# *1207 N. CAPITOL AVENUE AIR QUALITY ASSESSMENT*

## *San José, California*

**February 7, 2025**

**Prepared for:**

**Tyler Rogers**
**Project Manager**
**David J. Powers & Associates Inc.**
**1736 Franklin, Suite 400**
**Oakland, CA 94612**

**Prepared by:**

**Casey Divine**
**Jordyn Bauer**

ILLINGWORTH & RODKIN, INC.
Acoustics • Air Quality
**429 East Cotati Avenue**
**Cotati, CA 94931**
**(707) 794-0400**

**I&R Project#: 24-143**

## Introduction

The purpose of this report is to address the potential air quality and health risk impacts associated with the proposed residential development located at 1207 N. Capitol Ave in San José, California. Air quality impacts would be associated with demolition of the existing land uses, construction of the new building and infrastructure, and operation of the project. Air pollutant emissions were estimated using appropriate computer models. In addition, the potential health risks associated with construction and operation of the project and the impact of existing toxic air contaminant (TAC) sources affecting the nearby and proposed sensitive receptors were evaluated. The analysis was conducted following guidance provided by the Bay Area Air Quality Management District (BAAQMD).[1]

## Project Description

The approximately 1.5-acre project site is currently developed with an approximately 3,680 square foot (sf) single-family residence. The proposed project would demolish the existing use and construct a 135,639 square foot (sf) five-story affordable apartment building with 128 units. The project would include a parking lot with a total of 54 parking spaces. Construction is expected to begin in January 2026 and will be completed in December 2027.

## Setting

The project is located in Santa Clara County, which is in the San Francisco Bay Area Air Basin. Ambient air quality standards have been established at both the State and federal level. The Bay Area meets all ambient air quality standards with the exception of ground-level ozone, respirable particulate matter ($PM_{10}$), and fine particulate matter ($PM_{2.5}$).

### Air Pollutants of Concern

High ozone concentrations in the air basin are caused by the cumulative emissions of reactive organic gases (ROG) and nitrogen oxides ($NO_X$). These precursor pollutants react under certain meteorological conditions to form ozone concentrations. Controlling the emissions of these precursor pollutants is the focus of the Bay Area's attempts to reduce ambient ozone concentrations. The highest ozone concentrations in the Bay Area occur in the eastern and southern inland valleys downwind of existing air pollutant sources. High ozone concentrations aggravate respiratory and cardiovascular diseases, reduced lung function, and increase coughing and chest discomfort.

Particulate matter is another problematic air pollutant in the air basin. Particulate matter is assessed and measured in terms of respirable particulate matter or particles that have a diameter of 10 micrometers or less ($PM_{10}$) and fine particulate matter where particles have a diameter of 2.5 micrometers or less ($PM_{2.5}$). Elevated concentrations of $PM_{10}$ and $PM_{2.5}$ are the result of both region-wide (or cumulative) emissions and localized emissions. High particulate matter

[1] Bay Area Air Quality Management District, *2022 CEQA Guidelines*, April 2023.

concentrations aggravate respiratory and cardiovascular diseases, reduce lung function, increase mortality (e.g., lung cancer), and result in reduced lung function growth in children.

Toxic Air Contaminants

TACs are a broad class of compounds known to cause morbidity or mortality, often because they cause cancer. TACs are found in ambient air, especially in urban areas, and are caused by industry, agriculture, fuel combustion, and commercial operations (e.g., dry cleaners). TACs are typically found in low concentrations, even near their source (e.g., diesel particulate matter [DPM] near a freeway). Because chronic exposure of TACs can result in adverse health effects, they are regulated at the regional, State, and federal level.

Diesel exhaust is the predominant TAC in urban air and is estimated to represent about three-quarters of the cancer risk from TACs (based on the Bay Area average). According to the California Air Resources Board (CARB), diesel exhaust is a complex mixture of gases, vapors, and fine particles. This complexity makes the evaluation of health effects from diesel exhaust exposure a complex scientific issue. Some of the chemicals in diesel exhaust, such as benzene and formaldehyde, have been previously identified as TACs by the CARB, and are listed as carcinogens either under the State's Proposition 65 or under the Federal Hazardous Air Pollutants programs. Health risks from TACs are estimated using the Office of Environmental Health Hazard Assessment (OEHHA) risk assessment guidelines, which were published in February of 2015 and incorporated into BAAQMD's CEQA guidance.[2]

$PM_{2.5}$ emissions can include TACs. Due to the adverse health effects caused by $PM_{2.5}$ exposure even at low concentrations, BAAQMD developed assessing methods and health risk thresholds to address exposure to increased concentrations caused by project $PM_{2.5}$ emissions.[3]

Sensitive Receptors

There are groups of people more affected by air pollution than others. CARB has identified the following persons who are most likely to be affected by air pollution: children under 16, people over 65, athletes, and people with cardiovascular and chronic respiratory diseases. These groups are classified as sensitive receptors. Locations that may contain a high concentration of these sensitive population groups include residential areas, hospitals, daycare facilities, elder care facilities, and elementary schools. For cancer risk assessments, infants and children are the most sensitive receptors, since they are more susceptible to cancer causing TACs. Residential locations are assumed to include infants and small children. The closest sensitive receptors to the project site are the residents in the adjacent single-and multi-family homes to the north and west. There are also residents in the single-family homes to the east opposite N. Capitol Avenue. Additional sensitive receptors are located at further distances from the site. This project would introduce new sensitive receptors (i.e., residents) to the area.

[2] OEHHA, 2015. *Air Toxics Hot Spots Program Risk Assessment Guidelines, The Air Toxics Hot Spots Program Guidance Manual for Preparation of Health Risk Assessments*. Office of Environmental Health Hazard Assessment. February.
[3] BAAQMD, 2022 CEQA Air Quality Guidelines, Appendix A, p40.

**Regulatory Setting**

The Federal and California Clean Air Acts have established ambient air quality standards for different pollutants. National ambient air quality standards (NAAQS) were established by the Federal Clean Air Act of 1970 (amended in 1977 and 1990) for six "criteria" pollutants. These criteria pollutants now include carbon monoxide (CO), ozone ($O_3$), nitrogen dioxide ($NO_2$), respirable particulate matter with a diameter less than 10 microns ($PM_{10}$), fine particulate matter ($PM_{2.5}$), sulfur dioxide ($SO_2$), and lead (Pb). The air pollutants for which standards have been established are considered the most prevalent air pollutants known to be hazardous to human health. California ambient air quality standards (CAAQS) include the NAAQS pollutants and also hydrogen sulfide, sulfates, vinyl chloride, and visibility reducing particles. These additional CAAQS pollutants tend to have unique sources and are not typically included in environmental air quality assessments. In addition, Pb concentrations have decreased dramatically since it was removed from motor vehicle fuels. The Bay Area has attained the CO standard and monitoring data from the last 30 years show relatively low concentrations throughout the Bay Area. Therefore, CO is not an air quality issue for land use type projects such as this one.

Federal Regulations

The United States Environmental Protection Agency (EPA) sets nationwide ambient air quality standards (NAAQS) and emission standards for mobile sources, which include on-road (highway) motor vehicles such trucks, buses, and automobiles, and non-road (off-road) vehicles and equipment used in construction, agricultural, industrial, and mining activities (such as bulldozers and loaders). The EPA also sets nationwide fuel standards.

In the past twenty years, the EPA has established a number of emission standards for on- and non-road heavy-duty diesel engines used in trucks and other equipment. This was done in part because diesel engines are a significant source of $NO_X$ and particulate matter ($PM_{2.5}$) and because the EPA has identified DPM as a probable carcinogen. Implementation of the heavy-duty diesel on-road vehicle standards and the non-road diesel engine standards are estimated to reduce particulate matter and $NO_X$ emissions from diesel engines up to 95 percent in 2030 when the heavy-duty vehicle fleet is completely replaced with newer heavy-duty vehicles that comply with these emission standards.[4]

In concert with the diesel engine emission standards, the EPA has also substantially reduced the amount of sulfur allowed in diesel fuels. The sulfur contained in diesel fuel is a significant contributor to the formation of particulate matter in diesel-fueled engine exhaust. The current standards limit the amount of sulfur allowed in diesel fuel to 15 parts per million by weight (ppmw). Ultra-low sulfur diesel (ULSD), as it is referred to, is required for use by all vehicles in the U.S.

All of the above federal diesel engine and diesel fuel requirements have been adopted by California, in some cases with modifications making the requirements more stringent or the implementation dates sooner.

[4] USEPA, 2000. *Regulatory Announcement, Heavy-Duty Engine and Vehicle Standards and Highway Diesel Fuel Sulfur Control Requirements*. EPA420-F-00-057. December.

State Regulations

The California Air Resources Board (CARB) has set statewide ambient air quality standards (CAAQS) and emission standards for on-road and off-road mobile sources that are more stringent than those adopted by the EPA. Several of these regulatory programs affect medium and heavy-duty diesel trucks that represent the bulk of DPM emissions from California highways. These regulations include the solid waste collection vehicle (SWCV) rule, in-use public and utility fleets, and the heavy-duty diesel truck and bus regulations. In 2008, CARB approved a regulation to reduce emissions of DPM and $NO_X$ from on-road heavy-duty diesel fueled vehicles.[5] The regulation requires affected vehicles to meet specific performance requirements between 2014 and 2023, with all affected diesel vehicles required to have 2010 model-year engines or equivalent by 2023. These requirements have been phased in over the compliance period and depend on the model year of the vehicle.

CARB has also adopted and implemented regulations to reduce DPM and $NO_X$ emissions from in-use (existing) and new off-road heavy-duty diesel vehicles (e.g., loaders, tractors, bulldozers, backhoes, off-highway trucks, etc.). The regulations apply to diesel-powered off-road vehicles with engines 25 horsepower (hp) or greater. The regulations are intended to reduce DPM and $NO_X$ exhaust emissions by requiring owners to turn over their fleet (replace older equipment with newer equipment) or retrofit existing equipment in order to achieve specified fleet-averaged emission rates. Implementation of this regulation, in conjunction with the Federal off-road equipment engine emission limits for new vehicles, has significantly reduce emissions of DPM and $NO_X$.

To address the issue of diesel emissions in the state, CARB developed the *Risk Reduction Plan to Reduce Particulate Matter Emissions from Diesel-Fueled Engines and Vehicles*[6]. In addition to requiring more stringent emission standards for new on-road and off-road mobile sources and stationary diesel-fueled engines to reduce particulate matter emissions by 90 percent, a significant component of the plan involves application of emission control strategies to existing diesel vehicles and equipment. Many of the measures of the Diesel Risk Reduction Plan have been approved and adopted, including the Federal on-road and non-road emission standards for new diesel engines, as well as adoption of regulations for ULSD fuel in California.

Bay Area Air Quality Management District (BAAQMD)

BAAQMD has jurisdiction over an approximately 5,600-square mile area, commonly referred to as the San Francisco Bay Area (Bay Area). The District's boundary encompasses the nine San Francisco Bay Area counties, including Alameda County, Contra Costa County, Marin County, San Francisco County, San Mateo County, Santa Clara County, Napa County, southwestern Solano County, and southern Sonoma County.

BAAQMD is the lead agency in developing plans to address attainment and maintenance of the NAAQS and CAAQS. The District also has permit authority over most types of stationary

[5] Available online: http://www.arb.ca.gov/msprog/onrdiesel/onrdiesel.htm. Accessed: November 21, 2014.
[6] California Air Resources Board, 2000. *Risk Reduction Plan to Reduce Particulate Matter Emissions from Diesel-Fueled Engines and Vehicles*. October.

equipment utilized for the proposed project. The BAAQMD is responsible for permitting and inspection of stationary sources; enforcement of regulations, including setting fees, levying fines, and enforcement actions; and ensuring that public nuisances are minimized.

BAAQMD's Community Air Risk Evaluation (CARE) program was initiated in 2004 to evaluate and reduce health risks associated with exposures to outdoor TACs in the Bay Area.[7] The program examines TAC emissions from point sources, area sources, and on-road and off-road mobile sources with an emphasis on diesel exhaust, which is a major contributor to airborne health risk in California. The CARE program is an on-going program that encourages community involvement and input. The technical analysis portion of the CARE program has been implemented in three phases that includes an assessment of the sources of TAC emissions, modeling and measurement programs to estimate concentrations of TAC, and an assessment of exposures and health risks. Throughout the program, information derived from the technical analyses has been used to develop emission reduction activities in areas with high TAC exposures and high density of sensitive populations. Risk reduction activities associated with the CARE program are focused on the most at-risk communities in the Bay Area. Seven areas have been identified by BAAQMD as impacted communities. They include Eastern San Francisco, Richmond/San Pablo, Western Alameda, San José, Vallejo, Concord, and Pittsburgh/Antioch. The project site is within the San José CARE area.

Overburdened communities are areas located (i) within a census tract identified by the California Communities Environmental Health Screening Tool (CalEnviroScreen), Version 4.0 implemented by OEHHA, as having an overall score at or above the 70th percentile, or (ii) within 1,000 feet of any such census tract.[8] The BAAQMD has identified several overburdened areas within its boundaries. However, the project site is not within an overburdened area as the Project site is scored at the 32$^{nd}$ percentile on CalEnviroScreen.[9]

*Clean Air Plan*

The BAAQMD is responsible for developing a Clean Air Plan which guides the region's air quality planning efforts to attain both the National Ambient Air Quality Standards (NAAQS) and California Ambient Air Quality Standards (CAAQS). The BAAQMD's *2017 Clean Air Plan* is the current Clean Air Plan which contains district-wide control measures to reduce ozone precursor emissions (i.e., ROG and $NO_X$), particulate matter ($PM_{10}$ and $PM_{2.5}$) and greenhouse gas (GHG) emissions.

*Furnaces and Boilers and Water Heaters*

In 2023, BAAQMD adopted the proposed amendments to Rules 9-4 and 9-6 that are intended to reduce emissions of NOx from residential and commercial water heaters. These amended rules will affect Bay Area households that use natural gas appliances by, essentially, prohibiting the installation of new natural gas-fired furnaces and water heaters. The rules require appliances that

[7] See BAAQMD: https://www.baaqmd.gov/community-health/community-health-protection-program/community-air-risk-evaluation-care-program.
[8] See BAAQMD: https://www.baaqmd.gov/~/media/dotgov/files/rules/reg-2-permits/2021-amendments/documents/20210722_01_appendixd_mapsofoverburdenedcommunities-pdf.pdf?la=en.
[9] OEHAA, CalEnviroScreen 4.0 Maps https://oehha.ca.gov/calenviroscreen/report/calenviroscreen-40

do not emit NOx. Currently, the only zero-NOx appliances available are electric appliances. Implementation begins in 2027, where only zero-NOx water heaters can be sold or installed, in 2029 where only zero-NOx furnaces can be sold or installed, and 2031 where only zero-NOx large commercial heaters can be sold or installed. Note that electric appliances would have zero emission of other criteria pollutants and zero emissions of direct GHG.

*BAAQMD CEQA Air Quality Guidelines*

In June 2010, BAAQMD adopted thresholds of significance to assist in the review of projects under CEQA. In 2023, the BAAQMD revised the *California Environmental Quality Act* (*CEQA) Air Quality Guidelines* that include significance thresholds to assist in the evaluation of air quality impacts of projects and plans proposed within the Bay Area. The current BAAQMD guidelines provide recommended procedures for evaluating potential air impacts during the environmental review process consistent with CEQA requirements including thresholds of significance, mitigation measures, and background air quality information. They include assessment methodologies for criteria air pollutants, air toxics, odors, and GHG emissions, as shown in Table 1.[10] Air quality impacts and health risks are considered potentially significant if they exceed these thresholds.

The BAAQMD recommends all projects include a "basic" set of best management practices (BMPs) to manage fugitive dust and consider impacts from dust (i.e., fugitive $PM_{10}$ and $PM_{2.5}$) to be less than significant if BMPs are implemented (listed below). BAAQMD strongly encourages enhanced BMPs for construction sites near schools, residential areas, other sensitive land uses, or if air quality impacts were found to be significant.

[10] Bay Area Air Quality Management District, 2023. *2022 CEQA Guidelines*. April.

**Table 1. BAAQMD CEQA Significance Thresholds**

| Criteria Air Pollutant | Construction Thresholds | | Operational Thresholds | |
|---|---|---|---|---|
| | Average Daily Emissions (lbs./day) | | Average Daily Emissions (lbs./day) | Annual Average Emissions (tons/year) |
| ROG | 54 | | 54 | 10 |
| $NO_X$ | 54 | | 54 | 10 |
| $PM_{10}$ | 82 (Exhaust) | | 82 | 15 |
| $PM_{2.5}$ | 54 (Exhaust) | | 54 | 10 |
| CO | Not Applicable | | 9.0 ppm (8-hour average) or 20.0 ppm (1-hour average) | |
| Fugitive Dust | Construction Dust Ordinance or other Best Management Practices (BMPs)* | | Not Applicable | |
| **Health Risks and Hazards** | **Single Sources/ Individual Project** | | **Combined Sources (Cumulative from all sources within 1000-foot zone of influence)** | |
| Excess Cancer Risk | >10.0 in a million | OR Compliance with Qualified Community Risk Reduction Plan | >100 in a million | OR Compliance with Qualified Community Risk Reduction Plan |
| Hazard Index | >1.0 | | >10.0 | |
| Incremental annual $PM_{2.5}$ | >0.3 µg/$m^3$ | | >0.8 µg/$m^3$ | |

Note: ROG = reactive organic gases, $NO_X$ = nitrogen oxides, $PM_{10}$ = course particulate matter or particulates with an aerodynamic diameter of 10 micrometers (µm) or less, $PM_{2.5}$ = fine particulate matter or particulates with an aerodynamic diameter of 2.5µm or less.

* BAAQMD strongly recommends implementing all feasible fugitive dust management practices especially when construction projects are located near sensitive communities, including schools, residential areas, or other sensitive land uses.

Source: Bay Area Air Quality Management District, 2022

San José Envision 2040 General Plan

The San José Envision 2040 General Plan includes goals, policies, and actions to reduce exposure of the City's sensitive population to exposure of air pollution and toxic air contaminants or TACs. The following goals, policies, and actions are applicable to the proposed project and this assessment:

*Applicable Goals – Air Pollutant Emission Reduction*

Goal MS-10 Minimize emissions from new development.

*Applicable Policies – Air Pollutant Emission Reduction*

MS-10.1 Assess projected air emissions from new development in conformance with the BAAQMD CEQA Guidelines and relative to state and federal standards. Identify and implement feasible air emission reduction measures.

MS-10.2 Consider the cumulative air quality impacts from proposed developments for proposed land use designation changes and new development, consistent with the region's Clean Air Plan and State law.

MS-10.3 Promote the expansion and improvement of public transportation services and facilities, where appropriate, to both encourage energy conservation and reduce air pollution.

MS-10.5 In order to reduce vehicle miles traveled and traffic congestion, require new development within 2,000 feet of an existing or planned transit station to encourage the use of public transit and minimize the dependence on the automobile through the application of site design guidelines and transit incentives.

MS-10.7 Encourage regional and statewide air pollutant emission reduction through energy conservation to improve air quality.

MS-10.11 Enforce the City's wood-burning appliance ordinance to limit air pollutant emissions from residential and commercial buildings.

MS-10.13 As a part of City of San José Sustainable City efforts, educate the public about air polluting household consumer products and activities that generate air pollution. Increase public awareness about the alternative products and activities that reduce air pollutant emissions.

*Applicable Goals – Toxic Air Contaminants*

Goal MS-11 Minimize exposure of people to air pollution and toxic air contaminants such as ozone, carbon monoxide, lead, and particulate matter.

*Applicable Policies – Toxic Air Contaminants*

MS-11.1 Require completion of air quality modeling for sensitive land uses such as new residential developments that are located near sources of pollution such as freeways and industrial uses. Require new residential development projects and projects categorized as sensitive receptors to incorporate effective mitigation into project designs or be located an adequate distance from sources of toxic air contaminants (TACs) to avoid significant risks to health and safety.

MS-11.2 For projects that emit toxic air contaminants, require project proponents to prepare health risk assessments in accordance with BAAQMD-recommended procedures as part of environmental review and employ effective mitigation to reduce possible health risks to a less than significant level. Alternatively, require new projects (such as, but not limited to, industrial, manufacturing, and processing facilities) that are sources of TACs to be located an adequate distance from residential areas and other sensitive receptors.

MS-11.4 Encourage the installation of appropriate air filtration at existing schools, residences, and other sensitive receptor uses adversely affected by pollution sources.

MS-11.5 Encourage the use of pollution absorbing trees and vegetation in buffer areas between substantial sources of TACs and sensitive land uses.

*Actions – Toxic Air Contaminants*

MS-11.6 Develop and adopt a comprehensive Community Risk Reduction Plan that includes: baseline inventory of TACs and $PM_{2.5}$, emissions from all sources, emissions reduction targets, and enforceable emission reduction strategies and performance measures. The Community Risk Reduction Plan will include enforcement and monitoring tools to ensure regular review of progress toward the emission reduction targets, progress reporting to the public and responsible agencies, and periodic updates of the plan, as appropriate.

MS-11.7 Consult with BAAQMD to identify stationary and mobile TAC sources and determine the need for and requirements of a health risk assessment for proposed developments.

MS-11.8 For new projects that generate truck traffic, require signage which reminds drivers that the State truck idling law limits truck idling to five minutes.

*Applicable Goals – Construction Air Emissions*

Goal MS-13 Minimize air pollutant emissions during demolition and construction activities.

*Applicable Policies – Construction Air Emissions*

MS-13.1 Include dust, particulate matter, and construction equipment exhaust control measures as conditions of approval for subdivision maps, site development and planned development permits, grading permits, and demolition permits. At minimum, conditions shall conform to construction mitigation measures recommended in the current BAAQMD CEQA Guidelines for the relevant project size and type.

*Applicable Actions – Construction Air Emissions*

MS-13.4 Adopt and periodically update dust, particulate, and exhaust control standard measures for demolition and grading activities to include on project plans as conditions of approval based upon construction mitigation measures in the BAAQMD CEQA Guidelines.

MS-13.5 Prevent silt loading on roadways that generates particulate matter air pollution by prohibiting unpaved or unprotected access to public roadways from construction sites.

MS-13.6 Revise the grading ordinance and condition grading permits to require that graded areas be stabilized from the completion of grading to commencement of construction.

