 |
| Mobile | 55.7142 | 252.2433 | 575.453 | 2.4158 | 272.3378 | 1.2177 | 273.5555 | 72.7595 | 1.1313 | 73.8908 | 0 | 248.50005 | 248.50005 | 12.0344 | 0 | 248.80091 |
| Total | 348.7074 | 407.206 | 706.3342 | 3.3456 | 272.3378 | 12.9969 | 285.3347 | 72.7595 | 12.9105 | 85.67 | 0 | 434,449.11 | 434,449.11 | 15.8024 | 3.409 | 435,855.06 |

ANNUAL - CONSTRUCTION ESTIMATES

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|--------------|----------------|-------------|----------------|--------------|---------------|---------------|---------------|----------------|---------------|---------------|----------|-----------------|-----------------|---------------|----------|-----------------|
| Category | tons/yr | | | | | | | | | | | | | | | |
| Area | 0.2782 | 2.51 | 2.5666 | 5.19E-03 | 0.0157 | 0.1114 | 0.1271 | 4.17E-03 | 0.1034 | 0.1076 | 0 | 454.5743 | 454.5743 | 0.1241 | 0 | 457.6775 |
| Energy | 0.3996 | 3.22 | 2.5671 | 5.60E-03 | 2.3945 | 0.1377 | 2.5222 | 1.0331 | 0.1299 | 1.16 | 0 | 491.7809 | 491.7809 | 0.1523 | 0 | 495.5893 |
| Mobile | 0.3947 | 3.65 | 3.4752 | 8.25E-03 | 1.4232 | 0.1477 | 1.5709 | 0.5041 | 0.1359 | 0.64 | 0 | 725.0151 | 725.0151 | 0.2303 | 0 | 730.7735 |
| Waste | 0.9277 | 7.32 | 7.2515 | 0.0384 | 3.2666 | 0.061 | 3.3276 | 0.9223 | 0.0601 | 0.9824 | 0 | 3,646.86 | 3,646.86 | 0.1768 | 0 | 3,651.27 |
| Water | 1.6611 | 16.3 | 13.8377 | 0.086 | 5.7163 | 0.0545 | 5.7708 | 1.5514 | 0.0523 | 1.6037 | 0 | 8,192.88 | 8,192.88 | 0.4078 | 0 | 8,203.08 |
| Mobile | 1.5898 | 16.2 | 13.5373 | 0.0856 | 5.7382 | 0.0532 | 5.7914 | 1.5574 | 0.0511 | 1.6084 | 0 | 8,159.03 | 8,159.03 | 0.4055 | 0 | 8,169.17 |
| Waste | 1.5106 | 16 | 13.1338 | 0.0843 | 5.6944 | 0.0514 | 5.7458 | 1.5455 | 0.0494 | 1.5949 | 0 | 8,041.60 | 8,041.60 | 0.3991 | 0 | 8,051.58 |
| Water | 1.4536 | 15.8 | 12.8432 | 0.0837 | 5.6944 | 0.0501 | 5.7445 | 1.5455 | 0.0482 | 1.5936 | 0 | 7,995.03 | 7,995.03 | 0.3962 | 0 | 8,004.94 |
| Mobile | 1.3976 | 15.7 | 12.6356 | 0.0836 | 5.7163 | 0.0416 | 5.7579 | 1.5514 | 0.0397 | 1.5912 | 0 | 7,966.78 | 7,966.78 | 0.394 | 0 | 7,996.63 |
| Waste | 1.403 | 15.8 | 12.684 | 0.0839 | 5.7382 | 0.0418 | 5.78 | 1.5574 | 0.0399 | 1.5973 | 0 | 8,017.38 | 8,017.38 | 0.3956 | 0 | 8,027.27 |
| Water | 1.3976 | 15.7 | 12.6356 | 0.0836 | 5.7163 | 0.0416 | 5.7579 | 1.5514 | 0.0397 | 1.5912 | 0 | 7,966.78 | 7,966.78 | 0.394 | 0 | 7,996.63 |
| Mobile | 1.3976 | 15.7 | 12.6356 | 0.0836 | 5.7163 | 0.0416 | 5.7579 | 1.5514 | 0.0397 | 1.5912 | 0 | 7,966.78 | 7,966.78 | 0.394 | 0 | 7,996.63 |
| Waste | 1.3923 | 15.6 | 12.5672 | 0.0833 | 5.6944 | 0.0414 | 5.7358 | 1.5455 | 0.0396 | 1.5851 | 0 | 7,956.18 | 7,956.18 | 0.3925 | 0 | 7,965.99 |
| Water | 1.2135 | 15.4 | 11.8101 | 0.0824 | 5.7163 | 0.0356 | 5.752 | 1.5514 | 0.0341 | 1.5855 | 0 | 7,881.21 | 7,881.21 | 0.3833 | 0 | 7,890.79 |
| Mobile | 1.2135 | 15.4 | 11.8101 | 0.0824 | 5.7163 | 0.0356 | 5.752 | 1.5514 | 0.0341 | 1.5855 | 0 | 7,881.21 | 7,881.21 | 0.3833 | 0 | 7,890.79 |
| Waste | 1.2135 | 15.4 | 11.8101 | 0.0824 | 5.7163 | 0.0356 | 5.752 | 1.5514 | 0.0341 | 1.5855 | 0 | 7,881.21 | 7,881.21 | 0.3833 | 0 | 7,890.79 |
| Water | 1.2135 | 15.4 | 11.8101 | 0.0824 | 5.7163 | 0.0356 | 5.752 | 1.5514 | 0.0341 | 1.5855 | 0 | 7,881.21 | 7,881.21 | 0.3833 | 0 | 7,890.79 |
| Mobile | 1.1328 | 15.2 | 11.3957 | 0.0816 | 5.6945 | 0.0339 | 5.7284 | 1.5455 | 0.0325 | 1.578 | 0 | 7,799.52 | 7,799.52 | 0.3719 | 0 | 7,808.82 |
| Waste | 1.1372 | 15.2 | 11.4395 | 0.0819 | 5.7164 | 0.0341 | 5.7504 | 1.5515 | 0.0326 | 1.5841 | 0 | 7,829.52 | 7,829.52 | 0.3733 | 0 | 7,838.86 |
| Water | 1.1372 | 15.2 | 11.4395 | 0.0819 | 5.7164 | 0.0341 | 5.7504 | 1.5515 | 0.0326 | 1.5841 | 0 | 7,829.52 | 7,829.52 | 0.3733 | 0 | 7,838.86 |
| Mobile | 0.8543 | 7.1 | 6.2648 | 0.0388 | 2.5712 | 0.0207 | 2.595 | 0.8978 | 0.0231 | 0.9209 | 0 | 3,689.32 | 3,689.32 | 0.1733 | 0 | 3,693.66 |
| Waste | 26.6661 | 0.39 | 1.8317 | 4.30E-03 | 0.2619 | 0.0117 | 0.2736 | 0.0666 | 0.0116 | 0.0812 | 0 | 377.2396 | 377.2396 | 0.01 | 0 | 377.4907 |
| Water | 88.7989 | 0.17 | 1.1736 | 5.48E-03 | 0.8382 | 2.79E-03 | 0.841 | 0.2227 | 2.64E-03 | 0.2254 | 0 | 492.4204 | 492.4204 | 8.16E-03 | 0 | 492.6243 |
| Total | 88.7989 | 16.3 | 13.8377 | 0.086 | 5.7382 | 0.1477 | 5.7914 | 1.5574 | 0.1359 | 1.6084 | 0 | 8,192.88 | 8,192.88 | 0.4078 | 0 | 8,203.08 |

Hotel

ANNUAL - CONSTRUCTION

| Year | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio-CO2 | NBio-CO2 | Total CO2 | CH4 | N2O | CO2e |
|---------|---------|---------|---------|----------|---------------|--------------|------------|----------------|---------------|-------------|---------|----------|-----------|----------|-----|---------|
| tons/yr | | | | | | | | | | | | | | | | |
| MT/yr | | | | | | | | | | | | | | | | |
| 2018 | 3.9141 | 36.7995 | 27.2637 | 0.0901 | 6.2441 | 0.9631 | 7.2073 | 2.1055 | 0.8971 | 3.0026 | 0 | 8.4225 | 8.4225 | 0.8435 | 0 | 8.4435 |
| 2019 | 4.5046 | 41.1098 | 33.0061 | 0.134 | 7.7683 | 0.6177 | 8.386 | 2.1237 | 0.5813 | 2.705 | 0 | 12.5778 | 12.5778 | 0.9049 | 0 | 12.5997 |
| 2020 | 3.8354 | 34.9707 | 28.793 | 0.1288 | 7.0707 | 0.3874 | 7.4581 | 1.9186 | 0.3659 | 2.2845 | 0 | 12.1165 | 12.1165 | 0.7744 | 0 | 12.1359 |
| 2021 | 3.4593 | 31.4804 | 26.7374 | 0.1259 | 7.0514 | 0.2691 | 7.3204 | 1.9133 | 0.2532 | 2.1665 | 0 | 11.8588 | 11.8588 | 0.7387 | 0 | 11.8773 |
| 2022 | 3.2436 | 29.5189 | 25.1314 | 0.1232 | 7.0514 | 0.2331 | 7.2845 | 1.9133 | 0.2193 | 2.1326 | 0 | 11.6241 | 11.6241 | 0.711 | 0 | 11.6411 |
| 2023 | 2.9349 | 23.7884 | 23.3893 | 0.1195 | 7.0513 | 0.1876 | 7.2389 | 1.9133 | 0.1761 | 2.0894 | 0 | 11.2838 | 11.2838 | 0.6576 | 0 | 11.3003 |
| 2024 | 2.802 | 23.2687 | 22.2964 | 0.1174 | 7.0707 | 0.171 | 7.2416 | 1.9186 | 0.1605 | 2.079 | 0 | 11.1028 | 11.1028 | 0.6442 | 0 | 11.1189 |
| 2025 | 2.6703 | 22.6451 | 21.2112 | 0.1147 | 7.0513 | 0.1536 | 7.2049 | 1.9133 | 0.1441 | 2.0574 | 0 | 10.8652 | 10.8652 | 0.6292 | 0 | 10.8812 |
| 2026 | 99.0419 | 21.4273 | 21.6444 | 0.1102 | 7.0424 | 0.1917 | 7.2341 | 1.9074 | 0.1793 | 2.0867 | 0 | 10.4069 | 10.4069 | 0.6426 | 0 | 10.4233 |
| 2027 | 4.1241 | 0.0488 | 0.1293 | 3.20E-04 | 0.0269 | 2.28E-03 | 0.0291 | 7.12E-03 | 2.11E-03 | 0.24E-03 | 0 | 28.7838 | 28.7838 | 3.39E-03 | 0 | 28.8886 |
| Maximum | 99.0419 | 41.1098 | 33.0061 | 0.134 | 7.7683 | 0.9631 | 8.386 | 2.1237 | 0.8971 | 3.0026 | 0 | 12.5778 | 12.5778 | 0.9049 | 0 | 12.5997 |

ANNUAL - OPERATIONS

| Category | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio-CO2 | NBio-CO2 | Total CO2 | CH4 | N2O | CO2e |
|----------|---------|----------|---------|--------|---------------|--------------|------------|----------------|---------------|-------------|----------|----------|-----------|----------|--------|----------|
| tons/yr | | | | | | | | | | | | | | | | |
| MT/yr | | | | | | | | | | | | | | | | |
| Area | 43.9188 | 5.00E-04 | 0.0547 | 0 | 1.90E-04 | 1.90E-04 | 1.90E-04 | 1.90E-04 | 1.90E-04 | 1.90E-04 | 0 | 0.1067 | 0.1067 | 2.80E-04 | 0 | 0.1137 |
| Energy | 2.7292 | 24.8111 | 20.8413 | 0.1489 | 1.8856 | 1.8856 | 1.8856 | 1.8856 | 1.8856 | 1.8856 | 0 | 63.7085 | 63.7085 | 1.9948 | 0.8008 | 63.9970 |
| Mobile | 8.7036 | 35.7149 | 90.625 | 0.3312 | 33.5769 | 0.257 | 33.8339 | 8.9887 | 0.2387 | 9.2275 | 0 | 30.7435 | 30.7435 | 1.5757 | 0 | 30.7829 |
| Waste | | | | | | | | | | | 663.7135 | 0 | 663.7135 | 39.2243 | 0 | 1,644.32 |
| Water | | | | | | | | | | | 48.0609 | 705.7639 | 753.8248 | 4.9647 | 0.1224 | 914.4283 |
| Total | 55.35 | 60.53 | 111.52 | 0.48 | 33.58 | 2.14 | 35.72 | 8.99 | 2.12 | 11.11 | 711.77 | 95157.98 | 95869.75 | 47.76 | 0.92 | 97338.87 |

DAILY - CONSTRUCTION - SUMMER

| Year | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio-CO2 | NBio-CO2 | Total CO2 | CH4 | N2O | CO2e |
|---------|----------|----------|----------|--------|---------------|--------------|------------|----------------|---------------|-------------|---------|----------|-----------|--------|-----|---------|
| lb/day | | | | | | | | | | | | | | | | |
| lb/day | | | | | | | | | | | | | | | | |
| 2018 | 39.1076 | 367.9819 | 273.5172 | 0.8948 | 66.7129 | 10.3319 | 77.0448 | 24.3476 | 9.6108 | 33.9584 | 0 | 92.0939 | 92.0939 | 9.3384 | 0 | 92.3274 |
| 2019 | 28.0192 | 261.8201 | 209.333 | 0.8012 | 48.3755 | 5.1126 | 53.4881 | 14.345 | 4.7749 | 19.1199 | 0 | 82.6627 | 82.6627 | 6.8391 | 0 | 82.8332 |
| 2020 | 20.7947 | 188.42 | 160.9044 | 0.724 | 39.5378 | 2.1109 | 41.6487 | 10.7049 | 1.9937 | 12.6985 | 0 | 75.0291 | 75.0291 | 4.6217 | 0 | 75.1445 |
| 2021 | 18.795 | 170.3162 | 150.0499 | 0.7094 | 39.5378 | 1.4692 | 41.007 | 10.7049 | 1.3823 | 12.0872 | 0 | 73.6164 | 73.6164 | 4.4208 | 0 | 73.7269 |
| 2022 | 17.6114 | 159.8256 | 141.1135 | 0.6942 | 39.5378 | 1.2726 | 40.8104 | 10.7049 | 1.1974 | 11.9023 | 0 | 72.1402 | 72.1402 | 4.2556 | 0 | 72.2461 |
| 2023 | 15.93 | 128.8538 | 131.6766 | 0.6727 | 39.5377 | 1.0248 | 40.5625 | 10.7049 | 0.9622 | 11.667 | 0 | 70.0119 | 70.0119 | 3.9435 | 0 | 70.1102 |
| 2024 | 15.1543 | 125.849 | 125.1754 | 0.6589 | 39.5377 | 0.9316 | 40.4693 | 10.7049 | 0.8743 | 11.5792 | 0 | 68.6723 | 68.6723 | 3.8525 | 0 | 68.7682 |
| 2025 | 14.4713 | 122.854 | 119.3467 | 0.6454 | 39.5377 | 0.8394 | 40.3771 | 10.7049 | 0.7875 | 11.4924 | 0 | 67.3608 | 67.3608 | 3.7734 | 0 | 67.4550 |
| 2026 | 930.4957 | 131.7878 | 144.9617 | 0.7092 | 45.6412 | 1.338 | 46.9793 | 12.3238 | 1.2503 | 13.5741 | 0 | 73.6705 | 73.6705 | 4.5517 | 0 | 73.7844 |
| 2027 | 916.442 | 10.7485 | 29.5852 | 0.074 | 6.1036 | 0.5058 | 6.6094 | 1.619 | 0.4699 | 2.0885 | 0 | 7.2997 | 7.2997 | 0.8365 | 0 | 7.3207 |
| Maximum | 930.4957 | 367.9819 | 273.5172 | 0.8948 | 66.7129 | 10.3319 | 77.0448 | 24.3476 | 9.6108 | 33.9584 | 0 | 92.0939 | 92.0939 | 9.3384 | 0 | 92.3274 |