# AIR QUALITY IMPACTS AND MITIGATION MEASURES

**Impact AIR-1: Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?**

The Bay Area is considered a non-attainment area for ground-level $O_3$ and $PM_{2.5}$ under both the NAAQS and the CAAQS. The area is also considered non-attainment for $PM_{10}$ under the CAAQS, but not the NAAQS. The area has attained both State and Federal ambient air quality standards for CO. As part of an effort to attain and maintain ambient air quality standards for $O_3$, $PM_{2.5}$ and $PM_{10}$, the BAAQMD has established thresholds of significance for these air pollutants and their precursors. The $O_3$ precursor pollutant thresholds are for ROG and NOx, while $PM_{10}$, and $PM_{2.5}$ have specific thresholds. The thresholds apply to both construction period emissions and operational period emissions. The California Emissions Estimator Model (CalEEMod) Version 2022 was used to estimate emissions from construction activities and project operation.

**Construction Period Emissions**

CalEEMod predicted emissions from on-site construction activity, construction vehicle trips, and evaporative emissions. The project land use types and size, and anticipated construction schedule were input to CalEEMod. The CalEEMod model output along with construction inputs are included in *Attachment 1*.

CalEEMod Inputs

*Land Use Inputs*

The proposed project land uses were entered into CalEEMod as described in Table 2.

**Table 2. Summary of Project Land Use Inputs**

| Project Land Uses | Size | Units | Square Feet (sf) | Acreage |
|---|---|---|---|---|
| Apartments Mid Rise | 128 | Dwelling Unit | 135,639 | 1.50 |
| Parking Lot | 54 | Parking Spaces | - | |

*Construction Inputs*

CalEEMod computes annual emissions for construction that are based on the project type, size, and acreage. The model provides emission estimates for both on-site and off-site construction activities. On-site activities are primarily made up of construction equipment emissions, while off-site activity includes worker, hauling, and vendor traffic. The construction build-out scenario, including equipment quantities, average hours per day, total number of workdays, and schedule, were based on provided information. The construction schedule assumed that the earliest start date would be January 2026 and would be built out over a period of approximately 24 months or 510 construction workdays. The earliest year of operation was assumed to be 2028.

*Construction Truck Traffic Emissions*

Construction would produce traffic in the form of worker trips and truck traffic. The traffic-related emissions are based on worker and vendor trip estimates produced by CalEEMod and haul trips that were computed based on the estimate of demolition material to be exported, provided soil imported and/or exported to the site, and the provided amount of cement and asphalt truck trips to and from the site. CalEEMod provides daily estimates of worker and vendor trips for each applicable phase. Daily haul trips for demolition were estimated by CalEEMod using the estimated demolition and provided soil import/export values volumes. The number of total concrete/asphalt round haul trips were provided for the project and converted to daily one-way trips, assuming two trips per delivery. These values are shown in the project construction equipment worksheet included in *Attachment 1*.

Summary of Computed Construction Emissions

Average daily emissions were annualized for each year of construction by dividing the annual construction emissions by the number of active workdays during that year. Table 3 shows the unmitigated annualized average daily construction emissions of ROG, $NO_X$, $PM_{10}$ exhaust, and $PM_{2.5}$ exhaust during construction of the project. As indicated in Table 3, predicted unmitigated annualized average project construction emissions would not exceed the BAAQMD significance thresholds during any year of construction.

**Table 3. Construction Period Emissions - Unmitigated**

| Year | ROG | NOx | $PM_{10}$ Exhaust | $PM_{2.5}$ Exhaust |
|---|---|---|---|---|
| *Construction Emissions Per Year (Tons)* | | | | |
| 2026 | 0.13 | 1.01 | 0.03 | 0.03 |
| 2027 | 1.10 | 1.04 | 0.03 | 0.03 |
| *Average Daily Construction Emissions Per Year (pounds/day)* | | | | |
| 2026 (261 construction workdays) | 0.99 | 7.75 | 0.26 | 0.24 |
| 2027 (249 construction workdays) | 8.80 | 8.37 | 0.24 | 0.23 |
| *BAAQMD Thresholds (pounds per day)* | *54* lbs./day | *54* lbs./day | *82* lbs./day | *54* lbs./day |
| **Exceed Threshold?** | No | No | No | No |

Construction activities, particularly during site preparation and grading, would temporarily generate fugitive dust in the form of $PM_{10}$ and $PM_{2.5}$. Sources of fugitive dust would include disturbed soils at the construction site and trucks carrying uncovered loads of soils. Unless properly controlled, vehicles leaving the site would deposit mud on local streets, which could be an additional source of airborne dust after it dries. The BAAQMD recommends all projects include a "basic" set of best management practices (BMPs) to manage fugitive dust and considers impacts from dust (i.e., fugitive $PM_{10}$ and $PM_{2.5}$) to be less-than-significant if BMPs are implemented to reduce these emissions. San Jose General Policy MS-10.1 specifies that projects should assess projected air emissions from new developments in conformance with the BAAQMD CEQA Guidelines and relative to state and federal standards and identify and implement feasible air emission reduction measures requires construction projects to implement these measures. The project would be required to implement the BMPs recommended by BAAQMD, which are consistent with and have been adopted by the City as Standard Permit Conditions (per General

Plan policies MS 10.1, MS 13.1, and MS 13.4) during all phases of construction to reduce dust and other particulate matter emissions.

***Standard Permit Conditions:*** **Include measures to control dust and exhaust during construction.**

The following measures shall be implemented during all phases of construction to control dust and exhaust at the project site:

1. Water all exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) two times per day.

2. Cover all haul trucks transporting soil, sand, or other loose material off-site.

3. Remove all visible mud or dirt track out onto adjacent public roads at least once per day using wet power vacuum street sweepers. The use of dry power sweeping is prohibited.

4. Limit all vehicle speeds on unpaved roads to 15 mph.

5. Pave all new roadways, driveways, and sidewalks as soon as possible.

6. Lay building pads as soon as possible after grading unless seeding or soil binders are used.

7. Suspend all excavation, grading, and/or demolition activities when average wind speeds exceed 20 mph.

8. Wash off all trucks and equipment, including their tires, prior to leaving the site.

9. Treat unpaved roads providing access to sites located 100 feet or further from a paved road with a 6- to 12-inch layer of compacted layer of wood chips, mulch, or gravel.

10. Minimize idling time either by shutting equipment off when not in use or reducing the time of idling to no more than 2 minutes (A 5-minute limit is required by the state airborne toxics control measure [Title 13, Sections 2449(d)(3) and 2485 of the California Code of Regulations]). Provide clear signage that posts this requirement for workers at all access points to the site.

11. Maintain and properly tune all construction equipment in accordance with the manufacturer's specifications. Check all equipment by a certified mechanic and record a determination of running in proper condition prior to operation.

12. Post a publicly visible sign with the name and phone number of an on-site construction coordinator to contact regarding dust complaints. The on-site construction coordinator shall respond and take corrective action within 48 hours. The sign shall also provide the City's Code Enforcement Complaints email and number and the Air District's General Air Pollution Complaints number to ensure compliance with applicable regulations.

The City's required Standard Permit Conditions are consistent with BAAQMD-recommended basic BMPs for reducing fugitive dust contained in the BAAQMD CEQA Air Quality Guidelines. For this analysis, only the basic set of BMPs are required as the Project emissions and $PM_{2.5}$ impacts were below the BAAQMD thresholds. Enhanced BMPs would be required as mitigation if air quality impacts are found to be significant.

**Operational Period Emissions**

ROG, PM, and $NO_X$ emissions from the project would be generated primarily from autos driven by future residents. Evaporative emissions from architectural coatings and maintenance products (classified as consumer products) are also typical ROG emission sources from these types of land uses. CalEEMod was used to estimate emissions from operation of the proposed project assuming full build-out.

CalEEMod Inputs

*Land Uses*

The project land uses were input to CalEEMod as described above for the construction period modeling.

*Model Year*

Emissions associated with vehicle travel depend on the year of analysis because emission control technology requirements are phased-in over time. Therefore, the earlier the year analyzed in the model, the higher the emission rates utilized by CalEEMod. The earliest year of full operation would be 2028 if construction begins in 2026. Emissions associated with build-out later than 2028 would be lower.

*Traffic Information*

CalEEMod allows the user to enter specific vehicle trip generation rates. Therefore, the project-specific daily trip generation rate provided by the traffic consultant was entered into the model.[11] The project would produce approximately 616 daily trips. When accounting for the *Location-Based Vehicle Mode Share and Project-Specific Trip Reduction*, project would then produce 473 new daily trips. The daily trip generation was calculated by the Traffic Consultant using ITE trip generation rates, the size of the project land uses, and the adjusted total automobile trips after reductions. The Saturday and Sunday trip rates were derived by multiplying the ratio of the CalEEMod default rates for Saturday and Sunday trips to the default weekday rate with the project-specific daily weekday trip rate. The default trip lengths and trip types specified by CalEEMod were used.

[11] Email correspondence from Tyler Rogers, Project Manager, David J. Powers & Associates, Inc., January 28, 2025, *1207NCapitolAv_TripGen*.

*Energy*

CalEEMod defaults for energy use were used, which include the 2019 Title 24 Building Standards. GHG emissions modeling includes those indirect emissions from electricity consumption. The electricity produced emission rate was modified in CalEEMod. An emission factor of 162 pounds of $CO_2$ per megawatt of electricity produced was entered into CalEEMod, which is based on San José Clean Energy's (SJCE) 2021 emissions rate.[12] It should be noted that per Climate Smart San José and San José's Greenhouse Gas Reduction Strategy, SJCE's goal is to provide 100-percent carbon-free electricity prior to 2030.[13]

*Wood-Burning Devices*

CalEEMod default inputs assume new residential construction would include wood-burning fireplaces and stoves. The project would not include wood-burning devices, as these devices are prohibited by BAAQMD Regulation 6, Rule 3.[14] Therefore, the number of woodstoves and fireplaces in CalEEMod were set to zero.

*Other Inputs*

Default model assumptions for emissions associated with solid waste generation and water use were applied to the project. Wastewater treatment was estimated to be 100 percent aerobic conditions to represent City wastewater treatment plant conditions. The project site would not send wastewater to on-site septic tanks or facultative lagoons.

Summary of Computed Operational Emissions

Annual emissions were predicted using CalEEMod and daily emissions were estimated assuming 365 days of operation. Table 4 shows unmitigated net average daily operational emissions of ROG, NOX, total $PM_{10}$, and total $PM_{2.5}$ during operation of the project. Operational period emissions would not exceed the BAAQMD significance thresholds.

**Table 4. Operational Period Emissions**

| Scenario | ROG | NOx | $PM_{10}$ | $PM_{2.5}$ |
|---|---|---|---|---|
| 2028 Annual Project Operational Emissions (*tons/year*) | 0.91 | 0.23 | 0.43 | 0.11 |
| *BAAQMD Thresholds (tons /year)* | *10 tons* | *10 tons* | *15 tons* | *10 tons* |
| ***Exceed Thresholds?*** | *No* | *No* | *No* | *No* |
| 2028 Daily Project Operational Emissions (*pounds/day*)[1] | 4.97 | 1.24 | 2.37 | 0.63 |
| *BAAQMD Thresholds (pounds/day)* | *54* lbs. | *54* lbs. | *82* lbs. | *54* lbs. |
| ***Exceed Threshold?*** | *No* | *No* | *No* | *No* |
| Notes: [1]Assumes 365-day operation. | | | | |

[12] San José Clean Energy Website, Standard GreenSource service. Web: https://sanjosecleanenergy.org/commercial-rates/

[13] City of San José, 2020. "2030 Greenhouse Gas Reduction Strategy", August. Web: https://www.sanjoseca.gov/home/showpublisheddocument/63667/637347412207870000

[14] Bay Area Air Quality Management District, https://www.baaqmd.gov/~/media/dotgov/files/rules/regulation-6-rule-3/documents/20191120_r0603_final-pdf.pdf?la=en

**Impact AIR-2: Expose sensitive receptors to substantial pollutant concentrations?**

Project impacts related to increased health risk can occur by generating emissions of TACs and air pollutants. This project would introduce new sources of TACs during construction (e.g., on-site construction and truck hauling emissions) and operation (e.g., mobile sources). Project construction activity would generate dust and equipment exhaust that would affect nearby sensitive receptors. The project would not include stationary sources but would generate some traffic consisting of mostly light-duty gasoline-powered vehicles, which would produce TAC and air pollutant emissions.

Project impacts to existing sensitive receptors were addressed for temporary construction activities and long-term operational conditions. There are also several sources of existing TACs and localized air pollutants in the vicinity of the project. The impact of existing sources of TACs was assessed in terms of the cumulative risk which includes the project contribution, as well as the risk on the new sensitive receptors introduced by the project.

**Health Risk Methodology**

Health risk impacts were addressed by predicting increased cancer risk, the increase in annual $PM_{2.5}$ concentrations, and by computing the Hazard Index (HI) for non-cancer health risks. The risk impacts from the project are the combination of risks from construction and operation sources. These sources include on-site construction activity, construction truck hauling, and increased traffic from the project. To evaluate the increased cancer risks from the project, a 30-year exposure period was used, per BAAQMD guidance,[15] with the sensitive receptors being exposed to both project construction and operation emissions during this timeframe.

The project increased cancer risk is computed by summing the project construction cancer risk and operation cancer risk contributions. Unlike the increased maximum cancer risk, the annual $PM_{2.5}$ concentration and HI values are not additive but based on the annual maximum values for the entirety of the project. The project maximally exposed individual (MEI) is identified as the sensitive receptor(s) that is most impacted by the project's construction and operation.

The methodology for computing health risks impacts is contained in Appendix E of the BAAQMD CEQA Guidelines. TAC and $PM_{2.5}$ emissions are calculated, a dispersion model used to estimate ambient pollutant concentrations, and cancer risks and HI calculated using DPM concentrations.

**Modeled Sensitive Receptors**

Receptors for this assessment included locations where sensitive populations closest to the project would be present for extended periods of time (i.e., chronic exposures). This includes the nearby residences, as shown in Figure 1. Residential receptors were assumed to include all receptor groups (i.e., third trimester, infants, children, and adults) with almost continuous exposure to project emissions. While there are additional sensitive receptors within 1,000 feet of the project site, the receptors chosen are adequate to identify maximum impacts from the project.

[15] BAAQMD, Appendix E of the 2022 *BAAQMD CEQA Guidelines*, April 2023

**Health Risk from Project Construction**

The primary health risk impact issues associated with construction projects are cancer risks associated with diesel exhaust (i.e., DPM), which is a known TAC, and exposure to high ambient concentrations of dust (i.e., $PM_{2.5}$) DPM poses both a potential health and nuisance impact to nearby receptors. A health risk assessment of the project construction activities was conducted that evaluated potential health effects to nearby sensitive receptors from construction emissions of DPM and $PM_{2.5}$.[16] This assessment included dispersion modeling to predict the offsite concentrations resulting from project construction, so that lifetime cancer risks and non-cancer health effects could be estimated.

Construction Emissions

The CalEEMod model provided total uncontrolled annual $PM_{10}$ exhaust emissions (assumed to be DPM) for the off-road construction equipment and for exhaust emissions from on-road vehicles. Total DPM emissions were estimated to be 0.06 tons (126 pounds) and controlled fugitive dust emissions ($PM_{2.5}$) to be 0.03 tons (59 pounds) from all construction stages. The on-road emissions are a result of haul truck travel during grading activities, worker travel, and vendor deliveries during construction. A trip length of half-a-mile was used to represent vehicle travel while at or near the construction site. It was assumed that the emissions from on-road vehicles traveling at or near the site would occur at the construction site.

Dispersion Modeling

The U.S. EPA AERMOD dispersion model was used to predict DPM and $PM_{2.5}$ concentrations at sensitive receptors (i.e., residences) in the vicinity of the project construction area. The AERMOD dispersion model is a BAAQMD-recommended model for use in modeling analysis of these types of emission activities for CEQA projects.[17] Emission sources for the construction site were grouped into two categories: exhaust emissions of DPM and fugitive $PM_{2.5}$ dust emissions.

*Construction Sources*

To represent the construction equipment exhaust emissions, an area source was used with an emission release height of 20 feet (6 meters).[18] The release height incorporates both the physical release height from the construction equipment (i.e., the height of the exhaust pipe) and plume rise after it leaves the exhaust pipe. Plume rise is due to both the high temperature of the exhaust and the high velocity of the exhaust gas. It should be noted that when modeling an area source, plume rise is not calculated by the AERMOD dispersion model as it would do for a point source (exhaust stack). Therefore, the release height from an area source used to represent emissions from sources with plume rise, such as construction equipment, was based on the height the exhaust plume is expected to achieve, not just the height of the top of the exhaust pipe.

[16] DPM is identified by California as a toxic air contaminant due to the potential to cause cancer.
[17] BAAQMD, Appendix E of the 2022 *BAAQMD CEQA Guidelines*, April 2023
[18] California Air Resource Board, 2007. *Proposed Regulation for In-Use Off-Road Diesel Vehicles, Appendix D: Health Risk Methodology*. April. Web: https://ww3.arb.ca.gov/regact/2007/ordiesl07/ordiesl07.htm

For modeling fugitive $PM_{2.5}$ emissions, a near-ground level release height of 7 feet (2 meters) was used for the area source. Fugitive dust emissions at construction sites come from a variety of sources, including truck and equipment travel, grading activities, truck loading (with loaders) and unloading (rear or bottom dumping), loaders and excavators moving and transferring soil and other materials, etc. All of these activities result in fugitive dust emissions at various heights at the point(s) of generation. Once generated, the dust plume will tend to rise as it moves downwind across the site and exit the site at a higher elevation than when it was generated. For all these reasons, a 7-foot release height was used as the average release height across the construction site. Emissions from the construction equipment and on-road vehicle travel were distributed throughout the modeled area sources. Figure 1 shows the project construction site and receptors.

*AERMOD Inputs and Meteorological Data*

The modeling used a five-year meteorological data set (2013-2017) from the San José Airport prepared for use with the AERMOD model by the BAAQMD. Construction emissions were modeled as occurring Monday through Friday between 7:00 a.m. to 5:00 p.m., according to the construction schedule provided by the project applicant. Annual DPM and $PM_{2.5}$ concentrations from construction activities during the 2026-2027 period were calculated at nearby sensitive receptors using the model. Receptor heights of 5 feet (1.5 meters) and 15 feet (4.5 meters) were used to represent the breathing height on the first and second floors of nearby single- and multi-family residences.[19]

**Health Risks from Project Operation**

Diesel stationary equipment that could emit substantial TACs (e.g., emergency generators) are not planned for this project. Diesel powered vehicles are the primary concern with local traffic-generated TAC impacts. This project would generate 616 daily trips or 473 net daily trips[20] with a majority of the trips being from light-duty gasoline-powered vehicles (i.e., passenger cars). The project is not anticipated to generate large amounts of truck trips that would involve diesel vehicles. In addition, projects with the potential to cause or contribute to increased cancer risk from traffic include those that have high numbers of diesel-powered on road trucks or use off-road diesel equipment on site, such as a distribution center, a quarry, or a manufacturing facility, may potentially expose existing or future planned receptors to substantial cancer risk levels and/or health hazards. This is not a project of concern for mobile sources. Emissions from project traffic are considered negligible and not included within this analysis.

**Summary of Project-Related Health Risks at the Off-Site MEIs**

The maximum increased cancer risks were calculated using the modeled TAC concentrations combined with BAAQMD CEQA guidance for age sensitivity factors and exposure parameters. Age-sensitivity factors reflect the greater sensitivity of infants and small children to cancer causing

[19] Bay Area Air Quality Management District, 2012, Recommended Methods for Screening and Modeling Local Risks and Hazards, Version 3.0. May. Web: https://www.baaqmd.gov/~/media/files/planning-and-research/ceqa/risk-modeling-approach-may-2012.pdf?la=en

[20] Email correspondence from Tyler Rogers, Project Manager, David J. Powers & Associates, Inc., January 28, 2025, *1207NCapitolAv_TripGen*.

TACs. Third trimester, infant, child, and adult exposures were assumed to occur at all residences during the entire construction period.

Non-cancer health hazards and maximum $PM_{2.5}$ concentrations were also calculated. The maximum modeled annual $PM_{2.5}$ concentration was calculated based on combined exhaust and fugitive concentrations. The maximum computed HI value was based on the ratio of the maximum DPM concentration modeled and the chronic inhalation DPM reference exposure level of 5 $\mu g/m^3$. The annual $PM_{2.5}$ concentration and HI values are based on an annual maximum risk for the entirety of the project.

The modeled maximum annual DPM and $PM_{2.5}$ concentrations were identified at nearby sensitive receptors to find the MEI. Results of this assessment indicated that the construction MEIs were located at the same location on two different levels. The MEIs were located at receptors in an adjacent building along the northwest site boundary, with the cancer risk MEI located on the second floor (15 feet above ground) and the $PM_{2.5}$ concentration MEI located on the first floor (5 feet above ground). The location of the MEIs and nearby sensitive receptors are shown in Figure 1. Table 5 summarizes the maximum cancer risks, $PM_{2.5}$ concentrations, and health hazard indexes for project related construction activities. *Attachment 2* to this report includes the emission calculations used for the construction modeling and the cancer risk calculations.

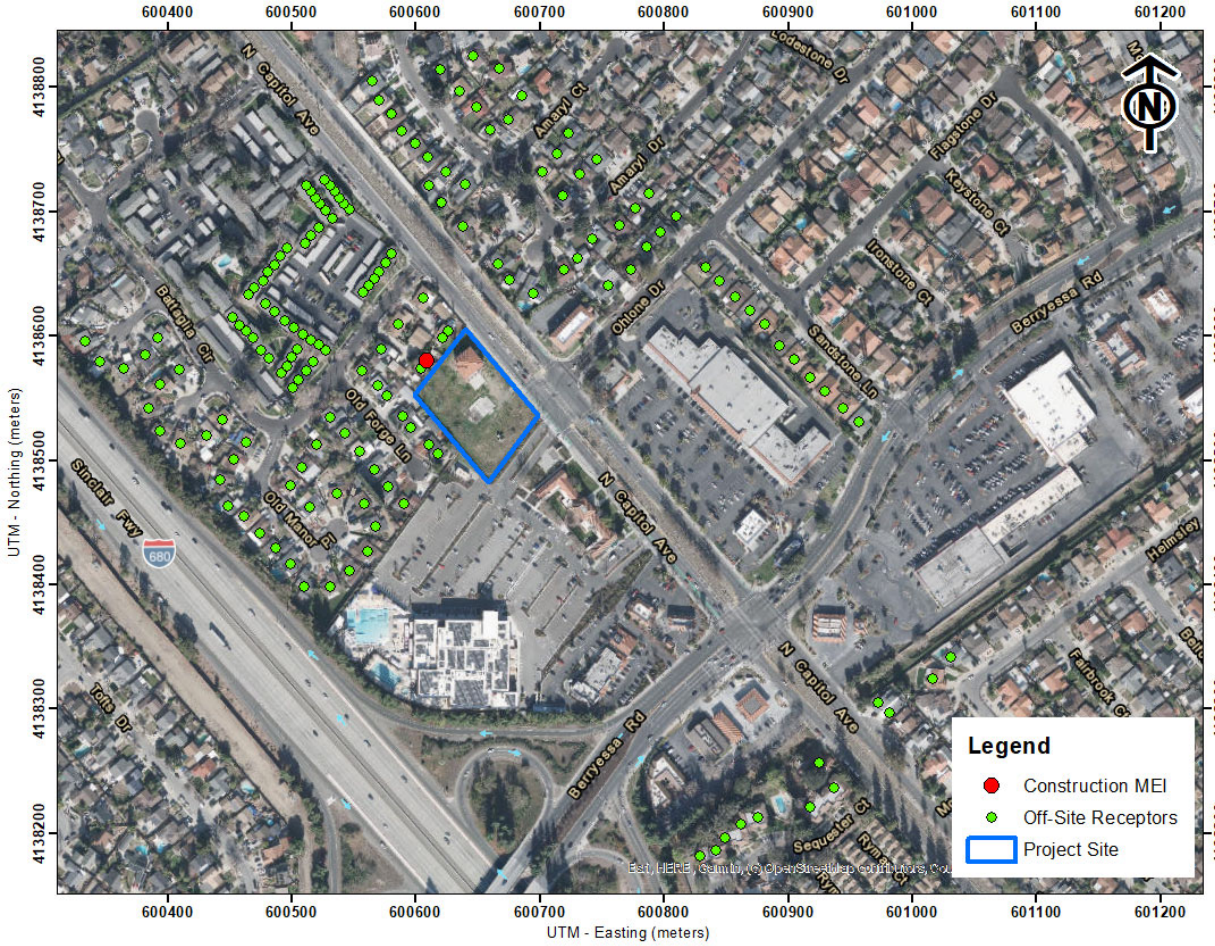
As shown in Table 5, the cancer risk from construction activities would exceed the BAAQMD single-source significance threshold. However, with the incorporation of the *Mitigation Measure AQ-1* and the City's Standard Permit Conditions for dust control, the cancer risk caused by construction would no longer exceed the BAAQMD single-source significance threshold. The unmitigated annual $PM_{2.5}$ concentration and HI at the MEIs do not exceed their respective BAAQMD single-source significance thresholds.

**Table 5. Construction Risk Impacts at the Off-Site MEIs**

| Source | | Cancer Risk[1] (per million) | Annual $PM_{2.5}$[1] ($\mu g/m^3$) | Hazard Index |
|---|---|---|---|---|
| Project Construction | Unmitigated | **34.77 (infant)** | 0.24 | 0.02 |
| | Mitigated[2] | 4.39 (infant) | 0.16 | <0.01 |
| ***BAAQMD Single-Source Threshold*** | | ***>10.0*** | ***>0.3*** | ***>1.0*** |
| *Exceed Threshold?* | Unmitigated | ***Yes*** | *No* | *No* |
| | Mitigated[2] | *No* | *No* | *No* |

Notes: [1] The maximum cancer risk and $PM_{2.5}$ concentration occur at the same receptor location on different levels.
[2] Construction equipment with Tier 4 Final engines and BMPs as Mitigation.

**Figure 1. Locations of Project Construction Site, Off-Site Sensitive Receptors, and Maximum TAC Impact Locations (MEI)**

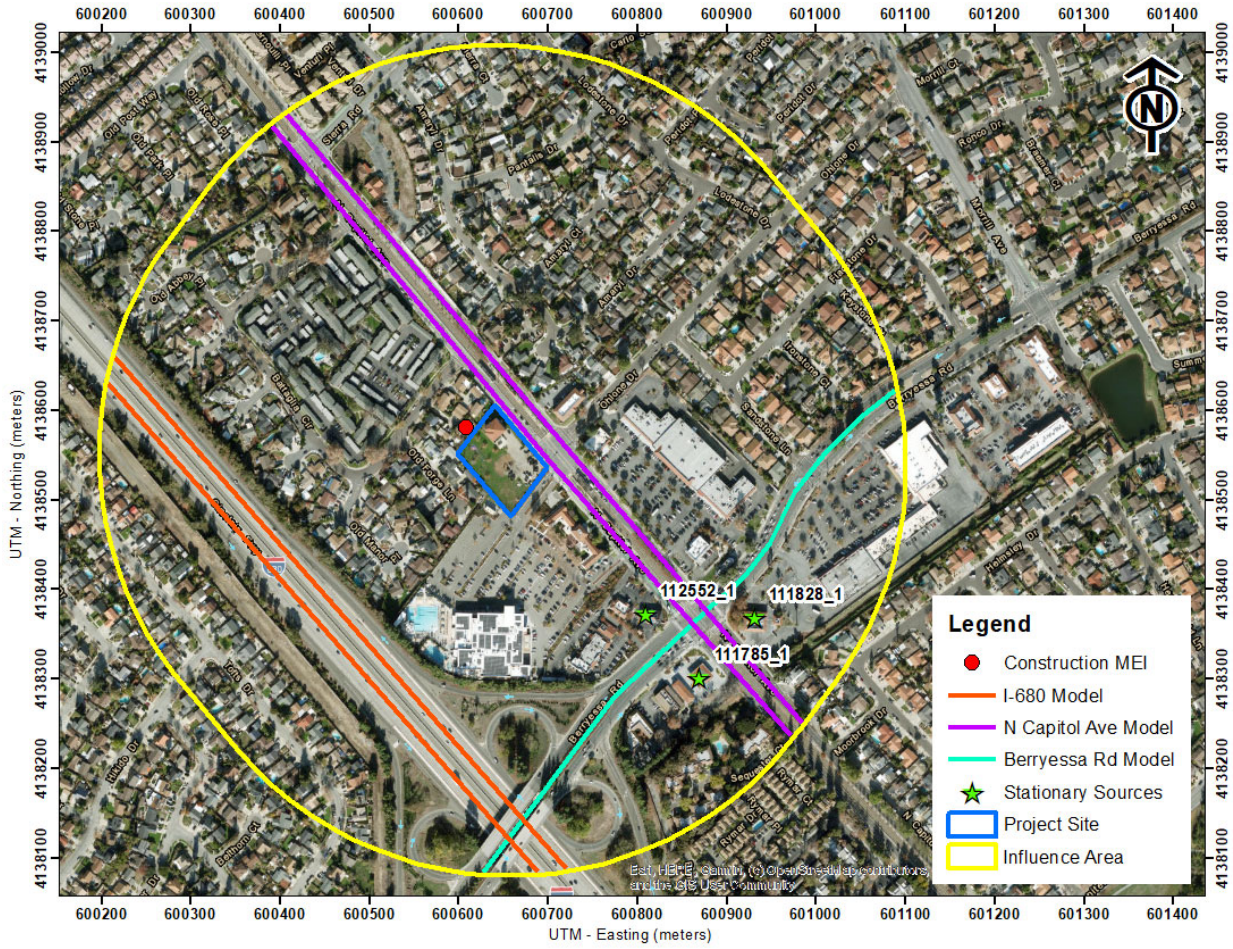



## Cumulative Health Risks of all TAC Sources at the Off-Site Project MEIs

Health risk assessments typically look at all substantial sources of TACs that can affect sensitive receptors that are located within 1,000 feet of a project site (i.e., influence area). These sources include rail lines, highways, busy surface streets, and stationary sources identified by BAAQMD.

A review of the project area using BAAQMD's geographic information systems (GIS) screening maps identified the existing health risks from a nearby roadway and stationary sources at the MEIs. Three existing roadway sources, I-680, N. Capitol Avenue, and Berryessa Road, and three stationary sources were identified as TAC sources with the potential to affect the project MEIs. Figure 2 shows the sources affecting the MEIs. Health risk impacts from these sources upon the MEIs are reported in Table 6. Details of the cumulative screening, modeling, and health risk calculations are included in *Attachment 3.*

**Figure 2. Project Site and Nearby TAC and $PM_{2.5}$ Sources**




Highways and Local Roadways – I-680, N. Capitol Avenue, and Berryessa Road

The project MEIs are located near I-680, N. Capitol Avenue, and Berryessa Road. A refined analysis of the impacts of TACs and $PM_{2.5}$ to the MEI receptors is necessary to evaluate potential cancer risks and $PM_{2.5}$ concentrations from vehicle traffic on these roadways. This analysis involved predicting emissions for the traffic volume and mix of vehicle types on the roadways near the project site and using an atmospheric dispersion model to predict exposure to TACs. The associated cancer risks were then computed based on the modeled exposures. *Attachment 1* includes a description of how community risk impacts, including cancer risk are computed.

*Traffic Emissions Modeling*

This analysis involved the development of DPM, organic TACs, and $PM_{2.5}$ emissions for traffic on I-680, N. Capitol Avenue, and Berryessa Road using the Caltrans version of the CARB EMFAC2021 emissions model, known as CT-EMFAC2021. CT-EMFAC2021 provides emission factors for mobile source criteria pollutants and TACs, including DPM. Emission processes modeled include running exhaust for DPM, $PM_{2.5}$ and total organic compounds (TOG), running evaporative losses for TOG, and tire and brake wear and fugitive road dust for $PM_{2.5}$. $PM_{2.5}$

emissions from all vehicles were used, rather than just the $PM_{2.5}$ fraction from diesel powered vehicles, because all vehicle types (i.e., gasoline and diesel powered) produce $PM_{2.5}$. Additionally, $PM_{2.5}$ emissions from vehicle tire and brake wear and from re-entrained roadway dust were included in the emissions estimate. DPM emissions are projected to decrease in the future as reflected in the CT-EMFAC2021 emissions data. Inputs to the model include region (Santa Clara County), type of road (freeway and major/collector), adjusted for the local truck mix on I-680 and truck percentage for non-state highways in Santa Clara County (3.51 percent)[21] for N. Capitol Avenue and Berryessa Road, traffic mix assigned by CT-EMFAC2021 for the county, year of analysis (2026 – construction year), and season (annual).

To estimate TAC and $PM_{2.5}$ emissions over the 30-year exposure period used for calculating the increased cancer risks for sensitive receptors at the MEIs, the CT-EMFAC2021 model was used to develop vehicle emission factors for the year 2026 (construction year). Emissions associated with vehicle travel depend on the year of analysis because emission control technology requirements are phased-in over time. Therefore, the earlier the year analyzed in the model, the higher the emission rates utilized by CT-EMFAC2021. Year 2026 emissions were conservatively assumed as being representative of future conditions over the time period that cancer risks are evaluated since, as discussed above, overall vehicle emissions, and in particular diesel truck emissions, will decrease in the future.

Average hourly traffic distributions for Santa Clara County roadways were developed using the EMFAC model,[22] which were then applied to the average daily traffic (ADT) volumes to obtain estimated hourly traffic volumes and emissions for the roadway. A review of the traffic information reported by Caltrans indicated that I-680 traffic included 158,000 vehicles per day (based on an annual average)[23] that are about 5.4 percent trucks, of which 3.6 percent are considered diesel heavy duty trucks and 1.8 percent are medium duty trucks.[24] Traffic volumes were assumed to increase 1 percent per year, due to overall regional growth, for a total of 164,320 vehicles. The ADT for N. Capitol Avenue and Berryessa Road was calculated based on background plus project traffic data obtained from the project's traffic consultant.[25] Assuming a 1 percent per year increase, the calculated ADT for N. Capitol Avenue would be 20,387 vehicles and for Berryessa Road would be 31,224 vehicles.

For all hours of the day on I-680, other than during peak a.m. and p.m. periods, an average speed of 65 mph was assumed for all vehicles. Based on traffic data from the Santa Clara Valley Transportation Authority's 2018 Monitoring and Conformance Report, traffic speeds during the

---

[21] Bay Area Air Quality Management District, 2012, *Recommended Methods for Screening and Modeling Local Risks and Hazards, Version 3.0.* May. Web: https://www.baaqmd.gov/~/media/files/planning-and-research/ceqa/risk-modeling-approach-may-2012.pdf?la=en

[22] The Burden output from EMFAC2007, a previous version of CARB's EMFAC model, was used for this since the current web-based version of EMFAC2021 does not include Burden type output with hour by hour traffic volume information.

[23] Caltrans, *2022 Traffic Volumes: Annual Average Daily Traffic (AADT) For All Vehicles on California State Highways,* 2024. Web: https://dot.ca.gov/programs/traffic-operations/census

[24] Caltrans, *2022 Truck Traffic: Annual Average Daily Truck Traffic For Truck Traffic on California State Highways, 2024.*

[25] Email correspondence from Tyler Rogers, Project Manager, David J. Powers & Associates, Inc., January 28, 2025, *1207CapitolAv_Vols_28Jan2025_DJP&A.*

peak a.m. and p.m. periods were identified.[26] For a 2-hour period during the peak a.m. period, an average travel speed of 55 mph was used for northbound traffic and an average speed of 60 mph was used for southbound traffic. For the peak p.m. period, an average travel speed of 60 mph was used for northbound traffic and an average travel speed of 20 mph was used for southbound traffic. For N. Capitol Avenue and Berryessa Road, an average travel speed of 30 mph was used for all hours of the day, 5 mph slower than the posted speed limit signs for the roadways to account for commute congestion and the amount of access in the area.

*Dispersion Modeling*

Dispersion modeling of TAC and $PM_{2.5}$ emissions was conducted using the EPA AERMOD air quality dispersion model, which is recommended by the BAAQMD for this type of analysis.[27] TAC and $PM_{2.5}$ emissions from traffic on these highways and roadways within 1,000 feet of the project site were evaluated. Vehicle traffic on the highways and roadways were modeled using volume sources along a line (line volume sources); with line segments used for travel on the highways and roadways. The same meteorological data and off-site sensitive receptors used in the previous dispersion modeling were used in the roadway modeling. Other inputs to the model included road geometry, hourly traffic emissions, and receptor locations. Annual TAC and $PM_{2.5}$ concentrations for 2026 from traffic on the roadways were calculated using the model. Concentrations were calculated at the construction MEIs with receptor heights of 5 feet (1.5 meters) and 15 feet (4.5 meters) to represent the breathing heights on the first and second floors of the residences.

*Computed Cancer and Non-Cancer Health Impacts*

The cancer risk, $PM_{2.5}$ concentration, and HI impacts from I-680, N. Capitol Avenue, and Berryessa Road on the construction MEIs are shown in Table 6. Figure 2 shows the highway and roadway links used for the modeling and receptor locations where concentrations were calculated. Details of the emission calculations, dispersion modeling, and cancer risk calculations for the receptors with the maximum cancer risk from I-680, N. Capitol Avenue, and Berryessa Road traffic are provided in *Attachment 3.*

<u>BAAQMD Permitted Stationary Sources</u>

Permitted stationary sources of air pollution near the project site were identified using BAAQMD's *Permitted Stationary Sources 2022* GIS website,[28] which identifies the location of nearby stationary sources and their estimated risk and hazard impacts, including emissions and adjustments to account for OEHHA guidance. Three sources were identified using this tool, all gasoline dispensing facilities. A stationary source information request was submitted to BAAQMD in order to estimate health risk impacts from the gasoline dispensing facilities.[29]

---

[26] Santa Clara Valley Transportation Authority. *2018 CMP Monitoring and Conformance Report May 24, 2019. Web:* https://www.vta.org/sites/default/files/2020-08/2018%20Monitoring%20Report.pdf
[27] BAAQMD. *Recommended Methods for Screening and Modeling Local Risks and Hazards*. May 2012
[28] BAAQMD, https://baaqmd.maps.arcgis.com/apps/webappviewer/index.html?id=845658c19eae4594b9f4b805fb9d89a3
[29] Correspondence with BAAQMD CEQA, October 3, 2024

The screening risk and hazard levels provided by BAAQMD for the stationary sources were adjusted for distance using CARB's *Gasoline Station Risk Screening Tool.* BAAQMD provided the gasoline throughputs for each gas dispensing facility near the project site.[30] The provided throughputs along with the distance between the MEIs and the gas dispensing facility, and the region for each gas station was input into the CARB tool to calculate the cancer risk and hazard index. Health risk impacts from the stationary sources upon the MEIs are reported in Table 6.

Summary of Cumulative Risks at the Project MEIs

Table 6 reports both the project and cumulative health risk impacts at the sensitive receptors most affected by project construction (i.e., the MEIs). The project's unmitigated construction cancer risk exceeds its BAAQMD single-source threshold. With the implementation of *Mitigation Measure AQ-1*, the project's cancer risk would be reduced to a level below the single-source threshold and would also not exceed the cumulative-source threshold. The annual $PM_{2.5}$ concentration and HI, unmitigated and mitigated, do not exceed the single-source or cumulative-source thresholds.

**Table 6. Cumulative Health Risk Impacts at the Project MEIs**

| Source | | Cancer Risk (per million) | Annual $PM_{2.5}$ ($\mu g/m^3$) | Hazard Index |
|---|---|---|---|---|
| **Project Impacts** | | | | |
| Project Construction | Unmitigated | **34.77 (infant)** | 0.24 | 0.02 |
| | Mitigated | 4.39 (infant) | 0.16 | <0.01 |
| ***BAAQMD Single-Source Threshold*** | | ***>10.0*** | ***>0.3*** | ***>1.0*** |
| *Exceed Threshold?* | Unmitigated | ***Yes*** | *No* | *No* |
| | Mitigated | *No* | *No* | *No* |
| **Cumulative Impacts** | | | | |
| I-680, ADT 164,320 | | 3.91 | 0.06 | <0.01 |
| N. Capitol Avenue, ADT 20,387 | | 1.14 | 0.07 | <0.01 |
| Berryessa Road, ADT 31,224 | | 0.36 | 0.02 | <0.01 |
| ARCO Facility #07079 (Facility ID #112552-1, Gas Dispensing Facility), MEIs at 915 feet | | 0.91 | - | 0.05 |
| Capitol Chevron (Facility ID #111785-1, Gas Dispensing Facility), MEIs at 1,200 feet | | 0.16 | - | 0.01 |
| Shell SS#68206 (Facility ID #111828-1, Gas Dispensing Facility) MEIs at 1,215 feet | | 0.57 | - | 0.02 |
| *Combined Sources* | Unmitigated | 41.82 | 0.39 | <0.13 |
| | Mitigated | 11.44 | 0.31 | <0.12 |
| ***BAAQMD Cumulative Source Threshold*** | | ***>100*** | ***>0.8*** | ***>10.0*** |
| ***Exceed Threshold?*** | Unmitigated | *No* | *No* | *No* |
| | Mitigated | *No* | *No* | *No* |

[30] Email from BAAQMD, October 3, 2024. Subject: "RE_ Public Records Number 2024-09-0178 Stationary Source Request for 24-xxx 1207 N Capitol Ave_San Jose SSIF"

*Mitigation Measure AQ-1:* **Use construction equipment that has low diesel particulate matter exhaust emissions.**

Implement a feasible plan to reduce diesel particulate matter emissions by 75 percent such that annual $PM_{2.5}$ concentration from construction would be reduced below TAC significance levels as follows:

1. All diesel-powered construction equipment larger than 25 horsepower used at the site for more than two continuous days or 20 hours total shall meet U.S. EPA Tier 4 Final emission standards for PM ($PM_{10}$ and $PM_{2.5}$), and

Alternatively, the applicant may develop another construction operations plan demonstrating that the construction equipment used on-site would achieve a reduction in construction diesel particulate matter emissions by 75 percent or greater. Elements of the plan could include a combination of some of the following measures:

- Installation of electric power lines during early construction phases to avoid use of diesel portable equipment,
- Use of electrically-powered equipment,
- Forklifts and aerial lifts used for exterior and interior building construction shall be electric or propane/natural gas powered,
- Change in construction build-out plans to lengthen phases, and
- Implementation of different building techniques that result in less diesel equipment usage.

Such a construction operations plan would be subject to review by an air quality expert and approved by the City prior to construction.

*Effectiveness of Mitigation Measure AQ-1*

CalEEMod was used to compute emissions associated with these measures assuming that all equipment met U.S. EPA Tier 4 Final engine standards and the City's Standard Permit Conditions for dust control were included. With these implemented, the project's cancer risk would be reduced by 87 percent to 4.39 per million. As a result, the project's construction risks and hazards would be reduced below the BAAQMD single-source thresholds.

**Non-CEQA: On-site Health Risk Assessment of TAC Sources - New Project Receptors**

The City's General Plan Policy MS-11.1 requires new residential development projects and projects categorized as sensitive receptors to incorporate effective mitigation into project designs to avoid significant risks to health and safety. BAAQMD's recommended thresholds for health risks and hazards, shown in Table 1, are used to evaluate on-site exposure.

In addition to evaluating health impacts from project construction, a health risk assessment was completed to assess the impact that the existing TAC sources would have on the new proposed sensitive receptors (residents) that the project would introduce. The same TAC sources identified above were used in this health risk assessment.[31] On-site health risk results are listed in Table 7. *Attachment 3* includes the screening information used for TAC source impacts upon the proposed on-site sensitive receptors.

Highways and Local Roadways – I-680, N. Capitol Avenue, and Berryessa Road

The highway and roadway analysis for the new project residents was conducted in the same manner as described above for the off-site MEIs. However, the year 2028 (operational year) emission factors were conservatively assumed as being representative of future conditions, instead of 2026 (construction year). An analysis based on 2028 resulted in an increased ADT on I-680 of 167,480 vehicles, on N. Capitol Avenue of 20,791 vehicles, and on Berryessa Road of 31,842 vehicles.