DAILY - OPERATIONS - SUMMER

| Category | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio-CO2 | NBio-CO2 | Total CO2 | CH4 | N2O | CO2e |
|----------|----------|----------|---------|----------|---------------|--------------|------------|----------------|---------------|-------------|----------|----------|-----------|----------|--------|------------|
| lb/day | | | | | | | | | | | | | | | | |
| lb/day | | | | | | | | | | | | | | | | |
| Area | 240.6798 | 5.51E-03 | 0.8082 | 5.00E-05 | 1.26E-03 | 1.26E-03 | 1.26E-03 | 1.26E-03 | 1.26E-03 | 1.26E-03 | 0 | 1.307 | 1.307 | 3.40E-03 | 0 | 1.392 |
| Energy | 14.9546 | 135.9512 | 114.199 | 0.8157 | 10.3323 | 10.3323 | 10.3323 | 10.3323 | 10.3323 | 10.3323 | 0 | 163.1414 | 163.1414 | 3.1269 | 2.9909 | 164,110.92 |
| Mobile | 53.2105 | 200.4712 | 527.007 | 1.9794 | 196.9629 | 1.4709 | 198.4338 | 52.6252 | 1.3661 | 53.9913 | 0 | 202.4135 | 202.4135 | 9.9455 | 0 | 202,662.23 |
| Waste | | | | | | | | | | | 663.7135 | 0 | 663.7135 | 39.2243 | 0 | 1,644.32 |
| Water | | | | | | | | | | | 48.0609 | 705.7639 | 753.8248 | 4.9647 | 0.1224 | 914.4283 |
| Total | 308.8449 | 336.4279 | 641.814 | 2.7952 | 196.9629 | 11.8053 | 208.7682 | 52.6252 | 11.7005 | 64.3257 | 0 | 365.5563 | 365.5563 | 13.0758 | 2.9909 | 366,774.54 |

DAILY - CONSTRUCTION - WINTER

| Year | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio-CO2 | NBio-CO2 | Total CO2 | CH4 | N2O | CO2e |
|---------|----------|----------|----------|--------|---------------|--------------|------------|----------------|---------------|-------------|---------|----------|-----------|--------|-----|-----------|
| lb/day | | | | | | | | | | | | | | | | |
| lb/day | | | | | | | | | | | | | | | | |
| 2018 | 41.4557 | 369.6946 | 272.2884 | 0.8646 | 66.7129 | 10.3563 | 77.0692 | 24.3476 | 9.6341 | 33.9817 | 0 | 92.0939 | 92.0939 | 9.4987 | 0 | 92,338.39 |
| 2019 | 30.184 | 263.1975 | 208.0465 | 0.7718 | 48.3755 | 5.1343 | 53.5098 | 14.345 | 4.7956 | 19.1406 | 0 | 82.6627 | 82.6627 | 6.994 | 0 | 82,817.72 |
| 2020 | 22.8175 | 189.3963 | 159.4816 | 0.6952 | 39.5378 | 2.1258 | 41.6636 | 10.7049 | 2.0079 | 12.7128 | 0 | 75.0291 | 75.0291 | 4.7659 | 0 | 75,191.52 |
| 2021 | 20.7158 | 170.9335 | 148.4384 | 0.6814 | 39.5378 | 1.4815 | 41.0192 | 10.7049 | 1.394 | 12.0989 | 0 | 73.6164 | 73.6164 | 4.5579 | 0 | 73,842.86 |
| 2022 | 19.4573 | 160.2749 | 138.4589 | 0.6669 | 39.5378 | 1.2837 | 40.8215 | 10.7049 | 1.206 | 11.9128 | 0 | 72.1402 | 72.1402 | 4.3859 | 0 | 72,432.92 |
| 2023 | 17.6798 | 129.2043 | 129.4578 | 0.6465 | 39.5377 | 1.0319 | 40.5698 | 10.7049 | 0.9689 | 11.6788 | 0 | 70.0119 | 70.0119 | 3.9458 | 0 | 70,110.26 |
| 2024 | 16.8545 | 126.1359 | 123.0724 | 0.6335 | 39.5377 | 0.9379 | 40.4756 | 10.7049 | 0.8803 | 11.5852 | 0 | 68.6723 | 68.6723 | 3.9514 | 0 | 68,768.62 |
| 2025 | 16.1259 | 123.0848 | 117.4181 | 0.6208 | 39.5377 | 0.8448 | 40.3825 | 10.7049 | 0.7927 | 11.4976 | 0 | 67.3608 | 67.3608 | 3.8688 | 0 | 67,455.01 |
| 2026 | 932.4124 | 132.1052 | 142.236 | 0.6822 | 45.6412 | 1.3427 | 46.984 | 12.3238 | 1.2548 | 13.5786 | 0 | 73.6705 | 73.6705 | 4.6364 | 0 | 73,784.45 |
| 2027 | 916.7333 | 10.8772 | 28.8813 | 0.0711 | 6.1036 | 0.5058 | 6.6094 | 1.619 | 0.4699 | 2.0885 | 0 | 7.2997 | 7.2997 | 0.8365 | 0 | 7,320.78 |
| Maximum | 932.4124 | 369.6946 | 272.2884 | 0.8646 | 66.7129 | 10.3563 | 77.0692 | 24.3476 | 9.6341 | 33.9817 | 0 | 92.0939 | 92.0939 | 9.4987 | 0 | 92,338.39 |

DAILY - OPERATIONS - WINTER

| Category | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio-CO2 | NBio-CO2 | Total CO2 | CH4 | N2O | CO2e |
|----------|----------|----------|---------|----------|---------------|--------------|------------|----------------|---------------|-------------|----------|----------|-----------|----------|--------|------------|
| lb/day | | | | | | | | | | | | | | | | |
| lb/day | | | | | | | | | | | | | | | | |
| Area | 240.6798 | 5.51E-03 | 0.8082 | 5.00E-05 | 1.26E-03 | 1.26E-03 | 1.26E-03 | 1.26E-03 | 1.26E-03 | 1.26E-03 | 0 | 1.307 | 1.307 | 3.40E-03 | 0 | 1.392 |
| Energy | 14.9546 | 135.9512 | 114.199 | 0.8157 | 10.3323 | 10.3323 | 10.3323 | 10.3323 | 10.3323 | 10.3323 | 0 | 163.1414 | 163.1414 | 3.1269 | 2.9909 | 164,110.92 |
| Mobile | 51.237 | 203.7045 | 527.268 | 1.8775 | 196.9629 | 1.4782 | 198.4411 | 52.6252 | 1.3731 | 53.9983 | 0 | 202.4135 | 202.4135 | 10.0884 | 0 | 202,662.23 |
| Waste | | | | | | | | | | | 663.7135 | 0 | 663.7135 | 39.2243 | 0 | 1,644.32 |
| Water | | | | | | | | | | | 48.0609 | 705.7639 | 753.8248 | 4.9647 | 0.1224 | 914.4283 |
| Total | 306.8714 | 339.6612 | 642.075 | 2.6932 | 196.9629 | 11.8127 | 208.7756 | 52.6252 | 11.7075 | 64.3328 | 0 | 365.5563 | 365.5563 | 13.2197 | 2.9909 | 366,415.59 |

ANNUAL - CONSTRUCTION - 2018

| Year | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio-CO2 | Nbio-CO2 | Total CO2 | CH4 | N2O | CO2e |
|---------|---------|--------|--------|----------|---------------|--------------|------------|----------------|---------------|-------------|---------|----------|-----------|--------|-----|----------|
| lb/day | | | | | | | | | | | | | | | | |
| M/yr | | | | | | | | | | | | | | | | |
| 2018 | 0.3313 | 3.5298 | 1.9915 | 3.00E-03 | 0.641 | 0.1738 | 0.8144 | 0.285 | 0.1603 | 0.4453 | 0 | 318.578 | 318.578 | 0.092 | 0 | 320.8782 |
| 2019 | 0.8366 | 8.8128 | 4.6746 | 0.0204 | 1.156 | 0.2413 | 1.3963 | 0.5492 | 0.2258 | 0.7744 | 0 | 1,888.20 | 1,888.20 | 0.2691 | 0 | 1,905.43 |
| 2020 | 0.8159 | 8.3436 | 4.2424 | 0.0204 | 1.0601 | 0.179 | 1.2392 | 0.5371 | 0.1697 | 0.7068 | 0 | 2,284.96 | 2,284.96 | 0.1936 | 0 | 2,296.80 |
| 2021 | 0.7360 | 7.9131 | 4.0938 | 0.0204 | 1.0601 | 0.179 | 1.2392 | 0.5371 | 0.1697 | 0.7068 | 0 | 2,284.96 | 2,284.96 | 0.1936 | 0 | 2,296.80 |
| 2022 | 0.7360 | 7.9131 | 4.0938 | 0.0204 | 1.0601 | 0.179 | 1.2392 | 0.5371 | 0.1697 | 0.7068 | 0 | 2,284.96 | 2,284.96 | 0.1936 | 0 | 2,296.80 |
| 2023 | 0.7360 | 7.9131 | 4.0938 | 0.0204 | 1.0601 | 0.179 | 1.2392 | 0.5371 | 0.1697 | 0.7068 | 0 | 2,284.96 | 2,284.96 | 0.1936 | 0 | 2,296.80 |
| 2024 | 0.7360 | 7.9131 | 4.0938 | 0.0204 | 1.0601 | 0.179 | 1.2392 | 0.5371 | 0.1697 | 0.7068 | 0 | 2,284.96 | 2,284.96 | 0.1936 | 0 | 2,296.80 |
| 2025 | 0.7360 | 7.9131 | 4.0938 | 0.0204 | 1.0601 | 0.179 | 1.2392 | 0.5371 | 0.1697 | 0.7068 | 0 | 2,284.96 | 2,284.96 | 0.1936 | 0 | 2,296.80 |
| 2026 | 0.7360 | 7.9131 | 4.0938 | 0.0204 | 1.0601 | 0.179 | 1.2392 | 0.5371 | 0.1697 | 0.7068 | 0 | 2,284.96 | 2,284.96 | 0.1936 | 0 | 2,296.80 |
| 2027 | 0.7360 | 7.9131 | 4.0938 | 0.0204 | 1.0601 | 0.179 | 1.2392 | 0.5371 | 0.1697 | 0.7068 | 0 | 2,284.96 | 2,284.96 | 0.1936 | 0 | 2,296.80 |
| 2028 | 0.7360 | 7.9131 | 4.0938 | 0.0204 | 1.0601 | 0.179 | 1.2392 | 0.5371 | 0.1697 | 0.7068 | 0 | 2,284.96 | 2,284.96 | 0.1936 | 0 | 2,296.80 |
| 2029 | 0.7360 | 7.9131 | 4.0938 | 0.0204 | 1.0601 | 0.179 | 1.2392 | 0.5371 | 0.1697 | 0.7068 | 0 | 2,284.96 | 2,284.96 | 0.1936 | 0 | 2,296.80 |
| 2030 | 0.7360 | 7.9131 | 4.0938 | 0.0204 | 1.0601 | 0.179 | 1.2392 | 0.5371 | 0.1697 | 0.7068 | 0 | 2,284.96 | 2,284.96 | 0.1936 | 0 | 2,296.80 |
| Maximum | 17.9619 | 8.6128 | 6.2424 | 0.0244 | 1.158 | 0.2413 | 1.3993 | 0.5492 | 0.2258 | 0.7744 | 0 | 2,284.96 | 2,284.96 | 0.2091 | 0 | 2,299.80 |

ANNUAL - CONSTRUCTION - 2022

| Year | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio-CO2 | Nbio-CO2 | Total CO2 | CH4 | N2O | CO2e |
|---------|---------|--------|--------|----------|---------------|--------------|------------|----------------|---------------|-------------|---------|----------|-----------|--------|-----|----------|
| lb/day | | | | | | | | | | | | | | | | |
| M/yr | | | | | | | | | | | | | | | | |
| 2022 | 0.2362 | 2.3805 | 1.7549 | 3.02E-03 | 0.6441 | 0.1102 | 0.7542 | 0.2807 | 0.1018 | 0.3824 | 0 | 309.1739 | 309.1739 | 0.0923 | 0 | 311.4821 |
| 2023 | 0.5837 | 6.4301 | 4.9703 | 0.019 | 1.1549 | 0.1227 | 1.2776 | 0.3475 | 0.1144 | 0.4619 | 0 | 1,770.58 | 1,770.58 | 0.1663 | 0 | 1,792.22 |
| 2024 | 0.5837 | 6.4301 | 4.9703 | 0.019 | 1.1549 | 0.1227 | 1.2776 | 0.3475 | 0.1144 | 0.4619 | 0 | 1,770.58 | 1,770.58 | 0.1663 | 0 | 1,792.22 |
| 2025 | 0.5837 | 6.4301 | 4.9703 | 0.019 | 1.1549 | 0.1227 | 1.2776 | 0.3475 | 0.1144 | 0.4619 | 0 | 1,770.58 | 1,770.58 | 0.1663 | 0 | 1,792.22 |
| 2026 | 0.5837 | 6.4301 | 4.9703 | 0.019 | 1.1549 | 0.1227 | 1.2776 | 0.3475 | 0.1144 | 0.4619 | 0 | 1,770.58 | 1,770.58 | 0.1663 | 0 | 1,792.22 |
| 2027 | 0.5837 | 6.4301 | 4.9703 | 0.019 | 1.1549 | 0.1227 | 1.2776 | 0.3475 | 0.1144 | 0.4619 | 0 | 1,770.58 | 1,770.58 | 0.1663 | 0 | 1,792.22 |
| 2028 | 0.5837 | 6.4301 | 4.9703 | 0.019 | 1.1549 | 0.1227 | 1.2776 | 0.3475 | 0.1144 | 0.4619 | 0 | 1,770.58 | 1,770.58 | 0.1663 | 0 | 1,792.22 |
| 2029 | 0.5837 | 6.4301 | 4.9703 | 0.019 | 1.1549 | 0.1227 | 1.2776 | 0.3475 | 0.1144 | 0.4619 | 0 | 1,770.58 | 1,770.58 | 0.1663 | 0 | 1,792.22 |
| 2030 | 0.5837 | 6.4301 | 4.9703 | 0.019 | 1.1549 | 0.1227 | 1.2776 | 0.3475 | 0.1144 | 0.4619 | 0 | 1,770.58 | 1,770.58 | 0.1663 | 0 | 1,792.22 |
| Maximum | 18.6115 | 8.6148 | 6.1542 | 0.0228 | 1.1549 | 0.1227 | 1.2776 | 0.3475 | 0.1144 | 0.4619 | 0 | 2,124.88 | 2,124.88 | 0.1863 | 0 | 2,129.09 |

ANNUAL - OPERATION - 2018

| Year | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio-CO2 | Nbio-CO2 | Total CO2 | CH4 | N2O | CO2e |
|---------|---------|---------|---------|--------|---------------|--------------|------------|----------------|---------------|-------------|----------|-------------|-----------|---------|--------|-------------|
| lb/day | | | | | | | | | | | | | | | | |
| M/yr | | | | | | | | | | | | | | | | |
| Area | 11.5332 | 130E-04 | 0.0209 | 0 | 7.00E-08 | 7.00E-08 | 7.00E-08 | 0 | 0.0407 | 0.0407 | 1.10E-04 | 0 | 0.0433 | | | |
| Highway | 0.2476 | 2.2536 | 1.860 | 0.0138 | 0.1713 | 0.1713 | 0.1713 | 0 | 12.454 | 12.454 | 0.4466 | 0 | 12.9006 | | | |
| Mobile | 3.8538 | 18.0161 | 43.5881 | 0.1884 | 17.1774 | 0.1269 | 17.3043 | 4.9885 | 0.1179 | 4.7764 | 0 | 15,433.72 | 15,433.72 | 0.7683 | 0 | 15,435.88 |
| Water | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 429.8957 | 429.8957 | 0 | 0 | 429.8957 | 0 | 0 | 1,064.95 |
| Water | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 128.3628 | 128.3628 | 0 | 0 | 128.3628 | 0 | 0 | 316.76 |
| Total | 15.6349 | 18.2689 | 45.0919 | 0.1799 | 17.1774 | 0.2963 | 17.4737 | 4.9885 | 0.2893 | 4.8677 | 58.2483 | 30,511.0789 | 31,069.32 | 39.9125 | 0.4615 | 32,204.8604 |