Modeling receptors were placed in the approximate center of the proposed dwelling units. Roadway impacts were modeled at receptor heights of 5 feet (1.5 meters) and 18 feet (5.5 meters) representing sensitive receptors on the first and second floors of the proposed building. The portion of the roadways included in the modeling is shown in Figure 3 along with the project site and receptor locations where impacts were modeled.

Maximum increased cancer risks were calculated for the residents at the project site using the maximum modeled TAC concentrations. A 30-year exposure period was used in calculating cancer risks assuming the residents would include infants and adults were assumed to be in the new apartments for 24 hours per day for 350 days per year. The highest impacts from the combined highway and roadways occurred at a receptor on the first floor in the southeastern corner of the multi-family building along N. Capitol Avenue. Cancer risks associated with the roadways are greatest closest to the roadways and decrease with distance from the roads. The highway and roadway impacts at the project site are shown in Table 7. Details of the emission calculations, dispersion modeling, and cancer risk calculations are contained in *Attachment 3.*

[31] We note that to the extent this analysis considers *existing* air quality issues in relation to the impact on *future residents* of the Project, it does so for informational purposes only pursuant to the judicial decisions in *CBIA v. BAAQMD* (2015) 62 Cal.4th 369, 386 and *Ballona Wetlands Land Trust v. City of Los Angeles* (2011) 201 Cal.App.4th 455, 473, which confirm that the impacts of the environment on a project are excluded from CEQA unless the project itself "exacerbates" such impacts.

Stationary Sources

The stationary source screening analysis for the new project sensitive receptors was conducted in the same manner as described above for the cumulative analysis. Table 7 shows the health risk impacts for the stationary sources on the project sensitive receptors.

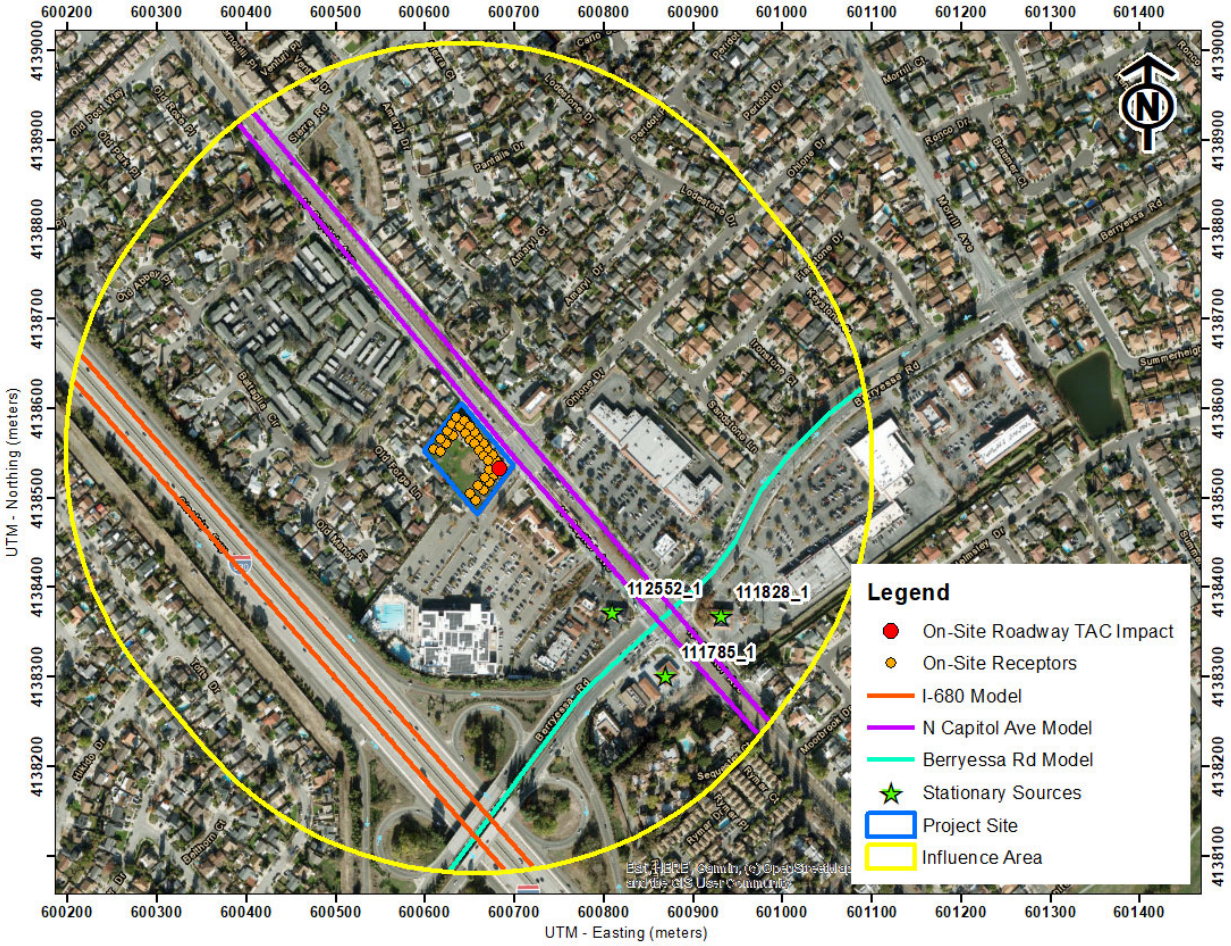
Summary of Cumulative Health Risks at the Project Site

Health risk impacts from the existing TAC sources upon the project site are reported in Table 7. The risks from the singular TAC sources are compared against the BAAQMD single-source threshold. The risks from all the sources are then combined and compared against the BAAQMD cumulative-source threshold. As shown, none of the sources exceed the single-source or cumulative-source thresholds.

**Table 7. Impacts from Combined Sources to Project Site Receptors**

| Source | Cancer Risk (per million) | Annual $PM_{2.5}$ ($\mu g/m^3$) | Hazard Index |
|---|---|---|---|
| I-680, ADT 167,480 | 4.33 | 0.08 | <0.01 |
| N. Capitol Avenue, ADT 20,791 | 2.26 | 0.17 | <0.01 |
| Berryessa Road, ADT 31,842 | 0.46 | 0.03 | <0.01 |
| ARCO Facility #07079 (Facility ID #112552-1, Gas Dispensing Facility), Project Site at 590 feet. | 1.86 | - | 0.15 |
| Capitol Chevron (Facility ID #111785-1, Gas Dispensing Facility), Project Site at 875 feet. | 0.29 | - | 0.03 |
| Shell SS#68206 (Facility ID #111828-1, Gas Dispensing Facility) Project Site at 900 feet. | 1.00 | - | 0.05 |
| ***BAAQMD Single-Source Threshold*** | ***10*** | ***0.3*** | ***1.0*** |
| *Exceed Threshold?* | *No* | *No* | *No* |
| Cumulative Total | 10.2 | 0.28 | <0.26 |
| ***BAAQMD Cumulative Source Threshold*** | ***100*** | ***0.8*** | ***10.0*** |
| *Exceed Threshold?* | *No* | *No* | *No* |

**Figure 3. Locations of Project Site, On-Site Residential Receptors, Roadway Model, Stationary Sources, and Maximum TAC Impacts**




## Supporting Documentation

*Attachment 1* includes the CalEEMod output for project construction and operational criteria air pollutant emissions. Also included are any modeling assumptions.

*Attachment 2* includes the construction health risk assessment. AERMOD dispersion modeling files for these assessments, which are quite voluminous, are available upon request and would be provided in digital format.

*Attachment 3* includes the cumulative health risk screening, calculations, and modeling results from sources affecting the MEIs and project receptors.

# Attachment 1: CalEEMod Modeling Inputs and Outputs

| Construction Criteria Air Pollutants | | | | | | | |
|---|---|---|---|---|---|---|---|
| *Unmitigated* | ROG | NOX | PM10 Exhaust | PM2.5 Exhaust | PM2.5 Fugitive | **CO2e** | |
| Year | Tons | | | | | MT | |
| 2026 | 0.13 | 1.01 | 0.03 | 0.03 | 0.04 | 259 | |
| 2027 | 1.10 | 1.04 | 0.03 | 0.03 | 0.02 | 271 | |
| | *Total Construction Emissions* | | | | | | |
| Tons | 1.23 | 2.05 | 0.06 | 0.06 | | 531 | |
| | | | | | | | |
| Pounds/Workdays | *Average Daily Emissions* | | | | | Workdays | |
| 2026 | 0.99 | 7.75 | 0.26 | 0.24 | | | **261** |
| 2027 | 8.80 | 8.37 | 0.24 | 0.23 | | | **249** |
| **Threshold - lbs/day** | **54.0** | **54.0** | **82.0** | **54.0** | | | |
| | *Total Construction Emissions* | | | | | | |
| Pounds | 2451.10 | 4109.54 | 128.27 | 118.17 | | 0.00 | |
| Average | 4.80 | 8.05 | 0.25 | 0.23 | | 0.00 | 510.29 |
| **Threshold - lbs/day** | **54.0** | **54.0** | **82.0** | **54.0** | | | |

| Operational Criteria Air Pollutants | | | | |
|---|---|---|---|---|
| *Unmitigated* | ROG | NOX | Total PM10 | Total PM2.5 |
| Year | Tons | | | |
| Total | 0.91 | 0.23 | 0.43 | 0.11 |
| | *Net Annual Operational Emissions* | | | |
| Tons/year | 0.91 | 0.23 | 0.43 | 0.11 |
| **Threshold - Tons/year** | **10.0** | **10.0** | **15.0** | **10.0** |
| | | | | |
| | *Average Daily Emissions* | | | |
| Pounds Per Day | 4.97 | 1.24 | 2.37 | 0.63 |
| **Threshold - lbs/day** | **54.0** | **54.0** | **82.0** | **54.0** |

| **Category** | **CO2e** | | | |
|---|---|---|---|---|
| | Project | | | |
| Mobile | 389.65 | | | |
| Area | 1.59 | | | |
| Energy | 94.60 | | | |
| Water | 5.13 | | | |
| Waste | 29.57 | | | |
| Refrig. | 0.16 | | | |
| TOTAL | 520.70 | 0.00 | 0.00 | 0.00 |
| Net GHG Emissions | | 520.70 | | 0.00 |

| **Number of Days Per Year** | | | | |
|---|---|---|---|---|
| 2026 | 1/1/2026 | 12/31/2026 | 365 | 261 |
| 2027 | 1/1/2027 | 12/14/2027 | 348 | 249 |
| 2028 | | | | |
| | | | 713 | **510** ***Total Workdays*** |

| Phase | Start Date | End Date | Days/Week | Workdays |
|---|---|---|---|---|
| Demolition | 1/1/2026 | 1/7/2026 | 5 | 5 |
| Site Preparation | 2/1/2026 | 2/13/2026 | 5 | 10 |
| Grading | 3/1/2026 | 3/17/2026 | 5 | 12 |
| Building Construction | 7/1/2026 | 6/29/2027 | 5 | 260 |
| Paving | 9/1/2027 | 12/14/2027 | 5 | 75 |
| Architectural Coating | 5/1/2027 | 11/12/2027 | 5 | 140 |
| Trenching | 5/1/2026 | 5/21/2026 | 5 | 15 |

# Air Quality/Noise Construction Information Data Request

**Project Name:** 1207 N. Capitol Ave, San Jose DEFAULTS

**Complete ALL Portions in Yellow**

See Equipment Type TAB for type, horsepower and load factor

**Project Size** 128 Dwelling Units 1.5 total project acres disturbed

135,639 s.f. residential

s.f. retail

s.f. office/commercial

s.f. other, specify:

s.f. parking garage spaces

s.f. parking lot 54 spaces

**Construction Days (i.e, M-F)** to

**Construction Hours** 7 am to 5 pm

**Pile Driving? Y/N?**

**Project include on-site GENERATOR OR FIRE PUMP during project OPERATION (not construction)? Y/N? ____**

IF YES (if BOTH separate values) -->

Kilowatts/Horsepower: _____

Fuel Type: _____

Location in project (Plans Desired if Available):

DO NOT MULTIPLY EQUIPMENT HOURS/DAY BY THE QUANTITY OF EQUIPMENT

| Quantity | Description | HP | Load Factor | Hours/day | Total Work Days | Avg. Hours per day | HP Annual Hours | Comments |
|---|---|---|---|---|---|---|---|---|
| | **Demolition** | **Start Date:** | **1/1/2026** | **Total phase:** | **5** | | | **Overall Import/Export Volumes** |
| | | **End Date:** | **1/7/2028** | | | | | |
| 1 | Other general industrial equipment | 81 | 0.34 | 8 | 5 | 8 | 1102 | **Demolition Volume** |
| 2 | Excavators | 158 | 0.38 | 8 | 5 | 8 | 4803 | Square footage of buildings to be demolished |
| 4 | Trucks | 97 | 0.4 | 8 | 5 | 8 | 6208 | |
| 2 | Rubber-Tired Dozers | 247 | 0.4 | 8 | 5 | 8 | 7904 | (*or* total tons to be hauled) |
| | Tractors/Loaders/Backhoes | 97 | 0.37 | | | 0 | 0 | **Est. 5,000** square feet *or* |
| | *Other Equipment?* | | | | | | | **?** Hauling volume (tons) |
| | | | | | | | | Any pavement demolished and hauled? **Est. 1,250 sf** |
| | **Site Preparation** | **Start Date:** | **2/1/2026** | **Total phase:** | **10** | | | |
| | | **End Date:** | **2/13/2026** | | | | | |
| | Graders | 187 | 0.41 | | | 0 | 0 | |
| 3 | Rubber Tired Dozers | 247 | 0.4 | 8 | 10 | 8 | 23712 | |
| 4 | Tractors/Loaders/Backhoes | 97 | 0.37 | 8 | 10 | 8 | 11485 | |
| 4 | Trucks | 97 | 0.4 | 8 | 10 | 8 | 12416 | |
| | *Other Equipment?* | | | | | | | |
| | **Grading / Excavation** | **Start Date:** | **3/1/2026** | **Total phase:** | **12** | | | |
| | | **End Date:** | **3/17/2026** | | | | | **Soil Hauling Volume** |
| 2 | Excavators | 158 | 0.38 | 8 | 12 | 8 | 11528 | Export volume = **1000** cubic yards? |
| 1 | Graders | 187 | 0.41 | 8 | 12 | 8 | 7360 | Import volume = **1500** cubic yards? |
| 1 | Rubber Tired Dozers | 247 | 0.4 | 8 | 12 | 8 | 9485 | |
| 4 | Tractors/Loaders/Backhoes | 97 | 0.37 | 8 | 12 | 8 | 13782 | |
| 2 | Skidsteers and loaders | 97 | 0.4 | 8 | 12 | 8 | 7450 | |
| 4 | Trucks | 97 | 0.4 | 8 | 12 | 8 | 14899 | |
| | *Other Equipment?* | | | | | | | |
| | **Trenching/Foundation** | **Start Date:** | **5/1/2026** | **Total phase:** | **15** | | | |
| | | **End Date:** | **5/21/2026** | | | | | |
| 1 | Tractor/Loader/Backhoe | 97 | 0.37 | 8 | 15 | 8 | 4307 | |
| 1 | Excavators | 158 | 0.38 | 8 | 15 | 8 | 7205 | |
| 3 | Trucks | 97 | 0.4 | 8 | 15 | 8 | 13968 | |
| | *Other Equipment?* | | | | | | | |
| | **Building - Framing/sideing** | **Start Date:** | **7/1/2026** | **Total phase:** | **260** | | | **Cement Trucks? _222_ Total Round-Trips** |
| | | **End Date:** | **6/29/2027** | | | | | |
| 1 | Cranes | 231 | 0.29 | 7 | 220 | 5.92307692 | 103165 | Electric? (Y/N) ___ Otherwise assumed diesel |
| 2 | Forklifts | 89 | 0.2 | 4 | 250 | 3.84615385 | 35600 | Liquid Propane (LPG)? (Y/N) ___ Otherwise Assumed diesel |
| 0 | Generator Sets | 84 | 0.74 | 8 | 260 | | 0 | Or temporary line power? Yes temp power |
| 1 | Tractors/Loaders/Backhoes | 97 | 0.37 | 4 | 200 | 3.07692308 | 28712 | |
| 4 | Air compressors | 5.5 | 0.48 | 8 | 250 | 7.69230769 | 21120 | |
| | *Other Equipment?* | | | | | | | |
| 1 | *Saws/nail guns* | 81 | 0.73 | 8 | 250 | 7.69230769 | 118260 | |
| | **Building - Interior/Architectural Coating** | **Start Date:** | **5/1/2027** | **Total phase:** | **140** | | | |
| | | **End Date:** | **11/12/2027** | | | | | |
| 2 | Air Compressors | 5.5 | 0.48 | 8 | 140 | 8 | 5914 | |
| 1 | Aerial Lift | 62 | 0.31 | 2 | 70 | 1 | 2691 | |
| 1 | Forklifts | 89 | 0.2 | 4 | 70 | 2 | 4984 | Liquid Propane (LPG)? (Y/N) ___ Otherwise Assumed diesel |
| | *Other Equipment?* | | | | | | | |
| | **Paving / Flatwork** | **Start Date:** | **9/1/2027** | **Total phase:** | **75** | | | |
| | | **Start Date:** | **12/14/2027** | | | | | |
| 2 | Cement and Mortar Mixers | 9 | 0.56 | 6 | 75 | 6 | 4536 | |
| 1 | Pavers | 130 | 0.42 | 8 | 75 | 8 | 32760 | |
| 2 | Paving Equipment | 132 | 0.36 | 6 | 75 | 6 | 42768 | **Asphalt? _200__ cubic yards or ____ round trips?** |
| 2 | Rollers | 80 | 0.38 | 6 | 75 | 6 | 27360 | |
| 1 | Tractors/Loaders/Backhoes | 97 | 0.37 | 8 | 75 | 8 | 21534 | |
| 3 | Trucks | 97 | 0.4 | 8 | 75 | 8 | 69840 | |
| | *Other Equipment?* | | | | | | | |
| | **Additional Phases** | **Start Date:** | | **Total phase:** | | | | |
| | | **Start Date:** | | | | | | |
| | | | | | | #DIV/0! | 0 | |
| | | | | | | #DIV/0! | 0 | |
| | | | | | | #DIV/0! | 0 | |
| | | | | | | #DIV/0! | 0 | |
| | | | | | | #DIV/0! | 0 | |
| TOTAL | | | | | 517 | | | |

**Equipment types listed in "Equipment Types" worksheet tab.**

Equipment listed in this sheet is to provide an example of inputs

It is assumed that water trucks would be used during grading

**Add or subtract phases and equipment, as appropriate**

**Modify horsepower or load factor, as appropriate**

**Complete one sheet for each project component**

| Traffic Consultant Trip Gen | | | | | | CalEEMod Default | | |
|---|---|---|---|---|---|---|---|---|
| Land Use | Size | Daily Trips | New Trips | Weekday Trip Gen | Weekday | | Sat | Sun |
| Apartments Mid Rise DU | 128 | 616 | 473 | ***3.70*** | | 5.44 | 4.91 | 4.09 |
| *Based Vehicle Mode Share* 13% | | *-80* | | | *Rev* | | ***3.34*** | ***2.78*** |
| *ect-Specific Trip Reduction* 11.80% | | *-63* | | | | | | |

**Project Trip Generation Estimates for 1207 N. Capitol Avenue Affordable Housing Project**

| | | | | AM Peak Hour | | | | PM Peak Hour | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Land Use | Size | Daily Rate | Daily Trips | Pk-Hr Rate | In | Out | Total | Pk-Hr Rate | In | Out | Total |
| Affordable Housing [1] | 128 DU | 4.81 | 616 | 0.50 | 19 | 45 | 64 | 0.46 | 35 | 24 | 59 |
| *Location-Based Vehicle Mode Share (13%)* [2] | | | *(80)* | | *(2)* | *(6)* | *(8)* | | *(5)* | *(3)* | *(8)* |
| *Project-Specific Trip Reduction (11.8%)* [3] | | | *(63)* | | *(2)* | *(5)* | *(7)* | | *(4)* | *(2)* | *(6)* |
| **Net Residential Trips:** | | | **473** | | **15** | **34** | **49** | | **26** | **19** | **45** |

Notes:

[1] Trip generation for the residential project based on average rates contained in the *ITE Trip Generation Manual, 11th Edition*, for Affordable Housing (Land Use 223) located in a General Urban/Suburban setting. Rates are expressed in trips per dwelling unit (DU).

[2] A 13% reduction was applied to the residential project based on the location-based vehicle mode share percentage outputs (Table 17 of the TA Handbook) produced from the San Jose Travel Demand Model for the place type: Urban Low Transit.

[3] An 11.8% trip reduction was applied to the project based on the City's VMT Evaluation Tool. This trip reduction reflects the affordability of the project & the increase in residential density on the site. It is assumed that every % reduction in VMT per capita is equivalent to 1% reduction in peak-hour trips.

# 24-143 1207 N. Capitol Ave, San Jose BMPs T4F 2028 Detailed Report

## Table of Contents

1. Basic Project Information

1.1. Basic Project Information

1.2. Land Use Types

1.3. User-Selected Emission Reduction Measures by Emissions Sector

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

2.2. Construction Emissions by Year, Unmitigated

2.3. Construction Emissions by Year, Mitigated

2.4. Operations Emissions Compared Against Thresholds

2.5. Operations Emissions by Sector, Unmitigated

2.6. Operations Emissions by Sector, Mitigated

3. Construction Emissions Details

3.1. Demolition (2026) - Unmitigated

3.2. Demolition (2026) - Mitigated

3.3. Site Preparation (2026) - Unmitigated

3.4. Site Preparation (2026) - Mitigated

3.5. Grading (2026) - Unmitigated

3.6. Grading (2026) - Mitigated

3.7. Building Construction (2026) - Unmitigated

3.8. Building Construction (2026) - Mitigated

3.9. Building Construction (2027) - Unmitigated

3.10. Building Construction (2027) - Mitigated

3.11. Paving (2027) - Unmitigated

3.12. Paving (2027) - Mitigated

3.13. Architectural Coating (2027) - Unmitigated

3.14. Architectural Coating (2027) - Mitigated

3.15. Trenching (2026) - Unmitigated

3.16. Trenching (2026) - Mitigated

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

4.1.2. Mitigated

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

4.2.2. Electricity Emissions By Land Use - Mitigated

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

4.2.4. Natural Gas Emissions By Land Use - Mitigated

4.3. Area Emissions by Source

4.3.1. Unmitigated

4.3.2. Mitigated

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

4.4.2. Mitigated

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

4.5.2. Mitigated

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

4.6.2. Mitigated

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

4.7.2. Mitigated

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

4.8.2. Mitigated

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

4.9.2. Mitigated

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

4.10.4. Soil Carbon Accumulation By Vegetation Type - Mitigated

4.10.5. Above and Belowground Carbon Accumulation by Land Use Type - Mitigated

4.10.6. Avoided and Sequestered Emissions by Species - Mitigated

5. Activity Data

5.1. Construction Schedule

5.2. Off-Road Equipment

5.2.1. Unmitigated

5.2.2. Mitigated

5.3. Construction Vehicles

5.3.1. Unmitigated

5.3.2. Mitigated

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

5.5. Architectural Coatings

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

5.6.2. Construction Earthmoving Control Strategies

5.7. Construction Paving

5.8. Construction Electricity Consumption and Emissions Factors

5.9. Operational Mobile Sources

5.9.1. Unmitigated

5.9.2. Mitigated

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

5.10.1.2. Mitigated

5.10.2. Architectural Coatings

5.10.3. Landscape Equipment

5.10.4. Landscape Equipment - Mitigated

5.11. Operational Energy Consumption

5.11.1. Unmitigated

5.11.2. Mitigated

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

5.12.2. Mitigated

5.13. Operational Waste Generation

5.13.1. Unmitigated

5.13.2. Mitigated

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

5.14.2. Mitigated

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

5.15.2. Mitigated

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

5.16.2. Process Boilers

5.17. User Defined

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

5.18.1.2. Mitigated

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

5.18.1.2. Mitigated

5.18.2. Sequestration

5.18.2.1. Unmitigated

5.18.2.2. Mitigated

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

6.2. Initial Climate Risk Scores

6.3. Adjusted Climate Risk Scores

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

7.2. Healthy Places Index Scores

7.3. Overall Health & Equity Scores

7.4. Health & Equity Measures

7.5. Evaluation Scorecard

7.6. Health & Equity Custom Measures

8. User Changes to Default Data

# 1. Basic Project Information

## 1.1. Basic Project Information

| Data Field | Value |
|---|---|
| Project Name | 24-143 1207 N. Capitol Ave, San Jose BMPs T4F 2028 |
| Construction Start Date | 1/1/2026 |
| Operational Year | 2028 |
| Lead Agency | — |
| Land Use Scale | Project/site |
| Analysis Level for Defaults | County |
| Windspeed (m/s) | 3.00 |
| Precipitation (days) | 1.60 |
| Location | 1207 N Capitol Ave, San Jose, CA 95132, USA |
| County | Santa Clara |
| City | San Jose |
| Air District | Bay Area AQMD |
| Air Basin | San Francisco Bay Area |
| TAZ | 1986 |
| EDFZ | 1 |
| Electric Utility | San Jose Clean Energy |
| Gas Utility | Pacific Gas & Electric |
| App Version | 2022.1.1.29 |

## 1.2. Land Use Types

| Land Use Subtype | Size | Unit | Lot Acreage | Building Area (sq ft) | Landscape Area (sq ft) | Special Landscape Area (sq ft) | Population | Description |
|---|---|---|---|---|---|---|---|---|
| Apartments Mid Rise | 128 | Dwelling Unit | 1.50 | 135,639 | 0.00 | — | 383 | — |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Parking Lot | 54.0 | Space | 0.00 | 0.00 | 0.00 | — | — | — |

### 1.3. User-Selected Emission Reduction Measures by Emissions Sector

| Sector | # | Measure Title |
|---|---|---|
| Construction | C-5 | Use Advanced Engine Tiers |

# 2. Emissions Summary

### 2.1. Construction Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Un/Mit. | ROG | NOx | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | CO2e |
|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — |
| Unmit. | 15.4 | 12.3 | 0.33 | 1.04 | 1.37 | 0.30 | 0.25 | 0.55 | 3,751 |
| Mit. | 14.3 | 7.56 | 0.06 | 1.04 | 1.09 | 0.05 | 0.25 | 0.30 | 3,751 |
| % Reduced | 7% | 39% | 83% | — | 20% | 82% | — | 46% | — |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — |
| Unmit. | 14.7 | 29.3 | 1.24 | 7.83 | 9.07 | 1.14 | 3.98 | 5.12 | 6,064 |
| Mit. | 14.0 | 7.89 | 0.10 | 7.83 | 7.93 | 0.10 | 3.98 | 4.08 | 6,064 |
| % Reduced | 5% | 73% | 92% | — | 13% | 91% | — | 20% | — |
| Average Daily (Max) | — | — | — | — | — | — | — | — | — |
| Unmit. | 6.01 | 5.71 | 0.18 | 0.67 | 0.85 | 0.17 | 0.24 | 0.41 | 1,639 |
| Mit. | 5.51 | 3.20 | 0.03 | 0.67 | 0.69 | 0.03 | 0.24 | 0.26 | 1,639 |
| % Reduced | 8% | 44% | 85% | — | 19% | 84% | — | 36% | — |
| Annual (Max) | — | — | — | — | — | — | — | — | — |
| Unmit. | 1.10 | 1.04 | 0.03 | 0.12 | 0.16 | 0.03 | 0.04 | 0.07 | 271 |
| Mit. | 1.00 | 0.58 | < 0.005 | 0.12 | 0.13 | < 0.005 | 0.04 | 0.05 | 271 |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| % Reduced | 8% | 44% | 85% | — | 19% | 84% | — | 36% | — |

## 2.2. Construction Emissions by Year, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Year | ROG | NOx | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | CO2e |
|---|---|---|---|---|---|---|---|---|---|
| Daily - Summer (Max) | — | — | — | — | — | — | — | — | — |
| 2026 | 1.47 | 10.2 | 0.31 | 0.89 | 1.20 | 0.28 | 0.21 | 0.50 | 3,208 |
| 2027 | 15.4 | 12.3 | 0.33 | 1.04 | 1.37 | 0.30 | 0.25 | 0.55 | 3,751 |
| Daily - Winter (Max) | — | — | — | — | — | — | — | — | — |
| 2026 | 3.19 | 29.3 | 1.24 | 7.83 | 9.07 | 1.14 | 3.98 | 5.12 | 6,064 |
| 2027 | 14.7 | 9.89 | 0.30 | 0.89 | 1.16 | 0.28 | 0.21 | 0.46 | 3,124 |
| Average Daily | — | — | — | — | — | — | — | — | — |
| 2026 | 0.71 | 5.54 | 0.18 | 0.67 | 0.85 | 0.17 | 0.24 | 0.41 | 1,567 |
| 2027 | 6.01 | 5.71 | 0.17 | 0.41 | 0.58 | 0.15 | 0.10 | 0.25 | 1,639 |
| Annual | — | — | — | — | — | — | — | — | — |
| 2026 | 0.13 | 1.01 | 0.03 | 0.12 | 0.16 | 0.03 | 0.04 | 0.07 | 259 |
| 2027 | 1.10 | 1.04 | 0.03 | 0.07 | 0.10 | 0.03 | 0.02 | 0.05 | 271 |

## 2.3. Construction Emissions by Year, Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Year | ROG | NOx | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | CO2e |
|---|---|---|---|---|---|---|---|---|---|
| Daily - Summer (Max) | — | — | — | — | — | — | — | — | — |
| 2026 | 0.54 | 5.72 | 0.04 | 0.89 | 0.93 | 0.04 | 0.21 | 0.26 | 3,208 |
| 2027 | 14.3 | 7.56 | 0.06 | 1.04 | 1.09 | 0.05 | 0.25 | 0.30 | 3,751 |
| Daily - Winter (Max) | — | — | — | — | — | — | — | — | — |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 2026 | 0.55 | 7.89 | 0.10 | 7.83 | 7.93 | 0.10 | 3.98 | 4.08 | 6,064 |
| 2027 | 14.0 | 5.76 | 0.06 | 0.89 | 0.93 | 0.05 | 0.21 | 0.26 | 3,124 |
| Average Daily | — | — | — | — | — | — | — | — | — |
| 2026 | 0.22 | 2.51 | 0.02 | 0.67 | 0.69 | 0.02 | 0.24 | 0.26 | 1,567 |
| 2027 | 5.51 | 3.20 | 0.03 | 0.41 | 0.44 | 0.03 | 0.10 | 0.12 | 1,639 |
| Annual | — | — | — | — | — | — | — | — | — |
| 2026 | 0.04 | 0.46 | < 0.005 | 0.12 | 0.13 | < 0.005 | 0.04 | 0.05 | 259 |
| 2027 | 1.00 | 0.58 | < 0.005 | 0.07 | 0.08 | < 0.005 | 0.02 | 0.02 | 271 |

## 2.4. Operations Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Un/Mit. | ROG | NOx | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | CO2e |
|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — |
| Unmit. | 5.43 | 1.23 | 0.04 | 2.45 | 2.50 | 0.04 | 0.62 | 0.66 | 3,411 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — |
| Unmit. | 4.74 | 1.32 | 0.04 | 2.45 | 2.49 | 0.04 | 0.62 | 0.66 | 3,235 |
| Average Daily (Max) | — | — | — | — | — | — | — | — | — |
| Unmit. | 4.97 | 1.24 | 0.04 | 2.33 | 2.37 | 0.04 | 0.59 | 0.63 | 3,145 |
| Annual (Max) | — | — | — | — | — | — | — | — | — |
| Unmit. | 0.91 | 0.23 | 0.01 | 0.43 | 0.43 | 0.01 | 0.11 | 0.11 | 521 |

## 2.5. Operations Emissions by Sector, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Sector | ROG | NOx | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | CO2e |
|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Mobile | 1.36 | 0.88 | 0.01 | 2.45 | 2.47 | 0.01 | 0.62 | 0.64 | 2,610 |
| Area | 4.05 | 0.07 | < 0.005 | — | < 0.005 | < 0.005 | — | < 0.005 | 19.5 |
| Energy | 0.02 | 0.29 | 0.02 | — | 0.02 | 0.02 | — | 0.02 | 571 |
| Water | — | — | — | — | — | — | — | — | 31.0 |
| Waste | — | — | — | — | — | — | — | — | 179 |
| Refrig. | — | — | — | — | — | — | — | — | 0.97 |
| Total | 5.43 | 1.23 | 0.04 | 2.45 | 2.50 | 0.04 | 0.62 | 0.66 | 3,411 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — |
| Mobile | 1.30 | 1.03 | 0.01 | 2.45 | 2.47 | 0.01 | 0.62 | 0.64 | 2,453 |
| Area | 3.42 | 0.00 | 0.00 | — | 0.00 | 0.00 | — | 0.00 | 0.00 |
| Energy | 0.02 | 0.29 | 0.02 | — | 0.02 | 0.02 | — | 0.02 | 571 |
| Water | — | — | — | — | — | — | — | — | 31.0 |
| Waste | — | — | — | — | — | — | — | — | 179 |
| Refrig. | — | — | — | — | — | — | — | — | 0.97 |
| Total | 4.74 | 1.32 | 0.04 | 2.45 | 2.49 | 0.04 | 0.62 | 0.66 | 3,235 |
| Average Daily | — | — | — | — | — | — | — | — | — |
| Mobile | 1.22 | 0.92 | 0.01 | 2.33 | 2.34 | 0.01 | 0.59 | 0.60 | 2,354 |
| Area | 3.73 | 0.03 | < 0.005 | — | < 0.005 | < 0.005 | — | < 0.005 | 9.61 |
| Energy | 0.02 | 0.29 | 0.02 | — | 0.02 | 0.02 | — | 0.02 | 571 |
| Water | — | — | — | — | — | — | — | — | 31.0 |
| Waste | — | — | — | — | — | — | — | — | 179 |
| Refrig. | — | — | — | — | — | — | — | — | 0.97 |
| Total | 4.97 | 1.24 | 0.04 | 2.33 | 2.37 | 0.04 | 0.59 | 0.63 | 3,145 |
| Annual | — | — | — | — | — | — | — | — | — |
| Mobile | 0.22 | 0.17 | < 0.005 | 0.43 | 0.43 | < 0.005 | 0.11 | 0.11 | 390 |
| Area | 0.68 | 0.01 | < 0.005 | — | < 0.005 | < 0.005 | — | < 0.005 | 1.59 |
| Energy | < 0.005 | 0.05 | < 0.005 | — | < 0.005 | < 0.005 | — | < 0.005 | 94.6 |
| Water | — | — | — | — | — | — | — | — | 5.13 |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Waste | — | — | — | — | — | — | — | — | 29.6 |
| Refrig. | — | — | — | — | — | — | — | — | 0.16 |
| Total | 0.91 | 0.23 | 0.01 | 0.43 | 0.43 | 0.01 | 0.11 | 0.11 | 521 |

## 2.6. Operations Emissions by Sector, Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Sector | ROG | NOx | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | CO2e |
|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — |
| Mobile | 1.36 | 0.88 | 0.01 | 2.45 | 2.47 | 0.01 | 0.62 | 0.64 | 2,610 |
| Area | 4.05 | 0.07 | < 0.005 | — | < 0.005 | < 0.005 | — | < 0.005 | 19.5 |
| Energy | 0.02 | 0.29 | 0.02 | — | 0.02 | 0.02 | — | 0.02 | 571 |
| Water | — | — | — | — | — | — | — | — | 31.0 |
| Waste | — | — | — | — | — | — | — | — | 179 |
| Refrig. | — | — | — | — | — | — | — | — | 0.97 |
| Total | 5.43 | 1.23 | 0.04 | 2.45 | 2.50 | 0.04 | 0.62 | 0.66 | 3,411 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — |
| Mobile | 1.30 | 1.03 | 0.01 | 2.45 | 2.47 | 0.01 | 0.62 | 0.64 | 2,453 |
| Area | 3.42 | 0.00 | 0.00 | — | 0.00 | 0.00 | — | 0.00 | 0.00 |
| Energy | 0.02 | 0.29 | 0.02 | — | 0.02 | 0.02 | — | 0.02 | 571 |
| Water | — | — | — | — | — | — | — | — | 31.0 |
| Waste | — | — | — | — | — | — | — | — | 179 |
| Refrig. | — | — | — | — | — | — | — | — | 0.97 |
| Total | 4.74 | 1.32 | 0.04 | 2.45 | 2.49 | 0.04 | 0.62 | 0.66 | 3,235 |
| Average Daily | — | — | — | — | — | — | — | — | — |
| Mobile | 1.22 | 0.92 | 0.01 | 2.33 | 2.34 | 0.01 | 0.59 | 0.60 | 2,354 |
| Area | 3.73 | 0.03 | < 0.005 | — | < 0.005 | < 0.005 | — | < 0.005 | 9.61 |
| Energy | 0.02 | 0.29 | 0.02 | — | 0.02 | 0.02 | — | 0.02 | 571 |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Water | — | — | — | — | — | — | — | — | 31.0 |
| Waste | — | — | — | — | — | — | — | — | 179 |
| Refrig. | — | — | — | — | — | — | — | — | 0.97 |
| Total | 4.97 | 1.24 | 0.04 | 2.33 | 2.37 | 0.04 | 0.59 | 0.63 | 3,145 |
| Annual | — | — | — | — | — | — | — | — | — |
| Mobile | 0.22 | 0.17 | < 0.005 | 0.43 | 0.43 | < 0.005 | 0.11 | 0.11 | 390 |
| Area | 0.68 | 0.01 | < 0.005 | — | < 0.005 | < 0.005 | — | < 0.005 | 1.59 |
| Energy | < 0.005 | 0.05 | < 0.005 | — | < 0.005 | < 0.005 | — | < 0.005 | 94.6 |
| Water | — | — | — | — | — | — | — | — | 5.13 |
| Waste | — | — | — | — | — | — | — | — | 29.6 |
| Refrig. | — | — | — | — | — | — | — | — | 0.16 |
| Total | 0.91 | 0.23 | 0.01 | 0.43 | 0.43 | 0.01 | 0.11 | 0.11 | 521 |

# 3. Construction Emissions Details

## 3.1. Demolition (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | CO2e |
|---|---|---|---|---|---|---|---|---|---|
| Onsite | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 2.11 | 19.1 | 0.81 | — | 0.81 | 0.74 | — | 0.74 | 3,175 |
| Demolition | — | — | — | 1.01 | 1.01 | — | 0.15 | 0.15 | — |
| Onsite truck | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Average Daily | — | — | — | — | — | — | — | — | — |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Off-Road Equipment | 0.03 | 0.26 | 0.01 | — | 0.01 | 0.01 | — | 0.01 | 43.5 |
| Demolition | — | — | — | 0.01 | 0.01 | — | < 0.005 | < 0.005 | — |
| Onsite truck | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Annual | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.01 | 0.05 | < 0.005 | — | < 0.005 | < 0.005 | — | < 0.005 | 7.20 |
| Demolition | — | — | — | < 0.005 | < 0.005 | — | < 0.005 | < 0.005 | — |
| Onsite truck | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Offsite | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — |
| Worker | 0.03 | 0.03 | 0.00 | 0.10 | 0.10 | 0.00 | 0.02 | 0.02 | 98.7 |
| Vendor | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Hauling | 0.02 | 1.26 | 0.01 | 0.26 | 0.27 | 0.01 | 0.07 | 0.08 | 1,017 |
| Average Daily | — | — | — | — | — | — | — | — | — |
| Worker | < 0.005 | < 0.005 | 0.00 | < 0.005 | < 0.005 | 0.00 | < 0.005 | < 0.005 | 1.37 |
| Vendor | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Hauling | < 0.005 | 0.02 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | 13.9 |
| Annual | — | — | — | — | — | — | — | — | — |
| Worker | < 0.005 | < 0.005 | 0.00 | < 0.005 | < 0.005 | 0.00 | < 0.005 | < 0.005 | 0.23 |
| Vendor | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Hauling | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | 2.31 |

## 3.2. Demolition (2026) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | CO2e |
|---|---|---|---|---|---|---|---|---|---|

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Onsite | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.32 | 3.25 | 0.06 | — | 0.06 | 0.06 | — | 0.06 | 3,175 |
| Demolition | — | — | — | 1.01 | 1.01 | — | 0.15 | 0.15 | — |
| Onsite truck | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Average Daily | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | < 0.005 | 0.04 | < 0.005 | — | < 0.005 | < 0.005 | — | < 0.005 | 43.5 |
| Demolition | — | — | — | 0.01 | 0.01 | — | < 0.005 | < 0.005 | — |
| Onsite truck | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Annual | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | < 0.005 | 0.01 | < 0.005 | — | < 0.005 | < 0.005 | — | < 0.005 | 7.20 |
| Demolition | — | — | — | < 0.005 | < 0.005 | — | < 0.005 | < 0.005 | — |
| Onsite truck | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Offsite | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — |
| Worker | 0.03 | 0.03 | 0.00 | 0.10 | 0.10 | 0.00 | 0.02 | 0.02 | 98.7 |
| Vendor | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Hauling | 0.02 | 1.26 | 0.01 | 0.26 | 0.27 | 0.01 | 0.07 | 0.08 | 1,017 |
| Average Daily | — | — | — | — | — | — | — | — | — |
| Worker | < 0.005 | < 0.005 | 0.00 | < 0.005 | < 0.005 | 0.00 | < 0.005 | < 0.005 | 1.37 |
| Vendor | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Hauling | < 0.005 | 0.02 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | 13.9 |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Annual | — | — | — | — | — | — | — | — | — |
| Worker | < 0.005 | < 0.005 | 0.00 | < 0.005 | < 0.005 | 0.00 | < 0.005 | < 0.005 | 0.23 |
| Vendor | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Hauling | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | 2.31 |

## 3.3. Site Preparation (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | CO2e |
|---|---|---|---|---|---|---|---|---|---|
| Onsite | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 3.14 | 29.2 | 1.24 | — | 1.24 | 1.14 | — | 1.14 | 5,316 |
| Dust From Material Movement | — | — | — | 7.67 | 7.67 | — | 3.94 | 3.94 | — |
| Onsite truck | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Average Daily | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.09 | 0.80 | 0.03 | — | 0.03 | 0.03 | — | 0.03 | 146 |
| Dust From Material Movement | — | — | — | 0.21 | 0.21 | — | 0.11 | 0.11 | — |
| Onsite truck | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Annual | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.02 | 0.15 | 0.01 | — | 0.01 | 0.01 | — | 0.01 | 24.1 |
| Dust From Material Movement | — | — | — | 0.04 | 0.04 | — | 0.02 | 0.02 | — |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Onsite truck | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Offsite | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — |
| Worker | 0.05 | 0.05 | 0.00 | 0.14 | 0.14 | 0.00 | 0.03 | 0.03 | 138 |
| Vendor | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Hauling | < 0.005 | 0.07 | < 0.005 | 0.01 | 0.02 | < 0.005 | < 0.005 | < 0.005 | 59.0 |
| Average Daily | — | — | — | — | — | — | — | — | — |
| Worker | < 0.005 | < 0.005 | 0.00 | < 0.005 | < 0.005 | 0.00 | < 0.005 | < 0.005 | 3.83 |
| Vendor | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Hauling | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | 1.62 |
| Annual | — | — | — | — | — | — | — | — | — |
| Worker | < 0.005 | < 0.005 | 0.00 | < 0.005 | < 0.005 | 0.00 | < 0.005 | < 0.005 | 0.63 |
| Vendor | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Hauling | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | 0.27 |