ANNUAL - OPERATION - 2022

| Year | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio-CO2 | Nbio-CO2 | Total CO2 | CH4 | N2O | CO2e |
|---------|---------|---------|---------|--------|---------------|--------------|------------|----------------|---------------|-------------|----------|-------------|-----------|---------|--------|-------------|
| lb/day | | | | | | | | | | | | | | | | |
| M/yr | | | | | | | | | | | | | | | | |
| Area | 11.5332 | 130E-04 | 0.0209 | 0 | 7.00E-08 | 7.00E-08 | 7.00E-08 | 0 | 0.0407 | 0.0407 | 1.10E-04 | 0 | 0.0433 | | | |
| Highway | 0.2476 | 2.2536 | 1.860 | 0.0138 | 0.1713 | 0.1713 | 0.1713 | 0 | 12.454 | 12.454 | 0.4466 | 0 | 12.9006 | | | |
| Mobile | 3.8538 | 18.0161 | 43.5881 | 0.1884 | 17.1774 | 0.1269 | 17.3043 | 4.9885 | 0.1179 | 4.7764 | 0 | 15,433.72 | 15,433.72 | 0.7683 | 0 | 15,435.88 |
| Water | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 429.8957 | 429.8957 | 0 | 0 | 429.8957 | 0 | 0 | 1,064.95 |
| Water | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 128.3628 | 128.3628 | 0 | 0 | 128.3628 | 0 | 0 | 316.76 |
| Total | 15.6349 | 18.2689 | 45.0919 | 0.1799 | 17.1774 | 0.2963 | 17.4737 | 4.9885 | 0.2893 | 4.8677 | 58.2483 | 30,511.0789 | 31,069.32 | 39.9125 | 0.4615 | 32,204.8604 |

DAILY - CONSTRUCTION - SUMMER

| Year | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio-CO2 | Nbio-CO2 | Total CO2 | CH4 | N2O | CO2e |
|---------|----------|---------|---------|--------|---------------|--------------|------------|----------------|---------------|-------------|---------|-----------|-----------|--------|-----|-----------|
| lb/day | | | | | | | | | | | | | | | | |
| 2018 | 0.1753 | 59.5831 | 35.774 | 0.0638 | 18.2141 | 2.6349 | 20.7921 | 9.9699 | 2.4241 | 12.3416 | 0 | 6,423.87 | 6,423.87 | 1.9501 | 0 | 6,472.83 |
| 2019 | 6.9404 | 69.3236 | 51.6599 | 0.1938 | 6.8376 | 2.3488 | 11.2210 | 3.6401 | 2.1931 | 5.8332 | 0 | 19,976.76 | 19,976.76 | 1.9462 | 0 | 20,019.92 |
| 2020 | 6.1889 | 63.0472 | 48.2276 | 0.1907 | 6.5136 | 1.3649 | 9.8785 | 2.3153 | 1.2699 | 3.5852 | 0 | 19,664.38 | 19,664.38 | 1.6154 | 0 | 19,704.77 |
| 2021 | 6.3303 | 57.9207 | 48.5964 | 0.1893 | 6.5136 | 1.3649 | 9.8785 | 2.3153 | 1.2699 | 3.5852 | 0 | 19,664.38 | 19,664.38 | 1.6154 | 0 | 19,704.77 |
| 2022 | 6.3303 | 57.9207 | 48.5964 | 0.1893 | 6.5136 | 1.3649 | 9.8785 | 2.3153 | 1.2699 | 3.5852 | 0 | 19,664.38 | 19,664.38 | 1.6154 | 0 | 19,704.77 |
| 2023 | 6.3303 | 57.9207 | 48.5964 | 0.1893 | 6.5136 | 1.3649 | 9.8785 | 2.3153 | 1.2699 | 3.5852 | 0 | 19,664.38 | 19,664.38 | 1.6154 | 0 | 19,704.77 |
| 2024 | 6.3303 | 57.9207 | 48.5964 | 0.1893 | 6.5136 | 1.3649 | 9.8785 | 2.3153 | 1.2699 | 3.5852 | 0 | 19,664.38 | 19,664.38 | 1.6154 | 0 | 19,704.77 |
| 2025 | 6.3303 | 57.9207 | 48.5964 | 0.1893 | 6.5136 | 1.3649 | 9.8785 | 2.3153 | 1.2699 | 3.5852 | 0 | 19,664.38 | 19,664.38 | 1.6154 | 0 | 19,704.77 |
| 2026 | 6.3303 | 57.9207 | 48.5964 | 0.1893 | 6.5136 | 1.3649 | 9.8785 | 2.3153 | 1.2699 | 3.5852 | 0 | 19,664.38 | 19,664.38 | 1.6154 | 0 | 19,704.77 |
| 2027 | 6.3303 | 57.9207 | 48.5964 | 0.1893 | 6.5136 | 1.3649 | 9.8785 | 2.3153 | 1.2699 | 3.5852 | 0 | 19,664.38 | 19,664.38 | 1.6154 | 0 | 19,704.77 |
| 2028 | 6.3303 | 57.9207 | 48.5964 | 0.1893 | 6.5136 | 1.3649 | 9.8785 | 2.3153 | 1.2699 | 3.5852 | 0 | 19,664.38 | 19,664.38 | 1.6154 | 0 | 19,704.77 |
| 2029 | 6.3303 | 57.9207 | 48.5964 | 0.1893 | 6.5136 | 1.3649 | 9.8785 | 2.3153 | 1.2699 | 3.5852 | 0 | 19,664.38 | 19,664.38 | 1.6154 | 0 | 19,704.77 |
| 2030 | 6.3303 | 57.9207 | 48.5964 | 0.1893 | 6.5136 | 1.3649 | 9.8785 | 2.3153 | 1.2699 | 3.5852 | 0 | 19,664.38 | 19,664.38 | 1.6154 | 0 | 19,704.77 |
| Maximum | 704.2267 | 69.3236 | 51.6599 | 0.1938 | 18.2141 | 2.6349 | 20.7921 | 9.9699 | 2.4241 | 12.3416 | 0 | 19,976.76 | 19,976.76 | 1.9501 | 0 | 20,019.92 |

DAILY - OPERATION - SUMMER

| Year | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio-CO2 | Nbio-CO2 | Total CO2 | CH4 | N2O | CO2e |
|---------|---------|----------|---------|----------|---------------|--------------|------------|----------------|---------------|-------------|----------|----------|-----------|-----|-----|------|
| lb/day | | | | | | | | | | | | | | | | |
| Area | 63.2095 | 2.10E-03 | 0.2318 | 2.00E-06 | 8.20E-04 | 8.20E-04 | 8.20E-04 | 0 | 0.4983 | 0.4983 | 1.10E-03 | 0 | 0.5307 | | | |
| Highway | 1.3393 | 12.3403 | 10.3726 | 0.0741 | 0.6580 | 0.6580 | 0.6580 | 0 | 14.8173 | 14.8173 | 0.284 | 0 | 14,860.36 | | | |
| Mobile | 29.6266 | 110.0839 | 323.376 | 1.2554 | 127.2139 | 0.9174 | 12 | | | | | | | | | |

Residential 2018 Start

| ANNUAL - CONSTRUCTION - 2018 | | | | | | | | | | | | | | | | |
|------------------------------|--------|--------|--------|----------|---------------|--------------|------------|----------------|---------------|-------------|---------|----------|-----------|--------|-----|----------|
| Year | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio-CO2 | NBio-CO2 | Total CO2 | CH4 | N2O | CO2e |
| 2018 | 0.5114 | 3.7961 | 3.5598 | 8.99E-03 | 0.8828 | 0.1532 | 0.836 | 0.2308 | 0.1427 | 0.3735 | 0 | 824.3182 | 824.3182 | 0.0999 | 0 | 826.8135 |
| 2019 | 0.5114 | 3.7961 | 3.5598 | 8.99E-03 | 0.8828 | 0.1532 | 0.836 | 0.2308 | 0.1427 | 0.3735 | 0 | 824.3182 | 824.3182 | 0.0999 | 0 | 826.8135 |
| 2020 | 0.5114 | 3.7961 | 3.5598 | 8.99E-03 | 0.8828 | 0.1532 | 0.836 | 0.2308 | 0.1427 | 0.3735 | 0 | 824.3182 | 824.3182 | 0.0999 | 0 | 826.8135 |
| Maximum | 0.5114 | 3.7961 | 3.5598 | 8.99E-03 | 0.8828 | 0.1532 | 0.836 | 0.2308 | 0.1427 | 0.3735 | 0 | 824.3182 | 824.3182 | 0.0999 | 0 | 826.8135 |

| ANNUAL - CONSTRUCTION - 2026 | | | | | | | | | | | | | | | | |
|------------------------------|--------|--------|-------|----------|---------------|--------------|------------|----------------|---------------|-------------|---------|----------|-----------|--------|-----|----------|
| Year | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio-CO2 | NBio-CO2 | Total CO2 | CH4 | N2O | CO2e |
| 2025 | 0.3015 | 1.9876 | 2.257 | 8.03E-03 | 0.6929 | 0.0902 | 0.7832 | 0.2335 | 0.096 | 0.2895 | 0 | 731.3128 | 731.3128 | 0.0992 | 0 | 733.5432 |
| 2026 | 0.3015 | 1.9876 | 2.257 | 8.03E-03 | 0.6929 | 0.0902 | 0.7832 | 0.2335 | 0.096 | 0.2895 | 0 | 731.3128 | 731.3128 | 0.0992 | 0 | 733.5432 |
| Maximum | 0.3015 | 1.9876 | 2.257 | 8.03E-03 | 0.6929 | 0.0902 | 0.7832 | 0.2335 | 0.096 | 0.2895 | 0 | 731.3128 | 731.3128 | 0.0992 | 0 | 733.5432 |

| DAILY - CONSTRUCTION - SUMMER | | | | | | | | | | | | | | | | |
|-------------------------------|--------|---------|---------|--------|---------------|--------------|------------|----------------|---------------|-------------|---------|-----------|-----------|--------|-----|-----------|
| Year | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio-CO2 | NBio-CO2 | Total CO2 | CH4 | N2O | CO2e |
| 2018 | 8.3336 | 59.5831 | 61.9529 | 0.1749 | 18.2141 | 2.6349 | 20.7921 | 9.9699 | 2.4241 | 12.3416 | 0 | 17,703.45 | 17,703.45 | 1.9501 | 0 | 17,738.02 |
| 2019 | 8.3336 | 59.5831 | 61.9529 | 0.1749 | 18.2141 | 2.6349 | 20.7921 | 9.9699 | 2.4241 | 12.3416 | 0 | 17,703.45 | 17,703.45 | 1.9501 | 0 | 17,738.02 |
| 2020 | 8.3336 | 59.5831 | 61.9529 | 0.1749 | 18.2141 | 2.6349 | 20.7921 | 9.9699 | 2.4241 | 12.3416 | 0 | 17,703.45 | 17,703.45 | 1.9501 | 0 | 17,738.02 |
| Maximum | 8.3336 | 59.5831 | 61.9529 | 0.1749 | 18.2141 | 2.6349 | 20.7921 | 9.9699 | 2.4241 | 12.3416 | 0 | 17,703.45 | 17,703.45 | 1.9501 | 0 | 17,738.02 |

| DAILY - CONSTRUCTION - WINTER | | | | | | | | | | | | | | | | |
|-------------------------------|--------|---------|--------|--------|---------------|--------------|------------|----------------|---------------|-------------|---------|-----------|-----------|--------|-----|-----------|
| Year | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio-CO2 | NBio-CO2 | Total CO2 | CH4 | N2O | CO2e |
| 2018 | 4.9912 | 59.5908 | 60.591 | 0.1678 | 18.2141 | 2.6349 | 20.7921 | 9.9699 | 2.4241 | 12.3416 | 0 | 16,960.20 | 16,960.20 | 1.9498 | 0 | 16,994.97 |
| 2019 | 4.9912 | 59.5908 | 60.591 | 0.1678 | 18.2141 | 2.6349 | 20.7921 | 9.9699 | 2.4241 | 12.3416 | 0 | 16,960.20 | 16,960.20 | 1.9498 | 0 | 16,994.97 |
| 2020 | 4.9912 | 59.5908 | 60.591 | 0.1678 | 18.2141 | 2.6349 | 20.7921 | 9.9699 | 2.4241 | 12.3416 | 0 | 16,960.20 | 16,960.20 | 1.9498 | 0 | 16,994.97 |
| Maximum | 4.9912 | 59.5908 | 60.591 | 0.1678 | 18.2141 | 2.6349 | 20.7921 | 9.9699 | 2.4241 | 12.3416 | 0 | 16,960.20 | 16,960.20 | 1.9498 | 0 | 16,994.97 |

| ANNUAL - OPERATION - 2018 | | | | | | | | | | | | | | | | |
|---------------------------|----------|--------|----------|----------|---------------|--------------|------------|----------------|---------------|-------------|----------|----------|-----------|-----|-----|----------|
| Category | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio-CO2 | NBio-CO2 | Total CO2 | CH4 | N2O | CO2e |
| Area | 107.0382 | 2.0501 | 132.7389 | 0.2201 | 17.049 | 17.049 | 34.098 | 1.61555 | 696.5058 | 2,312.05 | 1.5091 | 0.1271 | 2,387.65 | 0 | 0 | 2,387.65 |
| Energy | 0.0627 | 0.5354 | 0.2278 | 3.42E-03 | 0.0433 | 0.0433 | 0.0866 | 0 | 2,799.77 | 2,799.77 | 0.0996 | 0.0295 | 2,811.05 | 0 | 0 | 2,811.05 |
| Mobile | 1.3924 | 8.8453 | 16.7621 | 0.0959 | 0.0497 | 0.0524 | 0.1021 | 0 | 6,109.52 | 6,109.52 | 0.297 | 0 | 6,116.95 | 0 | 0 | 6,116.95 |
| Waste | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 146.0398 | 146.0398 | 8.9307 | 0 | 146.0398 | 0 | 0 | 146.0398 |
| Water | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 32.3285 | 32.3285 | 699.2075 | 3.3473 | 0.084 | 0 | 0 | 699.2075 |
| Total | 108.4933 | 8.4308 | 148.7288 | 0.2894 | 17.1419 | 17.1419 | 34.2447 | 1.6428 | 7,194.68 | 7,194.68 | 1,909.78 | 0.1569 | 7,206.53 | 0 | 0 | 7,206.53 |

| ANNUAL - OPERATION - 2026 | | | | | | | | | | | | | | | | |
|---------------------------|----------|--------|----------|----------|---------------|--------------|------------|----------------|---------------|-------------|----------|----------|-----------|-----|-----|----------|
| Category | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio-CO2 | NBio-CO2 | Total CO2 | CH4 | N2O | CO2e |
| Area | 107.0382 | 2.0501 | 132.7389 | 0.2201 | 17.049 | 17.049 | 34.098 | 1.61555 | 696.5058 | 2,312.05 | 1.5091 | 0.1271 | 2,387.65 | 0 | 0 | 2,387.65 |
| Energy | 0.0627 | 0.5354 | 0.2278 | 3.42E-03 | 0.0433 | 0.0433 | 0.0866 | 0 | 2,799.77 | 2,799.77 | 0.0996 | 0.0295 | 2,811.05 | 0 | 0 | 2,811.05 |
| Mobile | 1.3924 | 8.8453 | 16.7621 | 0.0959 | 0.0497 | 0.0524 | 0.1021 | 0 | 6,109.52 | 6,109.52 | 0.297 | 0 | 6,116.95 | 0 | 0 | 6,116.95 |
| Waste | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 146.0398 | 146.0398 | 8.9307 | 0 | 146.0398 | 0 | 0 | 146.0398 |
| Water | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 32.3285 | 32.3285 | 699.2075 | 3.3473 | 0.084 | 0 | 0 | 699.2075 |
| Total | 108.4933 | 8.4308 | 148.7288 | 0.2894 | 17.1419 | 17.1419 | 34.2447 | 1.6428 | 7,194.68 | 7,194.68 | 1,909.78 | 0.1569 | 7,206.53 | 0 | 0 | 7,206.53 |

| DAILY - OPERATION - SUMMER | | | | | | | | | | | | | | | | |
|----------------------------|----------|---------|----------|--------|---------------|--------------|------------|----------------|---------------|-------------|-----------|-----------|-----------|---------|--------|-----------|
| Category | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio-CO2 | NBio-CO2 | Total CO2 | CH4 | N2O | CO2e |
| Area | 2,444.28 | 48.2279 | 3,083.47 | 5.3597 | 414.9731 | 414.9731 | 829.9462 | 414.9731 | 414.9731 | 829.9462 | 43,434.99 | 18,448.34 | 61,883.32 | 40,3058 | 3,4165 | 63,909.08 |
| Energy | 0.3433 | 2.8330 | 1.2483 | 0.0187 | 0.2372 | 0.2372 | 0.4744 | 0 | 2,799.77 | 2,799.77 | 0.0996 | 0.0295 | 2,811.05 | 0 | 0 | 2,811.05 |
| Mobile | 8.5408 | 32.9087 | 100.2521 | 0.3979 | 40.7982 | 40.7982 | 81.5964 | 0 | 6,109.52 | 6,109.52 | 0.297 | 0 | 6,116.95 | 0 | 0 | 6,116.95 |
| Waste | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 146.0398 | 146.0398 | 8.9307 | 0 | 146.0398 | 0 | 0 | 146.0398 |
| Water | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 32.3285 | 32.3285 | 699.2075 | 3.3473 | 0.084 | 0 | 0 | 699.2075 |
| Total | 2,453.17 | 84.1001 | 3,184.97 | 5.7676 | 455.7713 | 455.7713 | 911.5426 | 414.9731 | 414.9731 | 829.9462 | 43,434.99 | 18,448.34 | 61,883.32 | 40,3058 | 3,4165 | 63,909.08 |

| DAILY - OPERATION - WINTER | | | | | | | | | | | | | | | | |
|----------------------------|----------|---------|----------|--------|---------------|--------------|------------|----------------|---------------|-------------|-----------|-----------|-----------|---------|--------|-----------|
| Category | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio-CO2 | NBio-CO2 | Total CO2 | CH4 | N2O | CO2e |
| Area | 2,444.28 | 48.2279 | 3,083.47 | 5.3597 | 414.9731 | 414.9731 | 829.9462 | 414.9731 | 414.9731 | 829.9462 | 43,434.99 | 18,448.34 | 61,883.32 | 40,3058 | 3,4165 | 63,909.08 |
| Energy | 0.3433 | 2.8330 | 1.2483 | 0.0187 | 0.2372 | 0.2372 | 0.4744 | 0 | 2,799.77 | 2,799.77 | 0.0996 | 0.0295 | 2,811.05 | 0 | 0 | 2,811.05 |
| Mobile | 8.5408 | 32.9087 | 100.2521 | 0.3979 | 40.7982 | 40.7982 | 81.5964 | 0 | 6,109.52 | 6,109.52 | 0.297 | 0 | 6,116.95 | 0 | 0 | 6,116.95 |
| Waste | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 146.0398 | 146.0398 | 8.9307 | 0 | 146.0398 | 0 | 0 | 146.0398 |
| Water | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 32.3285 | 32.3285 | 699.2075 | 3.3473 | 0.084 | 0 | 0 | 699.2075 |
| Total | 2,452.88 | 84.8976 | 3,182.83 | 5.7682 | 455.7713 | 455.7713 | 911.5426 | 414.9731 | 414.9731 | 829.9462 | 43,434.99 | 18,448.34 | 61,883.32 | 40,3058 | 3,4165 | 63,909.08 |

Restaurants

ANNUAL - CONSTRUCTION - 2018

| Year | ROG | NOx | CO | SO2 | Fugitive | Exhaust | PM10 | Fugitive | Exhaust | PM2.5 | Bio-CO2 | Nitro | Total CO2 | GHG | N2O | CO2e |
|---------|--------|--------|--------|----------|----------|---------|--------|----------|---------|--------|----------|----------|-----------|--------|----------|----------|
| 2018 | 0.2410 | 2.2087 | 1.8616 | 2.91E-03 | 0.1122 | 0.1222 | 0.2344 | 0.0494 | 0.1140 | 0.1838 | 0 | 283.0359 | 283.0359 | 0.0543 | 0 | 284.3668 |
| Maximum | 1.8621 | 1.2616 | 1.3459 | 2.91E-03 | 0.0853 | 0.1253 | 0.0166 | 0.0762 | 0.0889 | 0 | 212.8697 | 212.8697 | 0.0403 | 0 | 213.8737 | |

ANNUAL - OPERATION - 2018

| Category | ROG | NOx | CO | SO2 | Fugitive | Exhaust | PM10 | Fugitive | Exhaust | PM2.5 | Bio-CO2 | Nitro | Total CO2 | GHG | N2O | CO2e |
|----------|--------|----------|----------|----------|----------|---------|--------|----------|---------|--------|----------|-----------|-----------|--------|--------|-----------|
| Area | 0.7460 | 1.00E-05 | 1.30E-03 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2.64E-03 | 2.64E-03 | 1.00E-05 | 0 | 0 | 2.82E-03 |
| Energy | 0.1562 | 1.2651 | 1.0627 | 7.98E-03 | 0.0962 | 0.0962 | 0.0962 | 0.0962 | 0.0962 | 0.0962 | 0 | 3.2493E | 3.2493E | 0.1017 | 0.0408 | 3.26377 |
| Water | 0.2188 | 8.2697 | 6.27E-02 | 0.0688 | 0.0023 | 0.0049 | 0.0049 | 0.0049 | 0.0049 | 0.0049 | 0 | 0.0033 | 0.0033 | 0.0018 | 0 | 0.0033 |
| Waste | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total | 2.9938 | 9.7928 | 19.5385 | 0.0681 | 0.0221 | 0.1453 | 0.9673 | 1.8588 | 0.1417 | 1.7003 | 41.6659 | 9,074.160 | 9,115.826 | 3.5066 | 0.0771 | 9,226.459 |

ANNUAL - CONSTRUCTION - 2026

| Year | ROG | NOx | CO | SO2 | Fugitive | Exhaust | PM10 | Fugitive | Exhaust | PM2.5 | Bio-CO2 | Nitro | Total CO2 | GHG | N2O | CO2e |
|---------|--------|--------|--------|----------|----------|---------|--------|----------|---------|--------|---------|----------|-----------|--------|-----|----------|
| 2026 | 0.1282 | 1.1689 | 1.3502 | 2.82E-03 | 0.1128 | 0.0435 | 0.1579 | 0.0494 | 0.0425 | 0.0502 | 0 | 248.9197 | 248.9197 | 0.0569 | 0 | 250.1881 |
| Maximum | 1.8121 | 0.8717 | 1.1096 | 2.82E-03 | 0.0869 | 0.0512 | 0.0792 | 0.0169 | 0.0512 | 0.0477 | 0 | 166.9117 | 166.9117 | 0.0397 | 0 | 168.1683 |

ANNUAL - OPERATION - 2026

| Category | ROG | NOx | CO | SO2 | Fugitive | Exhaust | PM10 | Fugitive | Exhaust | PM2.5 | Bio-CO2 | Nitro | Total CO2 | GHG | N2O | CO2e |
|----------|--------|----------|----------|----------|----------|---------|--------|----------|---------|--------|----------|-----------|-----------|--------|--------|-----------|
| Area | 0.7460 | 1.00E-05 | 1.30E-03 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2.64E-03 | 2.64E-03 | 1.00E-05 | 0 | 0 | 2.82E-03 |
| Energy | 0.1562 | 1.2651 | 1.0627 | 7.98E-03 | 0.0962 | 0.0962 | 0.0962 | 0.0962 | 0.0962 | 0.0962 | 0 | 3.2493E | 3,249.06 | 0.1017 | 0.0408 | 3,263.77 |
| Water | 0.2188 | 8.2697 | 6.27E-02 | 0.0688 | 0.0023 | 0.0049 | 0.0049 | 0.0049 | 0.0049 | 0.0049 | 0 | 0.0033 | 0.0033 | 0.0018 | 0 | 0.0033 |
| Waste | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total | 2.9938 | 9.7928 | 19.5385 | 0.0681 | 0.0221 | 0.1453 | 0.9673 | 1.8588 | 0.1417 | 1.7003 | 41.6659 | 9,074.160 | 9,115.826 | 3.5066 | 0.0771 | 9,226.459 |

DAILY - CONSTRUCTION - SUMMER

| Year | ROG | NOx | CO | SO2 | Fugitive | Exhaust | PM10 | Fugitive | Exhaust | PM2.5 | Bio-CO2 | Nitro-CO2 | Total CO2 | GHG | N2O | CO2e |
|---------|----------|---------|---------|--------|----------|---------|---------|----------|---------|---------|---------|-----------|-----------|--------|-----|---------|
| 2018 | 4.6393 | 48.2639 | 23.9929 | 0.0402 | 18.2141 | 2.876 | 20.7921 | 0.9699 | 2.3717 | 12.3416 | 0 | 4.00835 | 4.00835 | 1.1984 | 0 | 4.03313 |
| Maximum | 190.8630 | 34.3444 | 19.8604 | 0.0305 | 0.0718 | 13.142 | 1.868 | 0.1819 | 1.2569 | 1.4177 | 0 | 3.84134 | 3.84134 | 0.7634 | 0 | 3.88913 |

DAILY - OPERATION - SUMMER

| Category | ROG | NOx | CO | SO2 | Fugitive | Exhaust | PM10 | Fugitive | Exhaust | PM2.5 | Bio-CO2 | Nitro-CO2 | Total CO2 | GHG | N2O | CO2e |
|----------|---------|----------|----------|--------|----------|---------|---------|----------|---------|---------|----------|-----------|-----------|--------|-----------|----------|
| Area | 4.1983 | 1.40E-04 | 0.0181 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0324 | 0.0324 | 0.00E-05 | 0 | 0 | 0.0340 |
| Energy | 0.7625 | 6.8021 | 5.623 | 0.0416 | 0.5268 | 0.5268 | 0.5268 | 0.5268 | 0.5268 | 0.5268 | 0 | 3.18153 | 3,181.53 | 0.1594 | 0.1526 | 3,187.96 |
| Water | 0.2188 | 8.2697 | 6.27E-02 | 0.0688 | 0.0023 | 0.0049 | 0.0049 | 0.0049 | 0.0049 | 0.0049 | 0 | 0.0033 | 0.0033 | 0.0018 | 0 | 0.0033 |
| Waste | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total | 18.1861 | 36.9033 | 113.5613 | 0.4132 | 35.1106 | 8.8168 | 33.9267 | 6.361 | 6.7948 | 18.1783 | 48.37427 | 48,379.27 | 2,1768 | 6.1928 | 48,478.98 | |

DAILY - CONSTRUCTION - WINTER

| Year | ROG | NOx | CO | SO2 | Fugitive | Exhaust | PM10 | Fugitive | Exhaust | PM2.5 | Bio-CO2 | Nitro-CO2 | Total CO2 | GHG | N2O | CO2e |
|---------|----------|---------|---------|--------|----------|---------|---------|----------|---------|---------|---------|-----------|-----------|--------|-----|----------|
| 2018 | 4.6493 | 48.2639 | 23.9929 | 0.0401 | 18.2141 | 2.876 | 20.7921 | 0.9699 | 2.3717 | 12.3416 | 0 | 3.9812 | 3,981.2 | 1.1981 | 0 | 4,024.89 |
| Maximum | 190.8697 | 34.3477 | 19.8634 | 0.0305 | 0.0718 | 13.142 | 1.8684 | 0.1819 | 1.2562 | 1.4161 | 0 | 3.76247 | 3,762.47 | 0.7598 | 0 | 3,808.13 |

DAILY - OPERATION - WINTER

| Category | ROG | NOx | CO | SO2 | Fugitive | Exhaust | PM10 | Fugitive | Exhaust | PM2.5 | Bio-CO2 | Nitro-CO2 | Total CO2 | GHG | N2O | CO2e |
|----------|---------|----------|----------|--------|----------|---------|---------|----------|---------|---------|-----------|-----------|-----------|--------|-----------|----------|
| Area | 4.1983 | 1.40E-04 | 0.0181 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0324 | 0.0324 | 0.00E-05 | 0 | 0 | 0.0345 |
| Energy | 0.7625 | 6.8021 | 5.623 | 0.0416 | 0.5268 | 0.5268 | 0.5268 | 0.5268 | 0.5268 | 0.5268 | 0 | 3.18153 | 3,181.53 | 0.1594 | 0.1526 | 3,187.96 |
| Water | 0.2188 | 8.2697 | 6.27E-02 | 0.0688 | 0.0023 | 0.0049 | 0.0049 | 0.0049 | 0.0049 | 0.0049 | 0 | 0.0033 | 0.0033 | 0.0018 | 0 | 0.0033 |
| Waste | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total | 17.6281 | 36.3327 | 111.3214 | 0.3834 | 35.1106 | 8.8116 | 33.9262 | 6.361 | 6.7928 | 18.1778 | 48,361.38 | 48,361.38 | 2,1514 | 6.1925 | 48,482.98 | |