## 3.4. Site Preparation (2026) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | CO2e |
|---|---|---|---|---|---|---|---|---|---|
| Onsite | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.50 | 2.59 | 0.10 | — | 0.10 | 0.10 | — | 0.10 | 5,316 |
| Dust From Material Movement | — | — | — | 7.67 | 7.67 | — | 3.94 | 3.94 | — |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Onsite truck | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Average Daily | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.01 | 0.07 | < 0.005 | — | < 0.005 | < 0.005 | — | < 0.005 | 146 |
| Dust From Material Movement | — | — | — | 0.21 | 0.21 | — | 0.11 | 0.11 | — |
| Onsite truck | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Annual | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | < 0.005 | 0.01 | < 0.005 | — | < 0.005 | < 0.005 | — | < 0.005 | 24.1 |
| Dust From Material Movement | — | — | — | 0.04 | 0.04 | — | 0.02 | 0.02 | — |
| Onsite truck | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Offsite | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — |
| Worker | 0.05 | 0.05 | 0.00 | 0.14 | 0.14 | 0.00 | 0.03 | 0.03 | 138 |
| Vendor | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Hauling | < 0.005 | 0.07 | < 0.005 | 0.01 | 0.02 | < 0.005 | < 0.005 | < 0.005 | 59.0 |
| Average Daily | — | — | — | — | — | — | — | — | — |
| Worker | < 0.005 | < 0.005 | 0.00 | < 0.005 | < 0.005 | 0.00 | < 0.005 | < 0.005 | 3.83 |
| Vendor | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Hauling | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | 1.62 |
| Annual | — | — | — | — | — | — | — | — | — |
| Worker | < 0.005 | < 0.005 | 0.00 | < 0.005 | < 0.005 | 0.00 | < 0.005 | < 0.005 | 0.63 |
| Vendor | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Hauling | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | 0.27 |

## 3.5. Grading (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | CO2e |
|---|---|---|---|---|---|---|---|---|---|
| Onsite | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 1.97 | 18.5 | 0.75 | — | 0.75 | 0.69 | — | 0.69 | 3,895 |
| Dust From Material Movement | — | — | — | 2.77 | 2.77 | — | 1.34 | 1.34 | — |
| Onsite truck | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Average Daily | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.06 | 0.61 | 0.02 | — | 0.02 | 0.02 | — | 0.02 | 128 |
| Dust From Material Movement | — | — | — | 0.09 | 0.09 | — | 0.04 | 0.04 | — |
| Onsite truck | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Annual | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.01 | 0.11 | < 0.005 | — | < 0.005 | < 0.005 | — | < 0.005 | 21.2 |
| Dust From Material Movement | — | — | — | 0.02 | 0.02 | — | 0.01 | 0.01 | — |
| Onsite truck | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Offsite | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Worker | 0.07 | 0.07 | 0.00 | 0.21 | 0.21 | 0.00 | 0.05 | 0.05 | 197 |
| Vendor | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Hauling | 0.04 | 2.43 | 0.02 | 0.50 | 0.52 | 0.02 | 0.14 | 0.16 | 1,972 |
| Average Daily | — | — | — | — | — | — | — | — | — |
| Worker | < 0.005 | < 0.005 | 0.00 | 0.01 | 0.01 | 0.00 | < 0.005 | < 0.005 | 6.57 |
| Vendor | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Hauling | < 0.005 | 0.08 | < 0.005 | 0.02 | 0.02 | < 0.005 | < 0.005 | 0.01 | 64.9 |
| Annual | — | — | — | — | — | — | — | — | — |
| Worker | < 0.005 | < 0.005 | 0.00 | < 0.005 | < 0.005 | 0.00 | < 0.005 | < 0.005 | 1.09 |
| Vendor | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Hauling | < 0.005 | 0.01 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | 10.7 |

## 3.6. Grading (2026) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | CO2e |
|---|---|---|---|---|---|---|---|---|---|
| Onsite | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.42 | 5.39 | 0.07 | — | 0.07 | 0.07 | — | 0.07 | 3,895 |
| Dust From Material Movement | — | — | — | 2.77 | 2.77 | — | 1.34 | 1.34 | — |
| Onsite truck | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Average Daily | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.01 | 0.18 | < 0.005 | — | < 0.005 | < 0.005 | — | < 0.005 | 128 |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Dust From Material Movement | — | — | — | 0.09 | 0.09 | — | 0.04 | 0.04 | — |
| Onsite truck | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Annual | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | < 0.005 | 0.03 | < 0.005 | — | < 0.005 | < 0.005 | — | < 0.005 | 21.2 |
| Dust From Material Movement | — | — | — | 0.02 | 0.02 | — | 0.01 | 0.01 | — |
| Onsite truck | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Offsite | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — |
| Worker | 0.07 | 0.07 | 0.00 | 0.21 | 0.21 | 0.00 | 0.05 | 0.05 | 197 |
| Vendor | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Hauling | 0.04 | 2.43 | 0.02 | 0.50 | 0.52 | 0.02 | 0.14 | 0.16 | 1,972 |
| Average Daily | — | — | — | — | — | — | — | — | — |
| Worker | < 0.005 | < 0.005 | 0.00 | 0.01 | 0.01 | 0.00 | < 0.005 | < 0.005 | 6.57 |
| Vendor | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Hauling | < 0.005 | 0.08 | < 0.005 | 0.02 | 0.02 | < 0.005 | < 0.005 | 0.01 | 64.9 |
| Annual | — | — | — | — | — | — | — | — | — |
| Worker | < 0.005 | < 0.005 | 0.00 | < 0.005 | < 0.005 | 0.00 | < 0.005 | < 0.005 | 1.09 |
| Vendor | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Hauling | < 0.005 | 0.01 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | 10.7 |

## 3.7. Building Construction (2026) - Unmitigated

### Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | CO2e |
|---|---|---|---|---|---|---|---|---|---|

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Onsite | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 1.17 | 9.42 | 0.30 | — | 0.30 | 0.28 | — | 0.28 | 1,914 |
| Onsite truck | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 1.17 | 9.42 | 0.30 | — | 0.30 | 0.28 | — | 0.28 | 1,914 |
| Onsite truck | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Average Daily | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.42 | 3.39 | 0.11 | — | 0.11 | 0.10 | — | 0.10 | 689 |
| Onsite truck | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Annual | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.08 | 0.62 | 0.02 | — | 0.02 | 0.02 | — | 0.02 | 114 |
| Onsite truck | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Offsite | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — |
| Worker | 0.29 | 0.20 | 0.00 | 0.76 | 0.76 | 0.00 | 0.18 | 0.18 | 787 |
| Vendor | 0.01 | 0.45 | 0.01 | 0.10 | 0.10 | 0.01 | 0.03 | 0.03 | 380 |
| Hauling | < 0.005 | 0.15 | < 0.005 | 0.03 | 0.03 | < 0.005 | 0.01 | 0.01 | 126 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — |
| Worker | 0.26 | 0.26 | 0.00 | 0.76 | 0.76 | 0.00 | 0.18 | 0.18 | 728 |
| Vendor | 0.01 | 0.48 | 0.01 | 0.10 | 0.10 | 0.01 | 0.03 | 0.03 | 379 |
| Hauling | < 0.005 | 0.16 | < 0.005 | 0.03 | 0.03 | < 0.005 | 0.01 | 0.01 | 126 |
| Average Daily | — | — | — | — | — | — | — | — | — |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Worker | 0.09 | 0.08 | 0.00 | 0.27 | 0.27 | 0.00 | 0.06 | 0.06 | 265 |
| Vendor | < 0.005 | 0.17 | < 0.005 | 0.03 | 0.04 | < 0.005 | 0.01 | 0.01 | 137 |
| Hauling | < 0.005 | 0.05 | < 0.005 | 0.01 | 0.01 | < 0.005 | < 0.005 | < 0.005 | 45.4 |
| Annual | — | — | — | — | — | — | — | — | — |
| Worker | 0.02 | 0.01 | 0.00 | 0.05 | 0.05 | 0.00 | 0.01 | 0.01 | 43.9 |
| Vendor | < 0.005 | 0.03 | < 0.005 | 0.01 | 0.01 | < 0.005 | < 0.005 | < 0.005 | 22.6 |
| Hauling | < 0.005 | 0.01 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | 7.52 |

## 3.8. Building Construction (2026) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | CO2e |
|---|---|---|---|---|---|---|---|---|---|
| Onsite | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.24 | 4.93 | 0.03 | — | 0.03 | 0.03 | — | 0.03 | 1,914 |
| Onsite truck | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.24 | 4.93 | 0.03 | — | 0.03 | 0.03 | — | 0.03 | 1,914 |
| Onsite truck | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Average Daily | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.09 | 1.77 | 0.01 | — | 0.01 | 0.01 | — | 0.01 | 689 |
| Onsite truck | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Annual | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.02 | 0.32 | < 0.005 | — | < 0.005 | < 0.005 | — | < 0.005 | 114 |
| Onsite truck | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Offsite | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — |
| Worker | 0.29 | 0.20 | 0.00 | 0.76 | 0.76 | 0.00 | 0.18 | 0.18 | 787 |
| Vendor | 0.01 | 0.45 | 0.01 | 0.10 | 0.10 | 0.01 | 0.03 | 0.03 | 380 |
| Hauling | < 0.005 | 0.15 | < 0.005 | 0.03 | 0.03 | < 0.005 | 0.01 | 0.01 | 126 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — |
| Worker | 0.26 | 0.26 | 0.00 | 0.76 | 0.76 | 0.00 | 0.18 | 0.18 | 728 |
| Vendor | 0.01 | 0.48 | 0.01 | 0.10 | 0.10 | 0.01 | 0.03 | 0.03 | 379 |
| Hauling | < 0.005 | 0.16 | < 0.005 | 0.03 | 0.03 | < 0.005 | 0.01 | 0.01 | 126 |
| Average Daily | — | — | — | — | — | — | — | — | — |
| Worker | 0.09 | 0.08 | 0.00 | 0.27 | 0.27 | 0.00 | 0.06 | 0.06 | 265 |
| Vendor | < 0.005 | 0.17 | < 0.005 | 0.03 | 0.04 | < 0.005 | 0.01 | 0.01 | 137 |
| Hauling | < 0.005 | 0.05 | < 0.005 | 0.01 | 0.01 | < 0.005 | < 0.005 | < 0.005 | 45.4 |
| Annual | — | — | — | — | — | — | — | — | — |
| Worker | 0.02 | 0.01 | 0.00 | 0.05 | 0.05 | 0.00 | 0.01 | 0.01 | 43.9 |
| Vendor | < 0.005 | 0.03 | < 0.005 | 0.01 | 0.01 | < 0.005 | < 0.005 | < 0.005 | 22.6 |
| Hauling | < 0.005 | 0.01 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | 7.52 |

## 3.9. Building Construction (2027) - Unmitigated

### Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | CO2e |
|---|---|---|---|---|---|---|---|---|---|
| Onsite | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 1.11 | 9.06 | 0.26 | — | 0.26 | 0.24 | — | 0.24 | 1,914 |
| Onsite truck | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 1.11 | 9.06 | 0.26 | — | 0.26 | 0.24 | — | 0.24 | 1,914 |
| Onsite truck | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Average Daily | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.39 | 3.19 | 0.09 | — | 0.09 | 0.09 | — | 0.09 | 674 |
| Onsite truck | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Annual | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.07 | 0.58 | 0.02 | — | 0.02 | 0.02 | — | 0.02 | 112 |
| Onsite truck | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Offsite | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — |
| Worker | 0.26 | 0.19 | 0.00 | 0.76 | 0.76 | 0.00 | 0.18 | 0.18 | 772 |
| Vendor | 0.01 | 0.43 | 0.01 | 0.10 | 0.10 | 0.01 | 0.03 | 0.03 | 372 |
| Hauling | < 0.005 | 0.14 | < 0.005 | 0.03 | 0.03 | < 0.005 | 0.01 | 0.01 | 123 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — |
| Worker | 0.25 | 0.23 | 0.00 | 0.76 | 0.76 | 0.00 | 0.18 | 0.18 | 714 |
| Vendor | 0.01 | 0.45 | 0.01 | 0.10 | 0.10 | 0.01 | 0.03 | 0.03 | 372 |
| Hauling | < 0.005 | 0.15 | < 0.005 | 0.03 | 0.03 | < 0.005 | 0.01 | 0.01 | 123 |
| Average Daily | — | — | — | — | — | — | — | — | — |
| Worker | 0.09 | 0.08 | 0.00 | 0.27 | 0.27 | 0.00 | 0.06 | 0.06 | 255 |
| Vendor | < 0.005 | 0.16 | < 0.005 | 0.03 | 0.04 | < 0.005 | 0.01 | 0.01 | 131 |
| Hauling | < 0.005 | 0.05 | < 0.005 | 0.01 | 0.01 | < 0.005 | < 0.005 | < 0.005 | 43.4 |
| Annual | — | — | — | — | — | — | — | — | — |
| Worker | 0.02 | 0.01 | 0.00 | 0.05 | 0.05 | 0.00 | 0.01 | 0.01 | 42.2 |
| Vendor | < 0.005 | 0.03 | < 0.005 | 0.01 | 0.01 | < 0.005 | < 0.005 | < 0.005 | 21.7 |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Hauling | < 0.005 | 0.01 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | 7.18 |

## 3.10. Building Construction (2027) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | CO2e |
|---|---|---|---|---|---|---|---|---|---|
| Onsite | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.24 | 4.93 | 0.03 | — | 0.03 | 0.03 | — | 0.03 | 1,914 |
| Onsite truck | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.24 | 4.93 | 0.03 | — | 0.03 | 0.03 | — | 0.03 | 1,914 |
| Onsite truck | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Average Daily | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.08 | 1.74 | 0.01 | — | 0.01 | 0.01 | — | 0.01 | 674 |
| Onsite truck | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Annual | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.02 | 0.32 | < 0.005 | — | < 0.005 | < 0.005 | — | < 0.005 | 112 |
| Onsite truck | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Offsite | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — |
| Worker | 0.26 | 0.19 | 0.00 | 0.76 | 0.76 | 0.00 | 0.18 | 0.18 | 772 |
| Vendor | 0.01 | 0.43 | 0.01 | 0.10 | 0.10 | 0.01 | 0.03 | 0.03 | 372 |
| Hauling | < 0.005 | 0.14 | < 0.005 | 0.03 | 0.03 | < 0.005 | 0.01 | 0.01 | 123 |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — |
| Worker | 0.25 | 0.23 | 0.00 | 0.76 | 0.76 | 0.00 | 0.18 | 0.18 | 714 |
| Vendor | 0.01 | 0.45 | 0.01 | 0.10 | 0.10 | 0.01 | 0.03 | 0.03 | 372 |
| Hauling | < 0.005 | 0.15 | < 0.005 | 0.03 | 0.03 | < 0.005 | 0.01 | 0.01 | 123 |
| Average Daily | — | — | — | — | — | — | — | — | — |
| Worker | 0.09 | 0.08 | 0.00 | 0.27 | 0.27 | 0.00 | 0.06 | 0.06 | 255 |
| Vendor | < 0.005 | 0.16 | < 0.005 | 0.03 | 0.04 | < 0.005 | 0.01 | 0.01 | 131 |
| Hauling | < 0.005 | 0.05 | < 0.005 | 0.01 | 0.01 | < 0.005 | < 0.005 | < 0.005 | 43.4 |
| Annual | — | — | — | — | — | — | — | — | — |
| Worker | 0.02 | 0.01 | 0.00 | 0.05 | 0.05 | 0.00 | 0.01 | 0.01 | 42.2 |
| Vendor | < 0.005 | 0.03 | < 0.005 | 0.01 | 0.01 | < 0.005 | < 0.005 | < 0.005 | 21.7 |
| Hauling | < 0.005 | 0.01 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | 7.18 |

## 3.11. Paving (2027) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | CO2e |
|---|---|---|---|---|---|---|---|---|---|
| Onsite | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.66 | 6.09 | 0.24 | — | 0.24 | 0.22 | — | 0.22 | 1,355 |
| Paving | 0.00 | — | — | — | — | — | — | — | — |
| Onsite truck | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.66 | 6.09 | 0.24 | — | 0.24 | 0.22 | — | 0.22 | 1,355 |
| Paving | 0.00 | — | — | — | — | — | — | — | — |
| Onsite truck | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Average Daily | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.14 | 1.25 | 0.05 | — | 0.05 | 0.05 | — | 0.05 | 278 |
| Paving | 0.00 | — | — | — | — | — | — | — | — |
| Onsite truck | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Annual | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.02 | 0.23 | 0.01 | — | 0.01 | 0.01 | — | 0.01 | 46.1 |
| Paving | 0.00 | — | — | — | — | — | — | — | — |
| Onsite truck | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Offsite | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — |
| Worker | 0.06 | 0.04 | 0.00 | 0.17 | 0.17 | 0.00 | 0.04 | 0.04 | 168 |
| Vendor | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Hauling | < 0.005 | 0.06 | < 0.005 | 0.01 | 0.01 | < 0.005 | < 0.005 | < 0.005 | 51.9 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — |
| Worker | 0.05 | 0.05 | 0.00 | 0.17 | 0.17 | 0.00 | 0.04 | 0.04 | 155 |
| Vendor | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Hauling | < 0.005 | 0.06 | < 0.005 | 0.01 | 0.01 | < 0.005 | < 0.005 | < 0.005 | 51.8 |
| Average Daily | — | — | — | — | — | — | — | — | — |
| Worker | 0.01 | 0.01 | 0.00 | 0.03 | 0.03 | 0.00 | 0.01 | 0.01 | 32.2 |
| Vendor | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Hauling | < 0.005 | 0.01 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | 10.7 |
| Annual | — | — | — | — | — | — | — | — | — |
| Worker | < 0.005 | < 0.005 | 0.00 | 0.01 | 0.01 | 0.00 | < 0.005 | < 0.005 | 5.34 |
| Vendor | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Hauling | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | 1.76 |

## 3.12. Paving (2027) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | CO2e |
|---|---|---|---|---|---|---|---|---|---|
| Onsite | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.21 | 2.14 | 0.05 | — | 0.05 | 0.05 | — | 0.05 | 1,355 |
| Paving | 0.00 | — | — | — | — | — | — | — | — |
| Onsite truck | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.21 | 2.14 | 0.05 | — | 0.05 | 0.05 | — | 0.05 | 1,355 |
| Paving | 0.00 | — | — | — | — | — | — | — | — |
| Onsite truck | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Average Daily | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.04 | 0.44 | 0.01 | — | 0.01 | 0.01 | — | 0.01 | 278 |
| Paving | 0.00 | — | — | — | — | — | — | — | — |
| Onsite truck | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Annual | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.01 | 0.08 | < 0.005 | — | < 0.005 | < 0.005 | — | < 0.005 | 46.1 |
| Paving | 0.00 | — | — | — | — | — | — | — | — |
| Onsite truck | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Offsite | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — |
| Worker | 0.06 | 0.04 | 0.00 | 0.17 | 0.17 | 0.00 | 0.04 | 0.04 | 168 |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Vendor | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Hauling | < 0.005 | 0.06 | < 0.005 | 0.01 | 0.01 | < 0.005 | < 0.005 | < 0.005 | 51.9 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — |
| Worker | 0.05 | 0.05 | 0.00 | 0.17 | 0.17 | 0.00 | 0.04 | 0.04 | 155 |
| Vendor | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Hauling | < 0.005 | 0.06 | < 0.005 | 0.01 | 0.01 | < 0.005 | < 0.005 | < 0.005 | 51.8 |
| Average Daily | — | — | — | — | — | — | — | — | — |
| Worker | 0.01 | 0.01 | 0.00 | 0.03 | 0.03 | 0.00 | 0.01 | 0.01 | 32.2 |
| Vendor | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Hauling | < 0.005 | 0.01 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | 10.7 |
| Annual | — | — | — | — | — | — | — | — | — |
| Worker | < 0.005 | < 0.005 | 0.00 | 0.01 | 0.01 | 0.00 | < 0.005 | < 0.005 | 5.34 |
| Vendor | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Hauling | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | 1.76 |

## 3.13. Architectural Coating (2027) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | CO2e |
|---|---|---|---|---|---|---|---|---|---|
| Onsite | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.32 | 2.46 | 0.06 | — | 0.06 | 0.05 | — | 0.05 | 414 |
| Architectural Coatings | 13.6 | — | — | — | — | — | — | — | — |
| Onsite truck | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Off-Road Equipment | 0.32 | 2.46 | 0.06 | — | 0.06 | 0.05 | — | 0.05 | 414 |
| Architectural Coatings | 13.6 | — | — | — | — | — | — | — | — |
| Onsite truck | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Average Daily | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.12 | 0.94 | 0.02 | — | 0.02 | 0.02 | — | 0.02 | 159 |
| Architectural Coatings | 5.23 | — | — | — | — | — | — | — | — |
| Onsite truck | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Annual | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.02 | 0.17 | < 0.005 | — | < 0.005 | < 0.005 | — | < 0.005 | 26.3 |
| Architectural Coatings | 0.96 | — | — | — | — | — | — | — | — |
| Onsite truck | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Offsite | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — |
| Worker | 0.05 | 0.04 | 0.00 | 0.15 | 0.15 | 0.00 | 0.04 | 0.04 | 154 |
| Vendor | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Hauling | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — |
| Worker | 0.05 | 0.05 | 0.00 | 0.15 | 0.15 | 0.00 | 0.04 | 0.04 | 143 |
| Vendor | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Hauling | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Average Daily | — | — | — | — | — | — | — | — | — |
| Worker | 0.02 | 0.02 | 0.00 | 0.06 | 0.06 | 0.00 | 0.01 | 0.01 | 55.5 |
| Vendor | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Hauling | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Annual | — | — | — | — | — | — | — | — | — |
| Worker | < 0.005 | < 0.005 | 0.00 | 0.01 | 0.01 | 0.00 | < 0.005 | < 0.005 | 9.18 |
| Vendor | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Hauling | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |

## 3.14. Architectural Coating (2027) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | CO2e |
|---|---|---|---|---|---|---|---|---|---|
| Onsite | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.06 | 1.83 | 0.01 | — | 0.01 | 0.01 | — | 0.01 | 414 |
| Architectural Coatings | 13.6 | — | — | — | — | — | — | — | — |
| Onsite truck | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.06 | 1.83 | 0.01 | — | 0.01 | 0.01 | — | 0.01 | 414 |
| Architectural Coatings | 13.6 | — | — | — | — | — | — | — | — |
| Onsite truck | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Average Daily | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.02 | 0.70 | < 0.005 | — | < 0.005 | < 0.005 | — | < 0.005 | 159 |
| Architectural Coatings | 5.23 | — | — | — | — | — | — | — | — |
| Onsite truck | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Annual | — | — | — | — | — | — | — | — | — |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Off-Road Equipment | < 0.005 | 0.13 | < 0.005 | — | < 0.005 | < 0.005 | — | < 0.005 | 26.3 |
| Architectural Coatings | 0.96 | — | — | — | — | — | — | — | — |
| Onsite truck | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Offsite | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — |
| Worker | 0.05 | 0.04 | 0.00 | 0.15 | 0.15 | 0.00 | 0.04 | 0.04 | 154 |
| Vendor | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Hauling | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — |
| Worker | 0.05 | 0.05 | 0.00 | 0.15 | 0.15 | 0.00 | 0.04 | 0.04 | 143 |
| Vendor | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Hauling | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Average Daily | — | — | — | — | — | — | — | — | — |
| Worker | 0.02 | 0.02 | 0.00 | 0.06 | 0.06 | 0.00 | 0.01 | 0.01 | 55.5 |
| Vendor | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Hauling | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Annual | — | — | — | — | — | — | — | — | — |
| Worker | < 0.005 | < 0.005 | 0.00 | 0.01 | 0.01 | 0.00 | < 0.005 | < 0.005 | 9.18 |
| Vendor | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Hauling | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |

## 3.15. Trenching (2026) - Unmitigated

### Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | CO2e |
|---|---|---|---|---|---|---|---|---|---|
| Onsite | — | — | — | — | — | — | — | — | — |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.20 | 1.86 | 0.06 | — | 0.06 | 0.05 | — | 0.05 | 433 |
| Onsite truck | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — |
| Average Daily | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.01 | 0.08 | < 0.005 | — | < 0.005 | < 0.005 | — | < 0.005 | 17.8 |
| Onsite truck | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Annual | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | < 0.005 | 0.01 | < 0.005 | — | < 0.005 | < 0.005 | — | < 0.005 | 2.95 |
| Onsite truck | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Offsite | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — |
| Worker | 0.02 | 0.01 | 0.00 | 0.04 | 0.04 | 0.00 | 0.01 | 0.01 | 42.7 |
| Vendor | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Hauling | < 0.005 | 0.03 | < 0.005 | 0.01 | 0.01 | < 0.005 | < 0.005 | < 0.005 | 29.5 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — |
| Average Daily | — | — | — | — | — | — | — | — | — |
| Worker | < 0.005 | < 0.005 | 0.00 | < 0.005 | < 0.005 | 0.00 | < 0.005 | < 0.005 | 1.64 |
| Vendor | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Hauling | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | 1.21 |
| Annual | — | — | — | — | — | — | — | — | — |
| Worker | < 0.005 | < 0.005 | 0.00 | < 0.005 | < 0.005 | 0.00 | < 0.005 | < 0.005 | 0.27 |
| Vendor | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Hauling | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | 0.20 |

## 3.16. Trenching (2026) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | CO2e |
|---|---|---|---|---|---|---|---|---|---|
| Onsite | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.05 | 0.81 | 0.01 | — | 0.01 | 0.01 | — | 0.01 | 433 |
| Onsite truck | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — |
| Average Daily | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | < 0.005 | 0.03 | < 0.005 | — | < 0.005 | < 0.005 | — | < 0.005 | 17.8 |
| Onsite truck | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Annual | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | < 0.005 | 0.01 | < 0.005 | — | < 0.005 | < 0.005 | — | < 0.005 | 2.95 |
| Onsite truck | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Offsite | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — |
| Worker | 0.02 | 0.01 | 0.00 | 0.04 | 0.04 | 0.00 | 0.01 | 0.01 | 42.7 |
| Vendor | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Hauling | < 0.005 | 0.03 | < 0.005 | 0.01 | 0.01 | < 0.005 | < 0.005 | < 0.005 | 29.5 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — |
| Average Daily | — | — | — | — | — | — | — | — | — |
| Worker | < 0.005 | < 0.005 | 0.00 | < 0.005 | < 0.005 | 0.00 | < 0.005 | < 0.005 | 1.64 |
| Vendor | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Hauling | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | 1.21 |
| Annual | — | — | — | — | — | — | — | — | — |
| Worker | < 0.005 | < 0.005 | 0.00 | < 0.005 | < 0.005 | 0.00 | < 0.005 | < 0.005 | 0.27 |
| Vendor | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Hauling | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | 0.20 |

# 4. Operations Emissions Details

## 4.1. Mobile Emissions by Land Use

### 4.1.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Land Use | ROG | NOx | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | CO2e |
|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — |
| Apartments Mid Rise | 1.36 | 0.88 | 0.01 | 2.45 | 2.47 | 0.01 | 0.62 | 0.64 | 2,610 |
| Parking Lot | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Total | 1.36 | 0.88 | 0.01 | 2.45 | 2.47 | 0.01 | 0.62 | 0.64 | 2,610 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — |
| Apartments Mid Rise | 1.30 | 1.03 | 0.01 | 2.45 | 2.47 | 0.01 | 0.62 | 0.64 | 2,453 |
| Parking Lot | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Total | 1.30 | 1.03 | 0.01 | 2.45 | 2.47 | 0.01 | 0.62 | 0.64 | 2,453 |
| Annual | — | — | — | — | — | — | — | — | — |
| Apartments Mid Rise | 0.22 | 0.17 | < 0.005 | 0.43 | 0.43 | < 0.005 | 0.11 | 0.11 | 390 |
| Parking Lot | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Total | 0.22 | 0.17 | < 0.005 | 0.43 | 0.43 | < 0.005 | 0.11 | 0.11 | 390 |

### 4.1.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Land Use | ROG | NOx | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | CO2e |
|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — |
| Apartments Mid Rise | 1.36 | 0.88 | 0.01 | 2.45 | 2.47 | 0.01 | 0.62 | 0.64 | 2,610 |
| Parking Lot | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Total | 1.36 | 0.88 | 0.01 | 2.45 | 2.47 | 0.01 | 0.62 | 0.64 | 2,610 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — |
| Apartments Mid Rise | 1.30 | 1.03 | 0.01 | 2.45 | 2.47 | 0.01 | 0.62 | 0.64 | 2,453 |
| Parking Lot | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Total | 1.30 | 1.03 | 0.01 | 2.45 | 2.47 | 0.01 | 0.62 | 0.64 | 2,453 |
| Annual | — | — | — | — | — | — | — | — | — |
| Apartments Mid Rise | 0.22 | 0.17 | < 0.005 | 0.43 | 0.43 | < 0.005 | 0.11 | 0.11 | 390 |
| Parking Lot | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Total | 0.22 | 0.17 | < 0.005 | 0.43 | 0.43 | < 0.005 | 0.11 | 0.11 | 390 |

## 4.2. Energy

### 4.2.1. Electricity Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Land Use | ROG | NOx | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | CO2e |
|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — |
| Apartments Mid Rise | — | — | — | — | — | — | — | — | 198 |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Parking Lot | — | — | — | — | — | — | — | — | 8.64 |
| Total | — | — | — | — | — | — | — | — | 206 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — |
| Apartments Mid Rise | — | — | — | — | — | — | — | — | 198 |
| Parking Lot | — | — | — | — | — | — | — | — | 8.64 |
| Total | — | — | — | — | — | — | — | — | 206 |
| Annual | — | — | — | — | — | — | — | — | — |
| Apartments Mid Rise | — | — | — | — | — | — | — | — | 32.7 |
| Parking Lot | — | — | — | — | — | — | — | — | 1.43 |
| Total | — | — | — | — | — | — | — | — | 34.2 |

### 4.2.2. Electricity Emissions By Land Use - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Land Use | ROG | NOx | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | CO2e |
|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — |
| Apartments Mid Rise | — | — | — | — | — | — | — | — | 198 |
| Parking Lot | — | — | — | — | — | — | — | — | 8.64 |
| Total | — | — | — | — | — | — | — | — | 206 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — |
| Apartments Mid Rise | — | — | — | — | — | — | — | — | 198 |
| Parking Lot | — | — | — | — | — | — | — | — | 8.64 |
| Total | — | — | — | — | — | — | — | — | 206 |
| Annual | — | — | — | — | — | — | — | — | — |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Apartments Mid Rise | — | — | — | — | — | — | — | — | 32.7 |
| Parking Lot | — | — | — | — | — | — | — | — | 1.43 |
| Total | — | — | — | — | — | — | — | — | 34.2 |

### 4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Land Use | ROG | NOx | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | CO2e |
|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — |
| Apartments Mid Rise | 0.02 | 0.29 | 0.02 | — | 0.02 | 0.02 | — | 0.02 | 365 |
| Parking Lot | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | — | 0.00 | 0.00 |
| Total | 0.02 | 0.29 | 0.02 | — | 0.02 | 0.02 | — | 0.02 | 365 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — |
| Apartments Mid Rise | 0.02 | 0.29 | 0.02 | — | 0.02 | 0.02 | — | 0.02 | 365 |
| Parking Lot | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | — | 0.00 | 0.00 |
| Total | 0.02 | 0.29 | 0.02 | — | 0.02 | 0.02 | — | 0.02 | 365 |
| Annual | — | — | — | — | — | — | — | — | — |
| Apartments Mid Rise | < 0.005 | 0.05 | < 0.005 | — | < 0.005 | < 0.005 | — | < 0.005 | 60.4 |
| Parking Lot | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | — | 0.00 | 0.00 |
| Total | < 0.005 | 0.05 | < 0.005 | — | < 0.005 | < 0.005 | — | < 0.005 | 60.4 |

### 4.2.4. Natural Gas Emissions By Land Use - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Land Use | ROG | NOx | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | CO2e |
|---|---|---|---|---|---|---|---|---|---|

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — |
| Apartments Mid Rise | 0.02 | 0.29 | 0.02 | — | 0.02 | 0.02 | — | 0.02 | 365 |
| Parking Lot | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | — | 0.00 | 0.00 |
| Total | 0.02 | 0.29 | 0.02 | — | 0.02 | 0.02 | — | 0.02 | 365 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — |
| Apartments Mid Rise | 0.02 | 0.29 | 0.02 | — | 0.02 | 0.02 | — | 0.02 | 365 |
| Parking Lot | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | — | 0.00 | 0.00 |
| Total | 0.02 | 0.29 | 0.02 | — | 0.02 | 0.02 | — | 0.02 | 365 |
| Annual | — | — | — | — | — | — | — | — | — |
| Apartments Mid Rise | < 0.005 | 0.05 | < 0.005 | — | < 0.005 | < 0.005 | — | < 0.005 | 60.4 |
| Parking Lot | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | — | 0.00 | 0.00 |
| Total | < 0.005 | 0.05 | < 0.005 | — | < 0.005 | < 0.005 | — | < 0.005 | 60.4 |

## 4.3. Area Emissions by Source

### 4.3.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Source | ROG | NOx | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | CO2e |
|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — |
| Hearths | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | — | 0.00 | 0.00 |
| Consumer Products | 2.90 | — | — | — | — | — | — | — | — |
| Architectural Coatings | 0.52 | — | — | — | — | — | — | — | — |
| Landscape Equipment | 0.63 | 0.07 | < 0.005 | — | < 0.005 | < 0.005 | — | < 0.005 | 19.5 |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Total | 4.05 | 0.07 | < 0.005 | — | < 0.005 | < 0.005 | — | < 0.005 | 19.5 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — |
| Hearths | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | — | 0.00 | 0.00 |
| Consumer Products | 2.90 | — | — | — | — | — | — | — | — |
| Architectural Coatings | 0.52 | — | — | — | — | — | — | — | — |
| Total | 3.42 | 0.00 | 0.00 | — | 0.00 | 0.00 | — | 0.00 | 0.00 |
| Annual | — | — | — | — | — | — | — | — | — |
| Hearths | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | — | 0.00 | 0.00 |
| Consumer Products | 0.53 | — | — | — | — | — | — | — | — |
| Architectural Coatings | 0.09 | — | — | — | — | — | — | — | — |
| Landscape Equipment | 0.06 | 0.01 | < 0.005 | — | < 0.005 | < 0.005 | — | < 0.005 | 1.59 |
| Total | 0.68 | 0.01 | < 0.005 | — | < 0.005 | < 0.005 | — | < 0.005 | 1.59 |

### 4.3.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Source | ROG | NOx | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | CO2e |
|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — |
| Hearths | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | — | 0.00 | 0.00 |
| Consumer Products | 2.90 | — | — | — | — | — | — | — | — |
| Architectural Coatings | 0.52 | — | — | — | — | — | — | — | — |
| Landscape Equipment | 0.63 | 0.07 | < 0.005 | — | < 0.005 | < 0.005 | — | < 0.005 | 19.5 |
| Total | 4.05 | 0.07 | < 0.005 | — | < 0.005 | < 0.005 | — | < 0.005 | 19.5 |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — |
| Hearths | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | — | 0.00 | 0.00 |
| Consumer Products | 2.90 | — | — | — | — | — | — | — | — |
| Architectural Coatings | 0.52 | — | — | — | — | — | — | — | — |
| Total | 3.42 | 0.00 | 0.00 | — | 0.00 | 0.00 | — | 0.00 | 0.00 |
| Annual | — | — | — | — | — | — | — | — | — |
| Hearths | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | — | 0.00 | 0.00 |
| Consumer Products | 0.53 | — | — | — | — | — | — | — | — |
| Architectural Coatings | 0.09 | — | — | — | — | — | — | — | — |
| Landscape Equipment | 0.06 | 0.01 | < 0.005 | — | < 0.005 | < 0.005 | — | < 0.005 | 1.59 |
| Total | 0.68 | 0.01 | < 0.005 | — | < 0.005 | < 0.005 | — | < 0.005 | 1.59 |

## 4.4. Water Emissions by Land Use

### 4.4.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Land Use | ROG | NOx | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | CO2e |
|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — |
| Apartments Mid Rise | — | — | — | — | — | — | — | — | 31.0 |
| Parking Lot | — | — | — | — | — | — | — | — | 0.00 |
| Total | — | — | — | — | — | — | — | — | 31.0 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Apartments Mid Rise | — | — | — | — | — | — | — | — | 31.0 |
| Parking Lot | — | — | — | — | — | — | — | — | 0.00 |
| Total | — | — | — | — | — | — | — | — | 31.0 |
| Annual | — | — | — | — | — | — | — | — | — |
| Apartments Mid Rise | — | — | — | — | — | — | — | — | 5.13 |
| Parking Lot | — | — | — | — | — | — | — | — | 0.00 |
| Total | — | — | — | — | — | — | — | — | 5.13 |

### 4.4.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Land Use | ROG | NOx | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | CO2e |
|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — |
| Apartments Mid Rise | — | — | — | — | — | — | — | — | 31.0 |
| Parking Lot | — | — | — | — | — | — | — | — | 0.00 |
| Total | — | — | — | — | — | — | — | — | 31.0 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — |
| Apartments Mid Rise | — | — | — | — | — | — | — | — | 31.0 |
| Parking Lot | — | — | — | — | — | — | — | — | 0.00 |
| Total | — | — | — | — | — | — | — | — | 31.0 |
| Annual | — | — | — | — | — | — | — | — | — |
| Apartments Mid Rise | — | — | — | — | — | — | — | — | 5.13 |
| Parking Lot | — | — | — | — | — | — | — | — | 0.00 |
| Total | — | — | — | — | — | — | — | — | 5.13 |

## 4.5. Waste Emissions by Land Use

### 4.5.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Land Use | ROG | NOx | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | CO2e |
|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — |
| Apartments Mid Rise | — | — | — | — | — | — | — | — | 179 |
| Parking Lot | — | — | — | — | — | — | — | — | 0.00 |
| Total | — | — | — | — | — | — | — | — | 179 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — |
| Apartments Mid Rise | — | — | — | — | — | — | — | — | 179 |
| Parking Lot | — | — | — | — | — | — | — | — | 0.00 |
| Total | — | — | — | — | — | — | — | — | 179 |
| Annual | — | — | — | — | — | — | — | — | — |
| Apartments Mid Rise | — | — | — | — | — | — | — | — | 29.6 |
| Parking Lot | — | — | — | — | — | — | — | — | 0.00 |
| Total | — | — | — | — | — | — | — | — | 29.6 |

### 4.5.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Land Use | ROG | NOx | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | CO2e |
|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — |
| Apartments Mid Rise | — | — | — | — | — | — | — | — | 179 |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Parking Lot | — | — | — | — | — | — | — | — | 0.00 |
| Total | — | — | — | — | — | — | — | — | 179 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — |
| Apartments Mid Rise | — | — | — | — | — | — | — | — | 179 |
| Parking Lot | — | — | — | — | — | — | — | — | 0.00 |
| Total | — | — | — | — | — | — | — | — | 179 |
| Annual | — | — | — | — | — | — | — | — | — |
| Apartments Mid Rise | — | — | — | — | — | — | — | — | 29.6 |
| Parking Lot | — | — | — | — | — | — | — | — | 0.00 |
| Total | — | — | — | — | — | — | — | — | 29.6 |

## 4.6. Refrigerant Emissions by Land Use

### 4.6.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Land Use | ROG | NOx | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | CO2e |
|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — |
| Apartments Mid Rise | — | — | — | — | — | — | — | — | 0.97 |
| Total | — | — | — | — | — | — | — | — | 0.97 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — |
| Apartments Mid Rise | — | — | — | — | — | — | — | — | 0.97 |
| Total | — | — | — | — | — | — | — | — | 0.97 |
| Annual | — | — | — | — | — | — | — | — | — |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Apartments Mid Rise | — | — | — | — | — | — | — | — | 0.16 |
| Total | — | — | — | — | — | — | — | — | 0.16 |

### 4.6.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Land Use | ROG | NOx | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | CO2e |
|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — |
| Apartments Mid Rise | — | — | — | — | — | — | — | — | 0.97 |
| Total | — | — | — | — | — | — | — | — | 0.97 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — |
| Apartments Mid Rise | — | — | — | — | — | — | — | — | 0.97 |
| Total | — | — | — | — | — | — | — | — | 0.97 |
| Annual | — | — | — | — | — | — | — | — | — |
| Apartments Mid Rise | — | — | — | — | — | — | — | — | 0.16 |
| Total | — | — | — | — | — | — | — | — | 0.16 |

## 4.7. Offroad Emissions By Equipment Type

### 4.7.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Equipment Type | ROG | NOx | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | CO2e |
|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — |
| Annual | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — |

### 4.7.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Equipment Type | ROG | NOx | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | CO2e |
|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — |
| Annual | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — |

## 4.8. Stationary Emissions By Equipment Type

### 4.8.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Equipment Type | ROG | NOx | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | CO2e |
|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — |
| Annual | — | — | — | — | — | — | — | — | — |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Total | — | — | — | — | — | — | — | — | — |

### 4.8.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Equipment Type | ROG | NOx | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | CO2e |
|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — |
| Annual | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — |

## 4.9. User Defined Emissions By Equipment Type

### 4.9.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Equipment Type | ROG | NOx | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | CO2e |
|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — |
| Annual | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — |

### 4.9.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Equipment Type | ROG | NOx | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | CO2e |
|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — |
| Annual | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — |

## 4.10. Soil Carbon Accumulation By Vegetation Type

### 4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Vegetation | ROG | NOx | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | CO2e |
|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — |
| Annual | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — |

### 4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Land Use | ROG | NOx | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | CO2e |
|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Total | — | — | — | — | — | — | — | — | — |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — |
| Annual | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — |

### 4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Species | ROG | NOx | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | CO2e |
|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — |
| Avoided | — | — | — | — | — | — | — | — | — |
| Subtotal | — | — | — | — | — | — | — | — | — |
| Sequestered | — | — | — | — | — | — | — | — | — |
| Subtotal | — | — | — | — | — | — | — | — | — |
| Removed | — | — | — | — | — | — | — | — | — |
| Subtotal | — | — | — | — | — | — | — | — | — |
| — | — | — | — | — | — | — | — | — | — |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — |
| Avoided | — | — | — | — | — | — | — | — | — |
| Subtotal | — | — | — | — | — | — | — | — | — |
| Sequestered | — | — | — | — | — | — | — | — | — |
| Subtotal | — | — | — | — | — | — | — | — | — |
| Removed | — | — | — | — | — | — | — | — | — |
| Subtotal | — | — | — | — | — | — | — | — | — |
| — | — | — | — | — | — | — | — | — | — |
| Annual | — | — | — | — | — | — | — | — | — |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Avoided | — | — | — | — | — | — | — | — | — |
| Subtotal | — | — | — | — | — | — | — | — | — |
| Sequestered | — | — | — | — | — | — | — | — | — |
| Subtotal | — | — | — | — | — | — | — | — | — |
| Removed | — | — | — | — | — | — | — | — | — |
| Subtotal | — | — | — | — | — | — | — | — | — |
| — | — | — | — | — | — | — | — | — | — |

### 4.10.4. Soil Carbon Accumulation By Vegetation Type - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Vegetation | ROG | NOx | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | CO2e |
|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — |
| Annual | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — |

### 4.10.5. Above and Belowground Carbon Accumulation by Land Use Type - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Land Use | ROG | NOx | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | CO2e |
|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Annual | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — |

## 4.10.6. Avoided and Sequestered Emissions by Species - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Species | ROG | NOx | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | CO2e |
|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — |
| Avoided | — | — | — | — | — | — | — | — | — |
| Subtotal | — | — | — | — | — | — | — | — | — |
| Sequestered | — | — | — | — | — | — | — | — | — |
| Subtotal | — | — | — | — | — | — | — | — | — |
| Removed | — | — | — | — | — | — | — | — | — |
| Subtotal | — | — | — | — | — | — | — | — | — |
| — | — | — | — | — | — | — | — | — | — |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — |
| Avoided | — | — | — | — | — | — | — | — | — |
| Subtotal | — | — | — | — | — | — | — | — | — |
| Sequestered | — | — | — | — | — | — | — | — | — |
| Subtotal | — | — | — | — | — | — | — | — | — |
| Removed | — | — | — | — | — | — | — | — | — |
| Subtotal | — | — | — | — | — | — | — | — | — |
| — | — | — | — | — | — | — | — | — | — |
| Annual | — | — | — | — | — | — | — | — | — |
| Avoided | — | — | — | — | — | — | — | — | — |
| Subtotal | — | — | — | — | — | — | — | — | — |
| Sequestered | — | — | — | — | — | — | — | — | — |
| Subtotal | — | — | — | — | — | — | — | — | — |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Removed | — | — | — | — | — | — | — | — | — |
| Subtotal | — | — | — | — | — | — | — | — | — |
| — | — | — | — | — | — | — | — | — | — |