Warehouse Facilities

| ANNUAL CONSTRUCTION - 2018 | | | | | | | | | | | | | | | | |
|----------------------------|---------|--------|--------|----------|------------------|-----------------|-------------------|------------------|---------|----------|-----------|----------|----------|--------|---|----------|
| Year | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | Fugitive PM2.5 | Exhaust PM2.5 | Bio-CO2 | Nbio-CO2 | Total CO2 | CH4 | N2O | CO2e | | |
| | t/yr | | | | | | | | | | | | | | | |
| 2018 | 0.255 | 2.3791 | 1.528 | 3.19E-03 | 0.2089 | 0.1258 | 0.3258 | 0.06 | 0.1175 | 0.2155 | 0 | 298.731 | 289.731 | 0.1595 | 0 | 291.1022 |
| 2019 | 2.8134 | 1.9495 | 1.5419 | 3.19E-03 | 0.0977 | 0.0952 | 0.1629 | 0.0184 | 0.0884 | 0.1078 | 0 | 286.4825 | 286.4825 | 0.1523 | 0 | 287.7452 |
| Maximum | 18.1545 | 4.2573 | 3.2811 | 9.36E-03 | 0.3639 | 0.1553 | 0.5112 | 0.1427 | 0.1491 | 0.29 | 0 | 663.6583 | 663.6583 | 0.104 | 0 | 664.4581 |

| ANNUAL CONSTRUCTION - 2026 | | | | | | | | | | | | | | | | |
|----------------------------|--------|--------|--------|----------|------------------|-----------------|-------------------|------------------|---------|----------|-----------|----------|----------|--------|---|----------|
| Year | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | Fugitive PM2.5 | Exhaust PM2.5 | Bio-CO2 | Nbio-CO2 | Total CO2 | CH4 | N2O | CO2e | | |
| | t/yr | | | | | | | | | | | | | | | |
| 2026 | 0.1504 | 1.2858 | 1.5741 | 3.08E-03 | 0.2089 | 0.0473 | 0.2571 | 0.058 | 0.0441 | 0.1421 | 0 | 270.1383 | 270.1383 | 0.0847 | 0 | 271.5046 |
| 2027 | 2.7278 | 1.8832 | 1.9659 | 2.99E-03 | 0.0577 | 0.0392 | 0.1099 | 0.0184 | 0.0399 | 0.0552 | 0 | 267.036 | 267.036 | 0.0495 | 0 | 268.1987 |
| Maximum | 9.8646 | 2.4515 | 2.8705 | 8.35E-03 | 0.367 | 0.0618 | 0.4238 | 0.1435 | 0.0381 | 0.1592 | 0 | 770.6143 | 770.6143 | 0.0899 | 0 | 772.8618 |

| DAILY CONSTRUCTION - SUMMER | | | | | | | | | | | | | | | | |
|-----------------------------|----------|---------|---------|--------|------------------|-----------------|-------------------|------------------|---------|----------|-----------|---------|---------|--------|---|---------|
| Year | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | Fugitive PM2.5 | Exhaust PM2.5 | Bio-CO2 | Nbio-CO2 | Total CO2 | CH4 | N2O | CO2e | | |
| | t/day | | | | | | | | | | | | | | | |
| 2018 | 4.6393 | 48.2539 | 23.0625 | 0.0465 | 18.2141 | 2.578 | 20.7821 | 9.8699 | 2.3717 | 12.3416 | 0 | 4.49873 | 4.49873 | 1.1981 | 0 | 4.51538 |
| 2019 | 261.9598 | 25.9287 | 21.2076 | 0.0454 | 1.0369 | 1.3273 | 2.3562 | 0.2791 | 1.2488 | 1.5275 | 0 | 4.43510 | 4.43510 | 0.1463 | 0 | 4.45379 |
| Maximum | 261.9598 | 48.2539 | 23.0625 | 0.0458 | 18.2141 | 2.578 | 20.7821 | 9.8699 | 2.3717 | 12.3416 | 0 | 4.51538 | 4.51538 | 1.1984 | 0 | 4.53557 |

| DAILY CONSTRUCTION - WINTER | | | | | | | | | | | | | | | | |
|-----------------------------|----------|---------|---------|--------|------------------|-----------------|-------------------|------------------|---------|----------|-----------|---------|---------|--------|---|---------|
| Year | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | Fugitive PM2.5 | Exhaust PM2.5 | Bio-CO2 | Nbio-CO2 | Total CO2 | CH4 | N2O | CO2e | | |
| | t/day | | | | | | | | | | | | | | | |
| 2018 | 4.6493 | 48.2607 | 23.0668 | 0.045 | 18.2141 | 2.578 | 20.7821 | 9.8699 | 2.3717 | 12.3416 | 0 | 4.49873 | 4.49873 | 1.1981 | 0 | 4.51538 |
| 2019 | 261.9598 | 25.9287 | 21.2076 | 0.0447 | 1.0369 | 1.3273 | 2.3562 | 0.2791 | 1.2488 | 1.5275 | 0 | 4.43510 | 4.43510 | 0.1463 | 0 | 4.45379 |
| Maximum | 261.9598 | 48.2607 | 23.0668 | 0.045 | 18.2141 | 2.578 | 20.7821 | 9.8699 | 2.3717 | 12.3416 | 0 | 4.49873 | 4.49873 | 1.1981 | 0 | 4.51538 |

Additional Dev.

ANNUAL CONSTRUCTION - 2018

| Year | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio-CO2 | Nbio-CO2 | Total CO2 | CH4 | N2O | CO2e |
|---------|---------|--------|--------|-----------|---------------|--------------|------------|----------------|---------------|-------------|---------|----------|-----------|--------|-----|----------|
| Mtyr | | | | | | | | | | | | | | | | |
| 2018 | 0.3484 | 3.4565 | 2.3039 | 0.546E-03 | 0.3639 | 0.1472 | 0.5112 | 0.1427 | 0.1373 | 0.28 | 0 | 610.7839 | 610.7839 | 0.0882 | 0 | 512.9133 |
| 2019 | 10.1545 | 4.2573 | 3.2811 | 9.36E-03 | 0.3251 | 0.1595 | 0.4846 | 0.0868 | 0.1491 | 0.236 | 0 | 863.8588 | 863.8588 | 0.104 | 0 | 866.4581 |
| Maximum | 10.1545 | 4.2573 | 3.2811 | 9.36E-03 | 0.3251 | 0.1595 | 0.4846 | 0.0868 | 0.1491 | 0.236 | 0 | 863.8588 | 863.8588 | 0.104 | 0 | 866.4581 |

ANNUAL CONSTRUCTION - 2026

| Year | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio-CO2 | Nbio-CO2 | Total CO2 | CH4 | N2O | CO2e |
|---------|--------|--------|--------|----------|---------------|--------------|------------|----------------|---------------|-------------|---------|----------|-----------|--------|-----|----------|
| Mtyr | | | | | | | | | | | | | | | | |
| 2026 | 0.1886 | 1.8054 | 1.7926 | 5.20E-03 | 0.387 | 0.0567 | 0.4437 | 0.1435 | 0.0527 | 0.1962 | 0 | 473.1925 | 473.1925 | 0.076 | 0 | 475.1075 |
| 2027 | 9.9648 | 2.4518 | 2.6105 | 8.33E-03 | 0.3221 | 0.0818 | 0.4039 | 0.0876 | 0.0561 | 0.1437 | 0 | 770.6143 | 770.6143 | 0.0899 | 0 | 772.6013 |
| Maximum | 9.9648 | 2.4518 | 2.6105 | 8.33E-03 | 0.3221 | 0.0818 | 0.4039 | 0.0876 | 0.0561 | 0.1437 | 0 | 770.6143 | 770.6143 | 0.0899 | 0 | 772.6013 |

PEAK DAILY CONSTRUCTION - SUMMER

| Year | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio-CO2 | Nbio-CO2 | Total CO2 | CH4 | N2O | CO2e |
|---------|---------|---------|--------|--------|---------------|--------------|------------|----------------|---------------|-------------|---------|----------|-----------|--------|-----|----------|
| l/day | | | | | | | | | | | | | | | | |
| 2018 | 6.1783 | 59.5831 | 35.774 | 0.0882 | 18.2141 | 2.6349 | 20.7921 | 9.9999 | 2.4241 | 12.3416 | 0 | 9.110.70 | 9.110.70 | 1.9501 | 0 | 9.136.90 |
| 2019 | 971.511 | 58.5831 | 35.774 | 0.0882 | 18.2141 | 2.6349 | 20.7921 | 9.9999 | 2.4241 | 12.3416 | 0 | 9.110.70 | 9.110.70 | 1.9501 | 0 | 9.136.90 |
| Maximum | 971.511 | 58.5831 | 35.774 | 0.0882 | 18.2141 | 2.6349 | 20.7921 | 9.9999 | 2.4241 | 12.3416 | 0 | 9.110.70 | 9.110.70 | 1.9501 | 0 | 9.136.90 |

PEAK DAILY CONSTRUCTION - WINTER

| Year | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio-CO2 | Nbio-CO2 | Total CO2 | CH4 | N2O | CO2e |
|---------|----------|---------|---------|--------|---------------|--------------|------------|----------------|---------------|-------------|---------|----------|-----------|--------|-----|----------|
| l/day | | | | | | | | | | | | | | | | |
| 2018 | 6.1883 | 59.5908 | 35.7388 | 0.0883 | 18.2141 | 2.6349 | 20.7921 | 9.9999 | 2.4241 | 12.3416 | 0 | 8.890.93 | 8.890.93 | 1.9498 | 0 | 8.897.56 |
| 2019 | 971.5287 | 58.5831 | 35.774 | 0.0882 | 18.2141 | 2.6349 | 20.7921 | 9.9999 | 2.4241 | 12.3416 | 0 | 8.890.93 | 8.890.93 | 1.9498 | 0 | 8.928.24 |
| Maximum | 971.5287 | 58.5831 | 35.774 | 0.0882 | 18.2141 | 2.6349 | 20.7921 | 9.9999 | 2.4241 | 12.3416 | 0 | 8.890.93 | 8.890.93 | 1.9498 | 0 | 8.928.24 |

ANNUAL OPERATION - 2018

| Category | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio-CO2 | Nbio-CO2 | Total CO2 | CH4 | N2O | CO2e |
|----------|--------|----------|-----------|----------|---------------|--------------|------------|----------------|---------------|-------------|----------|-----------|-----------|----------|--------|-----------|
| Mtyr | | | | | | | | | | | | | | | | |
| Area | 4.2448 | 7.00E-05 | 17.68E-03 | 0 | 3.00E-05 | 3.00E-05 | 3.00E-05 | 3.00E-05 | 3.00E-05 | 3.00E-05 | 0 | 0.015 | 0.015 | 4.00E-05 | 0 | 0.016 |
| Energy | 0.1481 | 1.1328 | 1.1159 | 7.29E-03 | 0.101 | 0.101 | 0.101 | 0.101 | 0.101 | 0.101 | 0 | 6.767.81 | 6.767.81 | 0.2017 | 0.0025 | 6.767.44 |
| Mobile | 1.4685 | 6.1108 | 18.8687 | 0.0649 | 6.7249 | 0.0494 | 6.7743 | 1.8003 | 0.0459 | 1.8462 | 0 | 6.021.47 | 6.021.47 | 0.2972 | 0 | 6.028.90 |
| Waste | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 198.199 | 0 | 198.199 | 0 | 391.9313 |
| Water | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 47.2521 | 1685.2462 | 1.012.50 | 4.8921 | 6.1228 |
| Water | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 47.2521 | 1685.2462 | 1.012.50 | 4.8921 | 6.1228 |
| Total | 6.8572 | 7.4392 | 17.9623 | 0.0729 | 6.7249 | 0.1804 | 6.9052 | 1.8903 | 0.1489 | 1.9471 | 285.4511 | 12.754.53 | 12.959.99 | 14.7403 | 0.1651 | 13.383.66 |

ANNUAL OPERATION - 2026

| Category | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio-CO2 | Nbio-CO2 | Total CO2 | CH4 | N2O | CO2e |
|----------|--------|----------|-----------|----------|---------------|--------------|------------|----------------|---------------|-------------|----------|-----------|-----------|----------|--------|-----------|
| Mtyr | | | | | | | | | | | | | | | | |
| Area | 4.2448 | 7.00E-05 | 17.68E-03 | 0 | 3.00E-05 | 3.00E-05 | 3.00E-05 | 3.00E-05 | 3.00E-05 | 3.00E-05 | 0 | 0.015 | 0.015 | 4.00E-05 | 0 | 0.016 |
| Energy | 0.1481 | 1.1328 | 1.1159 | 7.29E-03 | 0.101 | 0.101 | 0.101 | 0.101 | 0.101 | 0.101 | 0 | 6.767.81 | 6.767.81 | 0.2017 | 0.0025 | 6.767.44 |
| Mobile | 1.4685 | 6.1108 | 18.8687 | 0.0649 | 6.7249 | 0.0494 | 6.7743 | 1.8003 | 0.0459 | 1.8462 | 0 | 6.021.47 | 6.021.47 | 0.2972 | 0 | 6.028.90 |
| Waste | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 198.199 | 0 | 198.199 | 0 | 391.9313 |
| Water | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 47.2521 | 1685.2462 | 1.012.50 | 4.8921 | 6.1228 |
| Water | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 47.2521 | 1685.2462 | 1.012.50 | 4.8921 | 6.1228 |
| Total | 6.8572 | 7.4392 | 17.9623 | 0.0729 | 6.7249 | 0.1804 | 6.9052 | 1.8903 | 0.1489 | 1.9471 | 285.4511 | 12.754.53 | 12.959.99 | 14.7403 | 0.1651 | 13.383.66 |

PEAK DAILY OPERATION - SUMMER

| Category | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio-CO2 | Nbio-CO2 | Total CO2 | CH4 | N2O | CO2e |
|----------|---------|----------|---------|----------|---------------|--------------|------------|----------------|---------------|-------------|----------|-----------|-----------|----------|--------|-----------|
| l/day | | | | | | | | | | | | | | | | |
| Area | 23.2818 | 7.70E-04 | 0.0883 | 1.00E-05 | 3.00E-04 | 3.00E-04 | 3.00E-04 | 3.00E-04 | 3.00E-04 | 3.00E-04 | 0 | 0.1834 | 0.1834 | 4.80E-04 | 0 | 0.1893 |
| Energy | 0.8607 | 7.2791 | 6.1148 | 0.0437 | 0.5532 | 0.5532 | 0.5532 | 0.5532 | 0.5532 | 0.5532 | 0 | 6.750.19 | 6.750.19 | 0.1674 | 0.0025 | 6.767.70 |
| Mobile | 11.4891 | 44.0888 | 128.901 | 0.5 | 50.8369 | 0.3842 | 51.3059 | 13.5827 | 0.3384 | 13.9211 | 0 | 51.091.82 | 51.091.82 | 2.4284 | 0 | 51.152.63 |
| Waste | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 198.199 | 0 | 198.199 | 0 | 391.9313 |
| Water | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 47.2521 | 1685.2462 | 1.012.50 | 4.8921 | 6.1228 |
| Water | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 47.2521 | 1685.2462 | 1.012.50 | 4.8921 | 6.1228 |
| Total | 35.5616 | 51.2889 | 134.201 | 0.8437 | 50.8367 | 6.9179 | 61.7544 | 13.9227 | 0.8919 | 14.4746 | 59.82719 | 59.82719 | 2.5963 | 0.1602 | 0.1602 | 59.939.82 |

PEAK DAILY OPERATION - WINTER

| Category | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio-CO2 | Nbio-CO2 | Total CO2 | CH4 | N2O | CO2e |
|----------|---------|----------|---------|----------|---------------|--------------|------------|----------------|---------------|-------------|----------|-----------|-----------|----------|--------|-----------|
| l/day | | | | | | | | | | | | | | | | |
| Area | 23.2818 | 7.70E-04 | 0.0883 | 1.00E-05 | 3.00E-04 | 3.00E-04 | 3.00E-04 | 3.00E-04 | 3.00E-04 | 3.00E-04 | 0 | 0.1834 | 0.1834 | 4.80E-04 | 0 | 0.1893 |
| Energy | 0.8607 | 7.2791 | 6.1148 | 0.0437 | 0.5532 | 0.5532 | 0.5532 | 0.5532 | 0.5532 | 0.5532 | 0 | 6.750.19 | 6.750.19 | 0.1674 | 0.0025 | 6.767.70 |
| Mobile | 11.0548 | 44.9683 | 129.907 | 0.4748 | 50.8367 | 0.3687 | 51.3059 | 13.5827 | 0.3384 | 13.9211 | 0 | 48.532.40 | 48.532.40 | 2.448 | 0 | 48.563.52 |
| Waste | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 198.199 | 0 | 198.199 | 0 | 391.9313 |
| Water | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 47.2521 | 1685.2462 | 1.012.50 | 4.8921 | 6.1228 |
| Water | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 47.2521 | 1685.2462 | 1.012.50 | 4.8921 | 6.1228 |
| Total | 35.1973 | 52.2384 | 132.107 | 0.8183 | 50.8367 | 6.9182 | 61.7589 | 13.9227 | 0.8913 | 14.476 | 59.82719 | 59.82719 | 2.6129 | 0.1602 | 0.1602 | 59.939.81 |

Project Characteristics

| | |
|-------------------------------------|-----------------------------|
| Project Name | Cumulative Project Analysis |
| Project Location | County San Diego |
| CEC Forecasting Climate Zone | 13 |
| Start of Construction | Monday, June 4, 2018 |
| Operational Year | 2027 |
| Select Utility Company | San Diego Gas & Electric |

Land Use

| Land Use Type | Land Use Subtype | Unit Amou Size Metric | |
|----------------------|---------------------------|------------------------------|---------------|
| Commercial | General Office Building | 2,277 | 1000sqft |
| Commercial | Office Park | 838 | 1000sqft |
| Recreational | Quality Restaurant | 148 | 1000sqft |
| Residential | Condo/Townhouse High Rise | 1,564 | Dwelling Unit |
| Recreational | Hotel | 5,972 | Room |

SAN Fuel Farm - San Diego County APCD Air District, Annual

SAN Fuel Farm
San Diego County APCD Air District, Annual

1.0 Project Characteristics

1.1 Land Usage

| Land Uses | Size | Metric | Lot Acreage | Floor Surface Area | Population |
|------------------------|-------|----------|-------------|--------------------|------------|
| General Light Industry | 35.00 | 1000sqft | 0.80 | 35,000.00 | 0 |

1.2 Other Project Characteristics

| | | | | | |
|---------------------------------|--------------------------|---------------------------------|-------|----------------------------------|-------|
| Urbanization | Urban | Wind Speed (m/s) | 2.6 | Precipitation Freq (Days) | 40 |
| Climate Zone | 13 | | | Operational Year | 2021 |
| Utility Company | San Diego Gas & Electric | | | | |
| CO2 Intensity (lb/MW hr) | 720.49 | CH4 Intensity (lb/MW hr) | 0.029 | N2O Intensity (lb/MW hr) | 0.006 |

1.3 User Entered Comments & Non-Default Data

SAN Fuel Farm - San Diego County APCD Air District, Annual

Project Characteristics -

Land Use -

Construction Phase - '

Off-road Equipment -

Off-road Equipment -

Off-road Equipment -

Off-road Equipment -

Off-road Equipment -

Off-road Equipment -

Off-road Equipment -

Grading - '

Trips and VMT - '

Architectural Coating - '

SAN Fuel Farm - San Diego County APCD Air District, Annual

| Table Name | Column Name | Default Value | New Value |
|---------------------------|-----------------------------------|---------------|------------|
| tblArchitecturalCoating | ConstArea_Nonresidential_Exterior | 17,500.00 | 47,533.00 |
| tblConstructionPhase | NumDays | 5.00 | 10.00 |
| tblConstructionPhase | NumDays | 100.00 | 200.00 |
| tblConstructionPhase | NumDays | 2.00 | 36.00 |
| tblConstructionPhase | NumDays | 5.00 | 30.00 |
| tblConstructionPhase | NumDays | 1.00 | 30.00 |
| tblConstructionPhase | NumDays | 5.00 | 30.00 |
| tblConstructionPhase | PhaseEndDate | 7/31/2019 | 12/11/2020 |
| tblConstructionPhase | PhaseEndDate | 7/31/2019 | 11/27/2020 |
| tblConstructionPhase | PhaseEndDate | 7/31/2019 | 10/31/2019 |
| tblConstructionPhase | PhaseEndDate | 7/31/2019 | 12/12/2019 |
| tblConstructionPhase | PhaseEndDate | 7/31/2019 | 9/11/2019 |
| tblConstructionPhase | PhaseStartDate | 8/1/2019 | 11/30/2020 |
| tblConstructionPhase | PhaseStartDate | 8/1/2019 | 2/22/2020 |
| tblConstructionPhase | PhaseStartDate | 8/1/2019 | 9/12/2019 |
| tblConstructionPhase | PhaseStartDate | 8/1/2019 | 11/1/2019 |
| tblGrading | AcresOfGrading | 0.00 | 0.80 |
| tblGrading | AcresOfGrading | 15.00 | 0.80 |
| tblGrading | MaterialExported | 0.00 | 5,185.00 |
| tblProjectCharacteristics | OperationalYear | 2018 | 2021 |
| tblTripsAndVMT | HaulingTripNumber | 0.00 | 100.00 |
| tblTripsAndVMT | HaulingTripNumber | 0.00 | 299.00 |
| tblTripsAndVMT | HaulingTripNumber | 0.00 | 216.00 |
| tblTripsAndVMT | HaulingTripNumber | 0.00 | 17.00 |

2.0 Emissions Summary

SAN Fuel Farm - San Diego County APCD Air District, Annual

| Quarter | Start Date | End Date | Maximum Unmitigated ROG + NOX (tons/quarter) | Maximum Mitigated ROG + NOX (tons/quarter) |
|---------|------------|-----------|--|--|
| 1 | 8-1-2019 | 9-30-2019 | 0.2815 | 0.2815 |
| | | Highest | 0.2815 | 0.2815 |

2.2 Overall Operational

Unmitigated Operational

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|--------------|---------------|---------------|---------------|--------------------|---------------|--------------------|---------------|----------------|--------------------|---------------|----------------|-----------------|-----------------|---------------|--------------------|-----------------|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Area | 0.1773 | 0.0000 | 3.2000e-004 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 6.3000e-004 | 6.3000e-004 | 0.0000 | 0.0000 | 6.7000e-004 |
| Energy | 2.1900e-003 | 0.0199 | 0.0167 | 1.2000e-004 | | 1.5100e-003 | 1.5100e-003 | | 1.5100e-003 | 1.5100e-003 | 0.0000 | 118.3007 | 118.3007 | 4.3100e-003 | 1.2000e-003 | 118.7665 |
| Mobile | 0.0568 | 0.2539 | 0.6936 | 2.3600e-003 | 0.2027 | 2.0100e-003 | 0.2047 | 0.0543 | 1.8800e-003 | 0.0562 | 0.0000 | 217.5416 | 217.5416 | 0.0115 | 0.0000 | 217.8294 |
| Waste | | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 8.8098 | 0.0000 | 8.8098 | 0.5206 | 0.0000 | 21.8259 |
| Water | | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 2.5678 | 34.4420 | 37.0097 | 0.2651 | 6.5100e-003 | 45.5790 |
| Total | 0.2363 | 0.2737 | 0.7106 | 2.4800e-003 | 0.2027 | 3.5200e-003 | 0.2062 | 0.0543 | 3.3900e-003 | 0.0577 | 11.3776 | 370.2850 | 381.6625 | 0.8016 | 7.7100e-003 | 404.0014 |

SAN Fuel Farm - San Diego County APCD Air District, Annual

2.2 Overall Operational

Mitigated Operational

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|--------------|---------------|---------------|---------------|--------------------|---------------|--------------------|---------------|----------------|--------------------|---------------|----------------|-----------------|-----------------|---------------|--------------------|-----------------|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Area | 0.1773 | 0.0000 | 3.2000e-004 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 6.3000e-004 | 6.3000e-004 | 0.0000 | 0.0000 | 6.7000e-004 |
| Energy | 2.1900e-003 | 0.0199 | 0.0167 | 1.2000e-004 | | 1.5100e-003 | 1.5100e-003 | | 1.5100e-003 | 1.5100e-003 | 0.0000 | 118.3007 | 118.3007 | 4.3100e-003 | 1.2000e-003 | 118.7665 |
| Mobile | 0.0568 | 0.2539 | 0.6936 | 2.3600e-003 | 0.2027 | 2.0100e-003 | 0.2047 | 0.0543 | 1.8800e-003 | 0.0562 | 0.0000 | 217.5416 | 217.5416 | 0.0115 | 0.0000 | 217.8294 |
| Waste | | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 8.8098 | 0.0000 | 8.8098 | 0.5206 | 0.0000 | 21.8259 |
| Water | | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 2.5678 | 34.4420 | 37.0097 | 0.2651 | 6.5100e-003 | 45.5790 |
| Total | 0.2363 | 0.2737 | 0.7106 | 2.4800e-003 | 0.2027 | 3.5200e-003 | 0.2062 | 0.0543 | 3.3900e-003 | 0.0577 | 11.3776 | 370.2850 | 381.6625 | 0.8016 | 7.7100e-003 | 404.0014 |

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio-CO2 | Total CO2 | CH4 | N2O | CO2e |
|-------------------|------|------|------|------|---------------|--------------|------------|----------------|---------------|-------------|----------|----------|-----------|------|------|------|
| Percent Reduction | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |

3.0 Construction Detail

Construction Phase

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| Phase Number | Phase Name | Phase Type | Start Date | End Date | Num Days Week | Num Days | Phase Description |
|--------------|---------------------|-----------------------|------------|------------|---------------|----------|-------------------|
| 1 | 1_Site Preparation | Site Preparation | 8/1/2019 | 9/11/2019 | 5 | 30 | |
| 2 | 2_Grading | Grading | 9/12/2019 | 10/31/2019 | 5 | 36 | |
| 3 | 3_Foundation Paving | Paving | 11/1/2019 | 12/12/2019 | 5 | 30 | |
| 4 | 4_Dike Walls | Paving | 1/1/2020 | 2/11/2020 | 5 | 30 | |
| 5 | 5_Tank Installation | Building Construction | 2/22/2020 | 11/27/2020 | 5 | 200 | |
| 6 | 6_Surface Coating | Architectural Coating | 11/30/2020 | 12/11/2020 | 5 | 10 | |

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 52,500; Non-Residential Outdoor: 47,533; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

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| Phase Name | Offroad Equipment Type | Amount | Usage Hours | Horse Power | Load Factor |
|---------------------|---------------------------|--------|-------------|-------------|-------------|
| 6_Surface Coating | Air Compressors | 1 | 6.00 | 78 | 0.48 |
| 3_Foundation Paving | Cement and Mortar Mixers | 4 | 6.00 | 9 | 0.56 |
| 4_Dike Walls | Cement and Mortar Mixers | 4 | 6.00 | 9 | 0.56 |
| 2_Grading | Concrete/Industrial Saws | 1 | 8.00 | 81 | 0.73 |
| 5_Tank Installation | Cranes | 1 | 4.00 | 231 | 0.29 |
| 5_Tank Installation | Forklifts | 2 | 6.00 | 89 | 0.20 |
| 1_Site Preparation | Graders | 1 | 8.00 | 187 | 0.41 |
| 3_Foundation Paving | Pavers | 1 | 7.00 | 130 | 0.42 |
| 3_Foundation Paving | Rollers | 1 | 7.00 | 80 | 0.38 |
| 4_Dike Walls | Pavers | 1 | 7.00 | 130 | 0.42 |
| 2_Grading | Rubber Tired Dozers | 1 | 1.00 | 247 | 0.40 |
| 5_Tank Installation | Tractors/Loaders/Backhoes | 2 | 8.00 | 97 | 0.37 |
| 4_Dike Walls | Rollers | 1 | 7.00 | 80 | 0.38 |
| 2_Grading | Tractors/Loaders/Backhoes | 2 | 6.00 | 97 | 0.37 |
| 3_Foundation Paving | Tractors/Loaders/Backhoes | 1 | 7.00 | 97 | 0.37 |
| 1_Site Preparation | Tractors/Loaders/Backhoes | 1 | 8.00 | 97 | 0.37 |
| 4_Dike Walls | Tractors/Loaders/Backhoes | 1 | 7.00 | 97 | 0.37 |

Trips and VMT

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| Phase Name | Offroad Equipment Count | Worker Trip Number | Vendor Trip Number | Hauling Trip Number | Worker Trip Length | Vendor Trip Length | Hauling Trip Length | Worker Vehicle Class | Vendor Vehicle Class | Hauling Vehicle Class |
|---------------------|-------------------------|--------------------|--------------------|---------------------|--------------------|--------------------|---------------------|----------------------|----------------------|-----------------------|
| 6_Surface Coating | 1 | 3.00 | 0.00 | 0.00 | 10.80 | 7.30 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| 5_Tank Installation | 5 | 15.00 | 6.00 | 100.00 | 10.80 | 7.30 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| 4_Dike Walls | 7 | 18.00 | 0.00 | 17.00 | 10.80 | 7.30 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| 2_Grading | 4 | 10.00 | 0.00 | 648.00 | 10.80 | 7.30 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| 3_Foundation Paving | 7 | 18.00 | 0.00 | 299.00 | 10.80 | 7.30 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| 1_Site Preparation | 2 | 5.00 | 0.00 | 216.00 | 10.80 | 7.30 | 20.00 | LD_Mix | HDT_Mix | HHDT |

3.1 Mitigation Measures Construction

3.2 1_Site Preparation - 2019

Unmitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---------------|---------------|---------------|---------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|---------------|----------------|----------------|--------------------|---------------|----------------|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Fugitive Dust | | | | | 4.2000e-004 | 0.0000 | 4.2000e-004 | 5.0000e-005 | 0.0000 | 5.0000e-005 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 0.0108 | 0.1338 | 0.0621 | 1.5000e-004 | | 5.5100e-003 | 5.5100e-003 | | 5.0700e-003 | 5.0700e-003 | 0.0000 | 13.1338 | 13.1338 | 4.1600e-003 | 0.0000 | 13.2377 |
| Total | 0.0108 | 0.1338 | 0.0621 | 1.5000e-004 | 4.2000e-004 | 5.5100e-003 | 5.9300e-003 | 5.0000e-005 | 5.0700e-003 | 5.1200e-003 | 0.0000 | 13.1338 | 13.1338 | 4.1600e-003 | 0.0000 | 13.2377 |

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3.2 1_Site Preparation - 2019

Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|--------------|--------------------|---------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|---------------|---------------|---------------|--------------------|---------------|---------------|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 9.5000e-004 | 0.0331 | 7.2200e-003 | 9.0000e-005 | 1.8500e-003 | 1.2000e-004 | 1.9700e-003 | 5.1000e-004 | 1.2000e-004 | 6.3000e-004 | 0.0000 | 8.4196 | 8.4196 | 7.6000e-004 | 0.0000 | 8.4387 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 3.0000e-004 | 2.3000e-004 | 2.1900e-003 | 1.0000e-005 | 6.0000e-004 | 0.0000 | 6.1000e-004 | 1.6000e-004 | 0.0000 | 1.6000e-004 | 0.0000 | 0.5614 | 0.5614 | 2.0000e-005 | 0.0000 | 0.5618 |
| Total | 1.2500e-003 | 0.0333 | 9.4100e-003 | 1.0000e-004 | 2.4500e-003 | 1.2000e-004 | 2.5800e-003 | 6.7000e-004 | 1.2000e-004 | 7.9000e-004 | 0.0000 | 8.9810 | 8.9810 | 7.8000e-004 | 0.0000 | 9.0005 |

Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---------------|---------------|---------------|---------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|---------------|----------------|----------------|--------------------|---------------|----------------|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Fugitive Dust | | | | | 4.2000e-004 | 0.0000 | 4.2000e-004 | 5.0000e-005 | 0.0000 | 5.0000e-005 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 0.0108 | 0.1338 | 0.0621 | 1.5000e-004 | | 5.5100e-003 | 5.5100e-003 | | 5.0700e-003 | 5.0700e-003 | 0.0000 | 13.1338 | 13.1338 | 4.1600e-003 | 0.0000 | 13.2377 |
| Total | 0.0108 | 0.1338 | 0.0621 | 1.5000e-004 | 4.2000e-004 | 5.5100e-003 | 5.9300e-003 | 5.0000e-005 | 5.0700e-003 | 5.1200e-003 | 0.0000 | 13.1338 | 13.1338 | 4.1600e-003 | 0.0000 | 13.2377 |

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3.2 1_Site Preparation - 2019

Mitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|--------------|--------------------|---------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|---------------|---------------|---------------|--------------------|---------------|---------------|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 9.5000e-004 | 0.0331 | 7.2200e-003 | 9.0000e-005 | 1.8500e-003 | 1.2000e-004 | 1.9700e-003 | 5.1000e-004 | 1.2000e-004 | 6.3000e-004 | 0.0000 | 8.4196 | 8.4196 | 7.6000e-004 | 0.0000 | 8.4387 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 3.0000e-004 | 2.3000e-004 | 2.1900e-003 | 1.0000e-005 | 6.0000e-004 | 0.0000 | 6.1000e-004 | 1.6000e-004 | 0.0000 | 1.6000e-004 | 0.0000 | 0.5614 | 0.5614 | 2.0000e-005 | 0.0000 | 0.5618 |
| Total | 1.2500e-003 | 0.0333 | 9.4100e-003 | 1.0000e-004 | 2.4500e-003 | 1.2000e-004 | 2.5800e-003 | 6.7000e-004 | 1.2000e-004 | 7.9000e-004 | 0.0000 | 8.9810 | 8.9810 | 7.8000e-004 | 0.0000 | 9.0005 |