# 5. Activity Data

## 5.1. Construction Schedule

| Phase Name | Phase Type | Start Date | End Date | Days Per Week | Work Days per Phase | Phase Description |
|---|---|---|---|---|---|---|
| Demolition | Demolition | 1/1/2026 | 1/7/2026 | 5.00 | 5.00 | — |
| Site Preparation | Site Preparation | 2/1/2026 | 2/13/2026 | 5.00 | 10.0 | — |
| Grading | Grading | 3/1/2026 | 3/17/2026 | 5.00 | 12.0 | — |
| Building Construction | Building Construction | 7/1/2026 | 6/29/2027 | 5.00 | 260 | — |
| Paving | Paving | 9/1/2027 | 12/14/2027 | 5.00 | 75.0 | — |
| Architectural Coating | Architectural Coating | 5/1/2027 | 11/12/2027 | 5.00 | 140 | — |
| Trenching | Trenching | 5/1/2026 | 5/21/2026 | 5.00 | 15.0 | — |

## 5.2. Off-Road Equipment

### 5.2.1. Unmitigated

| Phase Name | Equipment Type | Fuel Type | Engine Tier | Number per Day | Hours Per Day | Horsepower | Load Factor |
|---|---|---|---|---|---|---|---|
| Demolition | Rubber Tired Dozers | Diesel | Average | 2.00 | 8.00 | 367 | 0.40 |
| Demolition | Other General Industrial Equipment | Diesel | Average | 1.00 | 8.00 | 35.0 | 0.34 |
| Demolition | Excavators | Diesel | Average | 2.00 | 8.00 | 36.0 | 0.38 |
| Site Preparation | Rubber Tired Dozers | Diesel | Average | 3.00 | 8.00 | 367 | 0.40 |
| Site Preparation | Tractors/Loaders/Backhoes | Diesel | Average | 4.00 | 8.00 | 84.0 | 0.37 |
| Grading | Rubber Tired Dozers | Diesel | Average | 1.00 | 8.00 | 367 | 0.40 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Grading | Tractors/Loaders/Back | Diesel | Average | 4.00 | 8.00 | 84.0 | 0.37 |
| Grading | Excavators | Diesel | Average | 2.00 | 8.00 | 36.0 | 0.38 |
| Grading | Graders | Diesel | Average | 1.00 | 8.00 | 148 | 0.41 |
| Grading | Skid Steer Loaders | Diesel | Average | 2.00 | 8.00 | 71.0 | 0.37 |
| Building Construction | Cranes | Diesel | Average | 1.00 | 5.90 | 367 | 0.29 |
| Building Construction | Forklifts | Diesel | Average | 2.00 | 3.80 | 82.0 | 0.20 |
| Building Construction | Tractors/Loaders/Backhoes | Diesel | Average | 1.00 | 3.10 | 84.0 | 0.37 |
| Building Construction | Air Compressors | Diesel | Average | 4.00 | 7.70 | 37.0 | 0.48 |
| Building Construction | Concrete/Industrial Saws | Diesel | Average | 1.00 | 7.70 | 33.0 | 0.73 |
| Paving | Cement and Mortar Mixers | Diesel | Average | 2.00 | 6.00 | 10.0 | 0.56 |
| Paving | Pavers | Diesel | Average | 1.00 | 8.00 | 81.0 | 0.42 |
| Paving | Paving Equipment | Diesel | Average | 2.00 | 6.00 | 89.0 | 0.36 |
| Paving | Rollers | Diesel | Average | 2.00 | 6.00 | 36.0 | 0.38 |
| Paving | Tractors/Loaders/Backhoes | Diesel | Average | 1.00 | 8.00 | 84.0 | 0.37 |
| Architectural Coating | Air Compressors | Diesel | Average | 2.00 | 8.00 | 37.0 | 0.48 |
| Architectural Coating | Aerial Lifts | Diesel | Average | 1.00 | 1.00 | 46.0 | 0.31 |
| Architectural Coating | Forklifts | Diesel | Average | 1.00 | 2.00 | 82.0 | 0.20 |
| Trenching | Tractors/Loaders/Backhoes | Diesel | Average | 1.00 | 8.00 | 84.0 | 0.37 |
| Trenching | Excavators | Diesel | Average | 1.00 | 8.00 | 36.0 | 0.38 |

### 5.2.2. Mitigated

| Phase Name | Equipment Type | Fuel Type | Engine Tier | Number per Day | Hours Per Day | Horsepower | Load Factor |
|---|---|---|---|---|---|---|---|
| Demolition | Rubber Tired Dozers | Diesel | Tier 4 Final | 2.00 | 8.00 | 367 | 0.40 |
| Demolition | Other General Industrial Equipment | Diesel | Tier 4 Final | 1.00 | 8.00 | 35.0 | 0.34 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Demolition | Excavators | Diesel | Tier 4 Final | 2.00 | 8.00 | 36.0 | 0.38 |
| Site Preparation | Rubber Tired Dozers | Diesel | Tier 4 Final | 3.00 | 8.00 | 367 | 0.40 |
| Site Preparation | Tractors/Loaders/Backhoes | Diesel | Tier 4 Final | 4.00 | 8.00 | 84.0 | 0.37 |
| Grading | Rubber Tired Dozers | Diesel | Tier 4 Final | 1.00 | 8.00 | 367 | 0.40 |
| Grading | Tractors/Loaders/Backhoes | Diesel | Tier 4 Final | 4.00 | 8.00 | 84.0 | 0.37 |
| Grading | Excavators | Diesel | Tier 4 Final | 2.00 | 8.00 | 36.0 | 0.38 |
| Grading | Graders | Diesel | Tier 4 Final | 1.00 | 8.00 | 148 | 0.41 |
| Grading | Skid Steer Loaders | Diesel | Tier 4 Final | 2.00 | 8.00 | 71.0 | 0.37 |
| Building Construction | Cranes | Diesel | Tier 4 Final | 1.00 | 5.90 | 367 | 0.29 |
| Building Construction | Forklifts | Diesel | Tier 4 Final | 2.00 | 3.80 | 82.0 | 0.20 |
| Building Construction | Tractors/Loaders/Backhoes | Diesel | Tier 4 Final | 1.00 | 3.10 | 84.0 | 0.37 |
| Building Construction | Air Compressors | Diesel | Tier 4 Final | 4.00 | 7.70 | 37.0 | 0.48 |
| Building Construction | Concrete/Industrial Saws | Diesel | Tier 4 Final | 1.00 | 7.70 | 33.0 | 0.73 |
| Paving | Cement and Mortar Mixers | Diesel | Average | 2.00 | 6.00 | 10.0 | 0.56 |
| Paving | Pavers | Diesel | Tier 4 Final | 1.00 | 8.00 | 81.0 | 0.42 |
| Paving | Paving Equipment | Diesel | Tier 4 Final | 2.00 | 6.00 | 89.0 | 0.36 |
| Paving | Rollers | Diesel | Tier 4 Final | 2.00 | 6.00 | 36.0 | 0.38 |
| Paving | Tractors/Loaders/Backhoes | Diesel | Tier 4 Final | 1.00 | 8.00 | 84.0 | 0.37 |
| Architectural Coating | Air Compressors | Diesel | Tier 4 Final | 2.00 | 8.00 | 37.0 | 0.48 |
| Architectural Coating | Aerial Lifts | Diesel | Tier 4 Final | 1.00 | 1.00 | 46.0 | 0.31 |
| Architectural Coating | Forklifts | Diesel | Tier 4 Final | 1.00 | 2.00 | 82.0 | 0.20 |
| Trenching | Tractors/Loaders/Backhoes | Diesel | Tier 4 Final | 1.00 | 8.00 | 84.0 | 0.37 |
| Trenching | Excavators | Diesel | Tier 4 Final | 1.00 | 8.00 | 36.0 | 0.38 |

## 5.3. Construction Vehicles

### 5.3.1. Unmitigated

| Phase Name | Trip Type | One-Way Trips per Day | Miles per Trip | Vehicle Mix |
|---|---|---|---|---|
| Demolition | — | — | — | — |
| Demolition | Worker | 12.5 | 11.7 | LDA,LDT1,LDT2 |
| Demolition | Vendor | — | 8.40 | HHDT,MHDT |
| Demolition | Hauling | 13.8 | 20.0 | HHDT |
| Demolition | Onsite truck | — | — | HHDT |
| Site Preparation | — | — | — | — |
| Site Preparation | Worker | 17.5 | 11.7 | LDA,LDT1,LDT2 |
| Site Preparation | Vendor | — | 8.40 | HHDT,MHDT |
| Site Preparation | Hauling | 0.80 | 20.0 | HHDT |
| Site Preparation | Onsite truck | — | — | HHDT |
| Grading | — | — | — | — |
| Grading | Worker | 25.0 | 11.7 | LDA,LDT1,LDT2 |
| Grading | Vendor | — | 8.40 | HHDT,MHDT |
| Grading | Hauling | 26.8 | 20.0 | HHDT |
| Grading | Onsite truck | — | — | HHDT |
| Building Construction | — | — | — | — |
| Building Construction | Worker | 92.2 | 11.7 | LDA,LDT1,LDT2 |
| Building Construction | Vendor | 13.7 | 8.40 | HHDT,MHDT |
| Building Construction | Hauling | 1.71 | 20.0 | HHDT |
| Building Construction | Onsite truck | — | — | HHDT |
| Paving | — | — | — | — |
| Paving | Worker | 20.0 | 11.7 | LDA,LDT1,LDT2 |
| Paving | Vendor | — | 8.40 | HHDT,MHDT |
| Paving | Hauling | 0.72 | 20.0 | HHDT |

| | | | | |
|---|---|---|---|---|
| Paving | Onsite truck | — | — | HHDT |
| Architectural Coating | — | — | — | — |
| Architectural Coating | Worker | 18.4 | 11.7 | LDA,LDT1,LDT2 |
| Architectural Coating | Vendor | — | 8.40 | HHDT,MHDT |
| Architectural Coating | Hauling | 0.00 | 20.0 | HHDT |
| Architectural Coating | Onsite truck | — | — | HHDT |
| Trenching | — | — | — | — |
| Trenching | Worker | 5.00 | 11.7 | LDA,LDT1,LDT2 |
| Trenching | Vendor | — | 8.40 | HHDT,MHDT |
| Trenching | Hauling | 0.40 | 20.0 | HHDT |
| Trenching | Onsite truck | — | — | HHDT |

### 5.3.2. Mitigated

| Phase Name | Trip Type | One-Way Trips per Day | Miles per Trip | Vehicle Mix |
|---|---|---|---|---|
| Demolition | — | — | — | — |
| Demolition | Worker | 12.5 | 11.7 | LDA,LDT1,LDT2 |
| Demolition | Vendor | — | 8.40 | HHDT,MHDT |
| Demolition | Hauling | 13.8 | 20.0 | HHDT |
| Demolition | Onsite truck | — | — | HHDT |
| Site Preparation | — | — | — | — |
| Site Preparation | Worker | 17.5 | 11.7 | LDA,LDT1,LDT2 |
| Site Preparation | Vendor | — | 8.40 | HHDT,MHDT |
| Site Preparation | Hauling | 0.80 | 20.0 | HHDT |
| Site Preparation | Onsite truck | — | — | HHDT |
| Grading | — | — | — | — |
| Grading | Worker | 25.0 | 11.7 | LDA,LDT1,LDT2 |
| Grading | Vendor | — | 8.40 | HHDT,MHDT |
| Grading | Hauling | 26.8 | 20.0 | HHDT |

| | | | | |
|---|---|---|---|---|
| Grading | Onsite truck | — | — | HHDT |
| Building Construction | — | — | — | — |
| Building Construction | Worker | 92.2 | 11.7 | LDA,LDT1,LDT2 |
| Building Construction | Vendor | 13.7 | 8.40 | HHDT,MHDT |
| Building Construction | Hauling | 1.71 | 20.0 | HHDT |
| Building Construction | Onsite truck | — | — | HHDT |
| Paving | — | — | — | — |
| Paving | Worker | 20.0 | 11.7 | LDA,LDT1,LDT2 |
| Paving | Vendor | — | 8.40 | HHDT,MHDT |
| Paving | Hauling | 0.72 | 20.0 | HHDT |
| Paving | Onsite truck | — | — | HHDT |
| Architectural Coating | — | — | — | — |
| Architectural Coating | Worker | 18.4 | 11.7 | LDA,LDT1,LDT2 |
| Architectural Coating | Vendor | — | 8.40 | HHDT,MHDT |
| Architectural Coating | Hauling | 0.00 | 20.0 | HHDT |
| Architectural Coating | Onsite truck | — | — | HHDT |
| Trenching | — | — | — | — |
| Trenching | Worker | 5.00 | 11.7 | LDA,LDT1,LDT2 |
| Trenching | Vendor | — | 8.40 | HHDT,MHDT |
| Trenching | Hauling | 0.40 | 20.0 | HHDT |
| Trenching | Onsite truck | — | — | HHDT |

## 5.4. Vehicles

### 5.4.1. Construction Vehicle Control Strategies

Non-applicable. No control strategies activated by user.

## 5.5. Architectural Coatings

| Phase Name | Residential Interior Area Coated (sq ft) | Residential Exterior Area Coated (sq ft) | Non-Residential Interior Area Coated (sq ft) | Non-Residential Exterior Area Coated (sq ft) | Parking Area Coated (sq ft) |
|---|---|---|---|---|---|
| Architectural Coating | 274,669 | 91,556 | 0.00 | 0.00 | — |

## 5.6. Dust Mitigation

### 5.6.1. Construction Earthmoving Activities

| Phase Name | Material Imported (cy) | Material Exported (cy) | Acres Graded (acres) | Material Demolished (Building Square Footage) | Acres Paved (acres) |
|---|---|---|---|---|---|
| Demolition | 0.00 | 0.00 | 0.00 | 5,000 | — |
| Site Preparation | — | — | 15.0 | 0.00 | — |
| Grading | 1,500 | 1,000 | 12.0 | 0.00 | — |
| Paving | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |

### 5.6.2. Construction Earthmoving Control Strategies

| Control Strategies Applied | Frequency (per day) | PM10 Reduction | PM2.5 Reduction |
|---|---|---|---|
| Water Exposed Area | 2 | 61% | 61% |

## 5.7. Construction Paving

| Land Use | Area Paved (acres) | % Asphalt |
|---|---|---|
| Apartments Mid Rise | — | 0% |
| Parking Lot | 0.00 | 100% |

## 5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

| Year | kWh per Year | CO2 | CH4 | N2O |
|---|---|---|---|---|
| 2026 | 0.00 | 809 | 0.03 | < 0.005 |
| 2027 | 0.00 | 809 | 0.03 | < 0.005 |

## 5.9. Operational Mobile Sources

### 5.9.1. Unmitigated

| Land Use Type | Trips/Weekday | Trips/Saturday | Trips/Sunday | Trips/Year | VMT/Weekday | VMT/Saturday | VMT/Sunday | VMT/Year |
|---|---|---|---|---|---|---|---|---|
| Apartments Mid Rise | 474 | 428 | 356 | 164,321 | 3,479 | 3,141 | 2,614 | 1,207,090 |
| Parking Lot | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |

### 5.9.2. Mitigated

| Land Use Type | Trips/Weekday | Trips/Saturday | Trips/Sunday | Trips/Year | VMT/Weekday | VMT/Saturday | VMT/Sunday | VMT/Year |
|---|---|---|---|---|---|---|---|---|
| Apartments Mid Rise | 474 | 428 | 356 | 164,321 | 3,479 | 3,141 | 2,614 | 1,207,090 |
| Parking Lot | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |

## 5.10. Operational Area Sources

### 5.10.1. Hearths

#### 5.10.1.1. Unmitigated

| Hearth Type | Unmitigated (number) |
|---|---|
| Apartments Mid Rise | — |
| Wood Fireplaces | 0 |
| Gas Fireplaces | 0 |
| Propane Fireplaces | 0 |
| Electric Fireplaces | 0 |
| No Fireplaces | 0 |
| Conventional Wood Stoves | 0 |
| Catalytic Wood Stoves | 0 |
| Non-Catalytic Wood Stoves | 0 |

| | |
|---|---|
| Pellet Wood Stoves | 0 |

### 5.10.1.2. Mitigated

| Hearth Type | Unmitigated (number) |
|---|---|
| Apartments Mid Rise | — |
| Wood Fireplaces | 0 |
| Gas Fireplaces | 0 |
| Propane Fireplaces | 0 |
| Electric Fireplaces | 0 |
| No Fireplaces | 0 |
| Conventional Wood Stoves | 0 |
| Catalytic Wood Stoves | 0 |
| Non-Catalytic Wood Stoves | 0 |
| Pellet Wood Stoves | 0 |

### 5.10.2. Architectural Coatings

| Residential Interior Area Coated (sq ft) | Residential Exterior Area Coated (sq ft) | Non-Residential Interior Area Coated (sq ft) | Non-Residential Exterior Area Coated (sq ft) | Parking Area Coated (sq ft) |
|---|---|---|---|---|
| 250776 | 83,592 | 19,500 | 6,500 | 1,317 |

### 5.10.3. Landscape Equipment

| Season | Unit | Value |
|---|---|---|
| Snow Days | day/yr | 0.00 |
| Summer Days | day/yr | 180 |

### 5.10.4. Landscape Equipment - Mitigated

| Season | Unit | Value |
|---|---|---|

| | | |
|---|---|---|
| Snow Days | day/yr | 0.00 |
| Summer Days | day/yr | 180 |

## 5.11. Operational Energy Consumption

### 5.11.1. Unmitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

| Land Use | Electricity (kWh/yr) | CO2 | CH4 | N2O | Natural Gas (kBTU/yr) |
|---|---|---|---|---|---|
| Apartments Mid Rise | 440,077 | 162 | 0.0330 | 0.0040 | 1,135,725 |
| Parking Lot | 19,232 | 162 | 0.0330 | 0.0040 | 0.00 |

### 5.11.2. Mitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

| Land Use | Electricity (kWh/yr) | CO2 | CH4 | N2O | Natural Gas (kBTU/yr) |
|---|---|---|---|---|---|
| Apartments Mid Rise | 440,077 | 162 | 0.0330 | 0.0040 | 1,135,725 |
| Parking Lot | 19,232 | 162 | 0.0330 | 0.0040 | 0.00 |

## 5.12. Operational Water and Wastewater Consumption

### 5.12.1. Unmitigated

| Land Use | Indoor Water (gal/year) | Outdoor Water (gal/year) |
|---|---|---|
| Apartments Mid Rise | 4,678,366 | 0.00 |
| Parking Lot | 0.00 | 0.00 |

### 5.12.2. Mitigated

| Land Use | Indoor Water (gal/year) | Outdoor Water (gal/year) |
|---|---|---|
| Apartments Mid Rise | 4,678,366 | 0.00 |
| Parking Lot | 0.00 | 0.00 |

## 5.13. Operational Waste Generation

### 5.13.1. Unmitigated

| Land Use | Waste (ton/year) | Cogeneration (kWh/year) |
|---|---|---|
| Apartments Mid Rise | 94.7 | — |
| Parking Lot | 0.00 | — |

### 5.13.2. Mitigated

| Land Use | Waste (ton/year) | Cogeneration (kWh/year) |
|---|---|---|
| Apartments Mid Rise | 94.7 | — |
| Parking Lot | 0.00 | — |

## 5.14. Operational Refrigeration and Air Conditioning Equipment

### 5.14.1. Unmitigated

| Land Use Type | Equipment Type | Refrigerant | GWP | Quantity (kg) | Operations Leak Rate | Service Leak Rate | Times Serviced |
|---|---|---|---|---|---|---|---|
| Apartments Mid Rise | Average room A/C & Other residential A/C and heat pumps | R-410A | 2,088 | < 0.005 | 2.50 | 2.50 | 10.0 |
| Apartments Mid Rise | Household refrigerators and/or freezers | R-134a | 1,430 | 0.12 | 0.60 | 0.00 | 1.00 |

### 5.14.2. Mitigated

| Land Use Type | Equipment Type | Refrigerant | GWP | Quantity (kg) | Operations Leak Rate | Service Leak Rate | Times Serviced |
|---|---|---|---|---|---|---|---|
| Apartments Mid Rise | Average room A/C & Other residential A/C and heat pumps | R-410A | 2,088 | < 0.005 | 2.50 | 2.50 | 10.0 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Apartments Mid Rise | Household refrigerators and/or freezers | R-134a | 1,430 | 0.12 | 0.60 | 0.00 | 1.00 |

## 5.15. Operational Off-Road Equipment

### 5.15.1. Unmitigated

| Equipment Type | Fuel Type | Engine Tier | Number per Day | Hours Per Day | Horsepower | Load Factor |
|---|---|---|---|---|---|---|

### 5.15.2. Mitigated

| Equipment Type | Fuel Type | Engine Tier | Number per Day | Hours Per Day | Horsepower | Load Factor |
|---|---|---|---|---|---|---|

## 5.16. Stationary Sources

### 5.16.1. Emergency Generators and Fire Pumps

| Equipment Type | Fuel Type | Number per Day | Hours per Day | Hours per Year | Horsepower | Load Factor |
|---|---|---|---|---|---|---|

### 5.16.2. Process Boilers

| Equipment Type | Fuel Type | Number | Boiler Rating (MMBtu/hr) | Daily Heat Input (MMBtu/day) | Annual Heat Input (MMBtu/yr) |
|---|---|---|---|---|---|

## 5.17. User Defined

| Equipment Type | Fuel Type |
|---|---|

## 5.18. Vegetation

### 5.18.1. Land Use Change

#### 5.18.1.1. Unmitigated

| Vegetation Land Use Type | Vegetation Soil Type | Initial Acres | Final Acres |
|---|---|---|---|

### 5.18.1.2. Mitigated

| Vegetation Land Use Type | Vegetation Soil Type | Initial Acres | Final Acres |
|---|---|---|---|

## 5.18.1. Biomass Cover Type

### 5.18.1.1. Unmitigated

| Biomass Cover Type | Initial Acres | Final Acres |
|---|---|---|

### 5.18.1.2. Mitigated

| Biomass Cover Type | Initial Acres | Final Acres |
|---|---|---|

## 5.18.2. Sequestration

### 5.18.2.1. Unmitigated

| Tree Type | Number | Electricity Saved (kWh/year) | Natural Gas Saved (btu/year) |
|---|---|---|---|

### 5.18.2.2. Mitigated

| Tree Type | Number | Electricity Saved (kWh/year) | Natural Gas Saved (btu/year) |
|---|---|---|---|

# 6. Climate Risk Detailed Report

## 6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

| Climate Hazard | Result for