3.3 2_Grading - 2019

Unmitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---------------|---------------|---------------|---------------|--------------------|---------------|--------------------|---------------|--------------------|--------------------|---------------|---------------|----------------|----------------|--------------------|---------------|----------------|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Fugitive Dust | | | | | 0.0143 | 0.0000 | 0.0143 | 7.5500e-003 | 0.0000 | 7.5500e-003 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 0.0172 | 0.1549 | 0.1385 | 2.2000e-004 | | 9.6700e-003 | 9.6700e-003 | | 9.2200e-003 | 9.2200e-003 | 0.0000 | 18.9364 | 18.9364 | 3.6100e-003 | 0.0000 | 19.0267 |
| Total | 0.0172 | 0.1549 | 0.1385 | 2.2000e-004 | 0.0143 | 9.6700e-003 | 0.0240 | 7.5500e-003 | 9.2200e-003 | 0.0168 | 0.0000 | 18.9364 | 18.9364 | 3.6100e-003 | 0.0000 | 19.0267 |

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3.3 2_Grading - 2019

Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|--------------|--------------------|---------------|---------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|---------------|----------------|----------------|--------------------|---------------|----------------|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 2.8500e-003 | 0.0993 | 0.0217 | 2.6000e-004 | 5.5400e-003 | 3.7000e-004 | 5.9200e-003 | 1.5200e-003 | 3.5000e-004 | 1.8800e-003 | 0.0000 | 25.2589 | 25.2589 | 2.2900e-003 | 0.0000 | 25.3160 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 7.1000e-004 | 5.4000e-004 | 5.2700e-003 | 1.0000e-005 | 1.4400e-003 | 1.0000e-005 | 1.4500e-003 | 3.8000e-004 | 1.0000e-005 | 3.9000e-004 | 0.0000 | 1.3473 | 1.3473 | 4.0000e-005 | 0.0000 | 1.3484 |
| Total | 3.5600e-003 | 0.0998 | 0.0269 | 2.7000e-004 | 6.9800e-003 | 3.8000e-004 | 7.3700e-003 | 1.9000e-003 | 3.6000e-004 | 2.2700e-003 | 0.0000 | 26.6062 | 26.6062 | 2.3300e-003 | 0.0000 | 26.6644 |

Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---------------|---------------|---------------|---------------|--------------------|---------------|--------------------|---------------|--------------------|--------------------|---------------|---------------|----------------|----------------|--------------------|---------------|----------------|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Fugitive Dust | | | | | 0.0143 | 0.0000 | 0.0143 | 7.5500e-003 | 0.0000 | 7.5500e-003 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 0.0172 | 0.1549 | 0.1385 | 2.2000e-004 | | 9.6700e-003 | 9.6700e-003 | | 9.2200e-003 | 9.2200e-003 | 0.0000 | 18.9364 | 18.9364 | 3.6100e-003 | 0.0000 | 19.0267 |
| Total | 0.0172 | 0.1549 | 0.1385 | 2.2000e-004 | 0.0143 | 9.6700e-003 | 0.0240 | 7.5500e-003 | 9.2200e-003 | 0.0168 | 0.0000 | 18.9364 | 18.9364 | 3.6100e-003 | 0.0000 | 19.0267 |

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3.3 2_Grading - 2019

Mitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|--------------|--------------------|---------------|---------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|---------------|----------------|----------------|--------------------|---------------|----------------|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 2.8500e-003 | 0.0993 | 0.0217 | 2.6000e-004 | 5.5400e-003 | 3.7000e-004 | 5.9200e-003 | 1.5200e-003 | 3.5000e-004 | 1.8800e-003 | 0.0000 | 25.2589 | 25.2589 | 2.2900e-003 | 0.0000 | 25.3160 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 7.1000e-004 | 5.4000e-004 | 5.2700e-003 | 1.0000e-005 | 1.4400e-003 | 1.0000e-005 | 1.4500e-003 | 3.8000e-004 | 1.0000e-005 | 3.9000e-004 | 0.0000 | 1.3473 | 1.3473 | 4.0000e-005 | 0.0000 | 1.3484 |
| Total | 3.5600e-003 | 0.0998 | 0.0269 | 2.7000e-004 | 6.9800e-003 | 3.8000e-004 | 7.3700e-003 | 1.9000e-003 | 3.6000e-004 | 2.2700e-003 | 0.0000 | 26.6062 | 26.6062 | 2.3300e-003 | 0.0000 | 26.6644 |

3.4 3_Foundation Paving - 2019

Unmitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|--------------|---------------|---------------|---------------|--------------------|---------------|--------------------|--------------------|----------------|--------------------|--------------------|---------------|----------------|----------------|--------------------|---------------|----------------|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Off-Road | 0.0125 | 0.1177 | 0.1072 | 1.7000e-004 | | 6.6400e-003 | 6.6400e-003 | | 6.1600e-003 | 6.1600e-003 | 0.0000 | 14.3587 | 14.3587 | 4.1000e-003 | 0.0000 | 14.4613 |
| Paving | 0.0000 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Total | 0.0125 | 0.1177 | 0.1072 | 1.7000e-004 | | 6.6400e-003 | 6.6400e-003 | | 6.1600e-003 | 6.1600e-003 | 0.0000 | 14.3587 | 14.3587 | 4.1000e-003 | 0.0000 | 14.4613 |

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3.4 3_Foundation Paving - 2019

Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|--------------|--------------------|---------------|---------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|---------------|----------------|----------------|--------------------|---------------|----------------|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 1.3100e-003 | 0.0458 | 9.9900e-003 | 1.2000e-004 | 2.5600e-003 | 1.7000e-004 | 2.7300e-003 | 7.0000e-004 | 1.6000e-004 | 8.7000e-004 | 0.0000 | 11.6549 | 11.6549 | 1.0600e-003 | 0.0000 | 11.6813 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 1.0600e-003 | 8.2000e-004 | 7.9000e-003 | 2.0000e-005 | 2.1700e-003 | 2.0000e-005 | 2.1800e-003 | 5.8000e-004 | 1.0000e-005 | 5.9000e-004 | 0.0000 | 2.0209 | 2.0209 | 6.0000e-005 | 0.0000 | 2.0226 |
| Total | 2.3700e-003 | 0.0466 | 0.0179 | 1.4000e-004 | 4.7300e-003 | 1.9000e-004 | 4.9100e-003 | 1.2800e-003 | 1.7000e-004 | 1.4600e-003 | 0.0000 | 13.6759 | 13.6759 | 1.1200e-003 | 0.0000 | 13.7039 |

Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|--------------|---------------|---------------|---------------|--------------------|---------------|--------------------|--------------------|----------------|--------------------|--------------------|---------------|----------------|----------------|--------------------|---------------|----------------|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Off-Road | 0.0125 | 0.1177 | 0.1072 | 1.7000e-004 | | 6.6400e-003 | 6.6400e-003 | | 6.1600e-003 | 6.1600e-003 | 0.0000 | 14.3587 | 14.3587 | 4.1000e-003 | 0.0000 | 14.4613 |
| Paving | 0.0000 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Total | 0.0125 | 0.1177 | 0.1072 | 1.7000e-004 | | 6.6400e-003 | 6.6400e-003 | | 6.1600e-003 | 6.1600e-003 | 0.0000 | 14.3587 | 14.3587 | 4.1000e-003 | 0.0000 | 14.4613 |

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3.4 3_Foundation Paving - 2019

Mitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|--------------|--------------------|---------------|---------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|---------------|----------------|----------------|--------------------|---------------|----------------|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 1.3100e-003 | 0.0458 | 9.9900e-003 | 1.2000e-004 | 2.5600e-003 | 1.7000e-004 | 2.7300e-003 | 7.0000e-004 | 1.6000e-004 | 8.7000e-004 | 0.0000 | 11.6549 | 11.6549 | 1.0600e-003 | 0.0000 | 11.6813 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 1.0600e-003 | 8.2000e-004 | 7.9000e-003 | 2.0000e-005 | 2.1700e-003 | 2.0000e-005 | 2.1800e-003 | 5.8000e-004 | 1.0000e-005 | 5.9000e-004 | 0.0000 | 2.0209 | 2.0209 | 6.0000e-005 | 0.0000 | 2.0226 |
| Total | 2.3700e-003 | 0.0466 | 0.0179 | 1.4000e-004 | 4.7300e-003 | 1.9000e-004 | 4.9100e-003 | 1.2800e-003 | 1.7000e-004 | 1.4600e-003 | 0.0000 | 13.6759 | 13.6759 | 1.1200e-003 | 0.0000 | 13.7039 |

3.5 4_Dike Walls - 2020

Unmitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|--------------|---------------|---------------|---------------|--------------------|---------------|--------------------|--------------------|----------------|--------------------|--------------------|---------------|----------------|----------------|--------------------|---------------|----------------|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Off-Road | 0.0116 | 0.1084 | 0.1067 | 1.7000e-004 | | 5.9300e-003 | 5.9300e-003 | | 5.5000e-003 | 5.5000e-003 | 0.0000 | 14.0894 | 14.0894 | 4.1000e-003 | 0.0000 | 14.1920 |
| Paving | 0.0000 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Total | 0.0116 | 0.1084 | 0.1067 | 1.7000e-004 | | 5.9300e-003 | 5.9300e-003 | | 5.5000e-003 | 5.5000e-003 | 0.0000 | 14.0894 | 14.0894 | 4.1000e-003 | 0.0000 | 14.1920 |

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3.5 4_Dike Walls - 2020

Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|--------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|---------------|---------------|---------------|--------------------|---------------|---------------|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 7.0000e-005 | 2.4200e-003 | 5.5000e-004 | 1.0000e-005 | 1.5000e-004 | 1.0000e-005 | 1.5000e-004 | 4.0000e-005 | 1.0000e-005 | 5.0000e-005 | 0.0000 | 0.6556 | 0.6556 | 6.0000e-005 | 0.0000 | 0.6570 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 1.0000e-003 | 7.4000e-004 | 7.2200e-003 | 2.0000e-005 | 2.1700e-003 | 2.0000e-005 | 2.1800e-003 | 5.8000e-004 | 1.0000e-005 | 5.9000e-004 | 0.0000 | 1.9572 | 1.9572 | 6.0000e-005 | 0.0000 | 1.9586 |
| Total | 1.0700e-003 | 3.1600e-003 | 7.7700e-003 | 3.0000e-005 | 2.3200e-003 | 3.0000e-005 | 2.3300e-003 | 6.2000e-004 | 2.0000e-005 | 6.4000e-004 | 0.0000 | 2.6127 | 2.6127 | 1.2000e-004 | 0.0000 | 2.6157 |

Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|--------------|---------------|---------------|---------------|--------------------|---------------|--------------------|--------------------|----------------|--------------------|--------------------|---------------|----------------|----------------|--------------------|---------------|----------------|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Off-Road | 0.0116 | 0.1084 | 0.1067 | 1.7000e-004 | | 5.9300e-003 | 5.9300e-003 | | 5.5000e-003 | 5.5000e-003 | 0.0000 | 14.0894 | 14.0894 | 4.1000e-003 | 0.0000 | 14.1920 |
| Paving | 0.0000 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Total | 0.0116 | 0.1084 | 0.1067 | 1.7000e-004 | | 5.9300e-003 | 5.9300e-003 | | 5.5000e-003 | 5.5000e-003 | 0.0000 | 14.0894 | 14.0894 | 4.1000e-003 | 0.0000 | 14.1920 |

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3.5 4_Dike Walls - 2020

Mitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|--------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|---------------|---------------|---------------|--------------------|---------------|---------------|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 7.0000e-005 | 2.4200e-003 | 5.5000e-004 | 1.0000e-005 | 1.5000e-004 | 1.0000e-005 | 1.5000e-004 | 4.0000e-005 | 1.0000e-005 | 5.0000e-005 | 0.0000 | 0.6556 | 0.6556 | 6.0000e-005 | 0.0000 | 0.6570 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 1.0000e-003 | 7.4000e-004 | 7.2200e-003 | 2.0000e-005 | 2.1700e-003 | 2.0000e-005 | 2.1800e-003 | 5.8000e-004 | 1.0000e-005 | 5.9000e-004 | 0.0000 | 1.9572 | 1.9572 | 6.0000e-005 | 0.0000 | 1.9586 |
| Total | 1.0700e-003 | 3.1600e-003 | 7.7700e-003 | 3.0000e-005 | 2.3200e-003 | 3.0000e-005 | 2.3300e-003 | 6.2000e-004 | 2.0000e-005 | 6.4000e-004 | 0.0000 | 2.6127 | 2.6127 | 1.2000e-004 | 0.0000 | 2.6157 |

3.6 5_Tank Installation - 2020

Unmitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|--------------|---------------|---------------|---------------|--------------------|---------------|---------------|---------------|----------------|---------------|---------------|---------------|-----------------|-----------------|---------------|---------------|-----------------|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Off-Road | 0.0862 | 0.8852 | 0.7388 | 1.1400e-003 | | 0.0522 | 0.0522 | | 0.0481 | 0.0481 | 0.0000 | 100.0605 | 100.0605 | 0.0324 | 0.0000 | 100.8695 |
| Total | 0.0862 | 0.8852 | 0.7388 | 1.1400e-003 | | 0.0522 | 0.0522 | | 0.0481 | 0.0481 | 0.0000 | 100.0605 | 100.0605 | 0.0324 | 0.0000 | 100.8695 |

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3.6 5_Tank Installation - 2020

Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|--------------|--------------------|---------------|---------------|--------------------|---------------|--------------------|---------------|--------------------|--------------------|--------------------|---------------|----------------|----------------|--------------------|---------------|----------------|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 4.0000e-004 | 0.0142 | 3.2600e-003 | 4.0000e-005 | 8.6000e-004 | 4.0000e-005 | 9.0000e-004 | 2.3000e-004 | 4.0000e-005 | 2.8000e-004 | 0.0000 | 3.8562 | 3.8562 | 3.5000e-004 | 0.0000 | 3.8649 |
| Vendor | 2.2900e-003 | 0.0684 | 0.0182 | 1.6000e-004 | 3.9800e-003 | 3.3000e-004 | 4.3200e-003 | 1.1500e-003 | 3.2000e-004 | 1.4700e-003 | 0.0000 | 15.8317 | 15.8317 | 1.2100e-003 | 0.0000 | 15.8620 |
| Worker | 5.5300e-003 | 4.0900e-003 | 0.0401 | 1.2000e-004 | 0.0120 | 9.0000e-005 | 0.0121 | 3.2000e-003 | 8.0000e-005 | 3.2800e-003 | 0.0000 | 10.8731 | 10.8731 | 3.3000e-004 | 0.0000 | 10.8813 |
| Total | 8.2200e-003 | 0.0867 | 0.0616 | 3.2000e-004 | 0.0169 | 4.6000e-004 | 0.0173 | 4.5800e-003 | 4.4000e-004 | 5.0300e-003 | 0.0000 | 30.5611 | 30.5611 | 1.8900e-003 | 0.0000 | 30.6082 |

Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|--------------|---------------|---------------|---------------|--------------------|---------------|---------------|---------------|----------------|---------------|---------------|---------------|-----------------|-----------------|---------------|---------------|-----------------|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Off-Road | 0.0862 | 0.8852 | 0.7388 | 1.1400e-003 | | 0.0522 | 0.0522 | | 0.0481 | 0.0481 | 0.0000 | 100.0604 | 100.0604 | 0.0324 | 0.0000 | 100.8694 |
| Total | 0.0862 | 0.8852 | 0.7388 | 1.1400e-003 | | 0.0522 | 0.0522 | | 0.0481 | 0.0481 | 0.0000 | 100.0604 | 100.0604 | 0.0324 | 0.0000 | 100.8694 |

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3.6 5_Tank Installation - 2020

Mitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|--------------|--------------------|---------------|---------------|--------------------|---------------|--------------------|---------------|--------------------|--------------------|--------------------|---------------|----------------|----------------|--------------------|---------------|----------------|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 4.0000e-004 | 0.0142 | 3.2600e-003 | 4.0000e-005 | 8.6000e-004 | 4.0000e-005 | 9.0000e-004 | 2.3000e-004 | 4.0000e-005 | 2.8000e-004 | 0.0000 | 3.8562 | 3.8562 | 3.5000e-004 | 0.0000 | 3.8649 |
| Vendor | 2.2900e-003 | 0.0684 | 0.0182 | 1.6000e-004 | 3.9800e-003 | 3.3000e-004 | 4.3200e-003 | 1.1500e-003 | 3.2000e-004 | 1.4700e-003 | 0.0000 | 15.8317 | 15.8317 | 1.2100e-003 | 0.0000 | 15.8620 |
| Worker | 5.5300e-003 | 4.0900e-003 | 0.0401 | 1.2000e-004 | 0.0120 | 9.0000e-005 | 0.0121 | 3.2000e-003 | 8.0000e-005 | 3.2800e-003 | 0.0000 | 10.8731 | 10.8731 | 3.3000e-004 | 0.0000 | 10.8813 |
| Total | 8.2200e-003 | 0.0867 | 0.0616 | 3.2000e-004 | 0.0169 | 4.6000e-004 | 0.0173 | 4.5800e-003 | 4.4000e-004 | 5.0300e-003 | 0.0000 | 30.5611 | 30.5611 | 1.8900e-003 | 0.0000 | 30.6082 |

3.7 6_Surface Coating - 2020

Unmitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|-----------------|---------------|--------------------|--------------------|--------------------|---------------|--------------------|--------------------|----------------|--------------------|--------------------|---------------|---------------|---------------|--------------------|---------------|---------------|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Archit. Coating | 0.5796 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 1.2100e-003 | 8.4200e-003 | 9.1600e-003 | 1.0000e-005 | | 5.5000e-004 | 5.5000e-004 | | 5.5000e-004 | 5.5000e-004 | 0.0000 | 1.2766 | 1.2766 | 1.0000e-004 | 0.0000 | 1.2791 |
| Total | 0.5808 | 8.4200e-003 | 9.1600e-003 | 1.0000e-005 | | 5.5000e-004 | 5.5000e-004 | | 5.5000e-004 | 5.5000e-004 | 0.0000 | 1.2766 | 1.2766 | 1.0000e-004 | 0.0000 | 1.2791 |

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3.7 6_Surface Coating - 2020

Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|--------------|--------------------|--------------------|--------------------|---------------|--------------------|---------------|--------------------|--------------------|---------------|--------------------|---------------|---------------|---------------|---------------|---------------|---------------|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 6.0000e-005 | 4.0000e-005 | 4.0000e-004 | 0.0000 | 1.2000e-004 | 0.0000 | 1.2000e-004 | 3.0000e-005 | 0.0000 | 3.0000e-005 | 0.0000 | 0.1087 | 0.1087 | 0.0000 | 0.0000 | 0.1088 |
| Total | 6.0000e-005 | 4.0000e-005 | 4.0000e-004 | 0.0000 | 1.2000e-004 | 0.0000 | 1.2000e-004 | 3.0000e-005 | 0.0000 | 3.0000e-005 | 0.0000 | 0.1087 | 0.1087 | 0.0000 | 0.0000 | 0.1088 |

Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|-----------------|---------------|--------------------|--------------------|--------------------|---------------|--------------------|--------------------|----------------|--------------------|--------------------|---------------|---------------|---------------|--------------------|---------------|---------------|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Archit. Coating | 0.5796 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 1.2100e-003 | 8.4200e-003 | 9.1600e-003 | 1.0000e-005 | | 5.5000e-004 | 5.5000e-004 | | 5.5000e-004 | 5.5000e-004 | 0.0000 | 1.2766 | 1.2766 | 1.0000e-004 | 0.0000 | 1.2791 |
| Total | 0.5808 | 8.4200e-003 | 9.1600e-003 | 1.0000e-005 | | 5.5000e-004 | 5.5000e-004 | | 5.5000e-004 | 5.5000e-004 | 0.0000 | 1.2766 | 1.2766 | 1.0000e-004 | 0.0000 | 1.2791 |

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3.7 6_Surface Coating - 2020

Mitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|--------------|--------------------|--------------------|--------------------|---------------|--------------------|---------------|--------------------|--------------------|---------------|--------------------|---------------|---------------|---------------|---------------|---------------|---------------|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 6.0000e-005 | 4.0000e-005 | 4.0000e-004 | 0.0000 | 1.2000e-004 | 0.0000 | 1.2000e-004 | 3.0000e-005 | 0.0000 | 3.0000e-005 | 0.0000 | 0.1087 | 0.1087 | 0.0000 | 0.0000 | 0.1088 |
| Total | 6.0000e-005 | 4.0000e-005 | 4.0000e-004 | 0.0000 | 1.2000e-004 | 0.0000 | 1.2000e-004 | 3.0000e-005 | 0.0000 | 3.0000e-005 | 0.0000 | 0.1087 | 0.1087 | 0.0000 | 0.0000 | 0.1088 |

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

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| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|-------------|---------|--------|--------|-------------|---------------|--------------|------------|----------------|---------------|-------------|----------|-----------|-----------|--------|--------|----------|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Mitigated | 0.0568 | 0.2539 | 0.6936 | 2.3600e-003 | 0.2027 | 2.0100e-003 | 0.2047 | 0.0543 | 1.8800e-003 | 0.0562 | 0.0000 | 217.5416 | 217.5416 | 0.0115 | 0.0000 | 217.8294 |
| Unmitigated | 0.0568 | 0.2539 | 0.6936 | 2.3600e-003 | 0.2027 | 2.0100e-003 | 0.2047 | 0.0543 | 1.8800e-003 | 0.0562 | 0.0000 | 217.5416 | 217.5416 | 0.0115 | 0.0000 | 217.8294 |

4.2 Trip Summary Information

| Land Use | Average Daily Trip Rate | | | Unmitigated | Mitigated |
|------------------------|-------------------------|----------|--------|-------------|------------|
| | Weekday | Saturday | Sunday | Annual VMT | Annual VMT |
| General Light Industry | 243.95 | 46.20 | 23.80 | 537,920 | 537,920 |
| Total | 243.95 | 46.20 | 23.80 | 537,920 | 537,920 |

4.3 Trip Type Information

| Land Use | Miles | | | Trip % | | | Trip Purpose % | | |
|------------------------|------------|------------|-------------|------------|------------|-------------|----------------|----------|---------|
| | H-W or C-W | H-S or C-C | H-O or C-NW | H-W or C-W | H-S or C-C | H-O or C-NW | Primary | Diverted | Pass-by |
| General Light Industry | 9.50 | 7.30 | 7.30 | 59.00 | 28.00 | 13.00 | 92 | 5 | 3 |

4.4 Fleet Mix

| Land Use | LDA | LDT1 | LDT2 | MDV | LHD1 | LHD2 | MHD | HHD | OBUS | UBUS | MCY | SBUS | MH |
|------------------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| General Light Industry | 0.593936 | 0.041843 | 0.182569 | 0.108325 | 0.016436 | 0.005513 | 0.015940 | 0.023523 | 0.001912 | 0.001972 | 0.006090 | 0.000748 | 0.001193 |

5.0 Energy Detail

Historical Energy Use: N

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5.1 Mitigation Measures Energy

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|-------------------------|-------------|--------|--------|-------------|---------------|--------------|-------------|----------------|---------------|-------------|----------|-----------|-----------|-------------|-------------|---------|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Electricity Mitigated | | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 96.6537 | 96.6537 | 3.8900e-003 | 8.0000e-004 | 96.9908 |
| Electricity Unmitigated | | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 96.6537 | 96.6537 | 3.8900e-003 | 8.0000e-004 | 96.9908 |
| NaturalGas Mitigated | 2.1900e-003 | 0.0199 | 0.0167 | 1.2000e-004 | | 1.5100e-003 | 1.5100e-003 | | 1.5100e-003 | 1.5100e-003 | 0.0000 | 21.6470 | 21.6470 | 4.1000e-004 | 4.0000e-004 | 21.7757 |
| NaturalGas Unmitigated | 2.1900e-003 | 0.0199 | 0.0167 | 1.2000e-004 | | 1.5100e-003 | 1.5100e-003 | | 1.5100e-003 | 1.5100e-003 | 0.0000 | 21.6470 | 21.6470 | 4.1000e-004 | 4.0000e-004 | 21.7757 |

5.2 Energy by Land Use - NaturalGas

Unmitigated

| | NaturalGas Use | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|------------------------|----------------|--------------------|---------------|---------------|--------------------|---------------|--------------------|--------------------|----------------|--------------------|--------------------|---------------|----------------|----------------|--------------------|--------------------|----------------|
| Land Use | kBTU/yr | tons/yr | | | | | | | | | | MT/yr | | | | | |
| General Light Industry | 405650 | 2.1900e-003 | 0.0199 | 0.0167 | 1.2000e-004 | | 1.5100e-003 | 1.5100e-003 | | 1.5100e-003 | 1.5100e-003 | 0.0000 | 21.6470 | 21.6470 | 4.1000e-004 | 4.0000e-004 | 21.7757 |
| Total | | 2.1900e-003 | 0.0199 | 0.0167 | 1.2000e-004 | | 1.5100e-003 | 1.5100e-003 | | 1.5100e-003 | 1.5100e-003 | 0.0000 | 21.6470 | 21.6470 | 4.1000e-004 | 4.0000e-004 | 21.7757 |

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5.2 Energy by Land Use - NaturalGas

Mitigated

| | NaturalGas Use | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|------------------------|----------------|--------------------|---------------|---------------|--------------------|---------------|--------------------|--------------------|----------------|--------------------|--------------------|---------------|----------------|----------------|--------------------|--------------------|----------------|
| Land Use | kBTU/yr | tons/yr | | | | | | | | | | MT/yr | | | | | |
| General Light Industry | 405650 | 2.1900e-003 | 0.0199 | 0.0167 | 1.2000e-004 | | 1.5100e-003 | 1.5100e-003 | | 1.5100e-003 | 1.5100e-003 | 0.0000 | 21.6470 | 21.6470 | 4.1000e-004 | 4.0000e-004 | 21.7757 |
| Total | | 2.1900e-003 | 0.0199 | 0.0167 | 1.2000e-004 | | 1.5100e-003 | 1.5100e-003 | | 1.5100e-003 | 1.5100e-003 | 0.0000 | 21.6470 | 21.6470 | 4.1000e-004 | 4.0000e-004 | 21.7757 |

5.3 Energy by Land Use - Electricity

Unmitigated

| | Electricity Use | Total CO2 | CH4 | N2O | CO2e |
|------------------------|-----------------|----------------|--------------------|--------------------|----------------|
| Land Use | kWh/yr | MT/yr | | | |
| General Light Industry | 295750 | 96.6537 | 3.8900e-003 | 8.0000e-004 | 96.9908 |
| Total | | 96.6537 | 3.8900e-003 | 8.0000e-004 | 96.9908 |

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5.3 Energy by Land Use - Electricity

Mitigated

| | Electricity Use | Total CO2 | CH4 | N2O | CO2e |
|------------------------|-----------------|----------------|--------------------|--------------------|----------------|
| Land Use | kWh/yr | MT/yr | | | |
| General Light Industry | 295750 | 96.6537 | 3.8900e-003 | 8.0000e-004 | 96.9908 |
| Total | | 96.6537 | 3.8900e-003 | 8.0000e-004 | 96.9908 |

6.0 Area Detail

6.1 Mitigation Measures Area

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|-------------|---------|--------|-------------|--------|---------------|--------------|------------|----------------|---------------|-------------|----------|-------------|-------------|--------|--------|-------------|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Mitigated | 0.1773 | 0.0000 | 3.2000e-004 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 6.3000e-004 | 6.3000e-004 | 0.0000 | 0.0000 | 6.7000e-004 |
| Unmitigated | 0.1773 | 0.0000 | 3.2000e-004 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 6.3000e-004 | 6.3000e-004 | 0.0000 | 0.0000 | 6.7000e-004 |

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6.2 Area by SubCategory

Unmitigated

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|-----------------------|---------------|---------------|--------------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|---------------|--------------------|--------------------|---------------|---------------|--------------------|
| SubCategory | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Architectural Coating | 0.0406 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Consumer Products | 0.1367 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Landscaping | 3.0000e-005 | 0.0000 | 3.2000e-004 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 6.3000e-004 | 6.3000e-004 | 0.0000 | 0.0000 | 6.7000e-004 |
| Total | 0.1773 | 0.0000 | 3.2000e-004 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 6.3000e-004 | 6.3000e-004 | 0.0000 | 0.0000 | 6.7000e-004 |

Mitigated

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|-----------------------|---------------|---------------|--------------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|---------------|--------------------|--------------------|---------------|---------------|--------------------|
| SubCategory | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Architectural Coating | 0.0406 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Consumer Products | 0.1367 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Landscaping | 3.0000e-005 | 0.0000 | 3.2000e-004 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 6.3000e-004 | 6.3000e-004 | 0.0000 | 0.0000 | 6.7000e-004 |
| Total | 0.1773 | 0.0000 | 3.2000e-004 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 6.3000e-004 | 6.3000e-004 | 0.0000 | 0.0000 | 6.7000e-004 |

7.0 Water Detail

SAN Fuel Farm - San Diego County APCD Air District, Annual

7.1 Mitigation Measures Water

| | Total CO2 | CH4 | N2O | CO2e |
|-------------|-----------|--------|-------------|---------|
| Category | MT/yr | | | |
| Mitigated | 37.0097 | 0.2651 | 6.5100e-003 | 45.5790 |
| Unmitigated | 37.0097 | 0.2651 | 6.5100e-003 | 45.5790 |

7.2 Water by Land Use

Unmitigated

| | Indoor/Outdoor Use | Total CO2 | CH4 | N2O | CO2e |
|------------------------|--------------------|----------------|---------------|--------------------|----------------|
| Land Use | Mgal | MT/yr | | | |
| General Light Industry | 8.09375 / 0 | 37.0097 | 0.2651 | 6.5100e-003 | 45.5790 |
| Total | | 37.0097 | 0.2651 | 6.5100e-003 | 45.5790 |

SAN Fuel Farm - San Diego County APCD Air District, Annual

7.2 Water by Land Use

Mitigated

| | Indoor/Outdoor Use | Total CO2 | CH4 | N2O | CO2e |
|------------------------|--------------------|----------------|---------------|--------------------|----------------|
| Land Use | Mgal | MT/yr | | | |
| General Light Industry | 8.09375 / 0 | 37.0097 | 0.2651 | 6.5100e-003 | 45.5790 |
| Total | | 37.0097 | 0.2651 | 6.5100e-003 | 45.5790 |

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

| | Total CO2 | CH4 | N2O | CO2e |
|-------------|-----------|--------|--------|---------|
| | MT/yr | | | |
| Mitigated | 8.8098 | 0.5206 | 0.0000 | 21.8259 |
| Unmitigated | 8.8098 | 0.5206 | 0.0000 | 21.8259 |

SAN Fuel Farm - San Diego County APCD Air District, Annual

8.2 Waste by Land Use

Unmitigated

| | Waste Disposed | Total CO2 | CH4 | N2O | CO2e |
|------------------------|----------------|---------------|---------------|---------------|----------------|
| Land Use | tons | MT/yr | | | |
| General Light Industry | 43.4 | 8.8098 | 0.5206 | 0.0000 | 21.8259 |
| Total | | 8.8098 | 0.5206 | 0.0000 | 21.8259 |

Mitigated

| | Waste Disposed | Total CO2 | CH4 | N2O | CO2e |
|------------------------|----------------|---------------|---------------|---------------|----------------|
| Land Use | tons | MT/yr | | | |
| General Light Industry | 43.4 | 8.8098 | 0.5206 | 0.0000 | 21.8259 |
| Total | | 8.8098 | 0.5206 | 0.0000 | 21.8259 |

9.0 Operational Offroad

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

SAN Fuel Farm - San Diego County APCD Air District, Annual

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

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

User Defined Equipment

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

11.0 Vegetation
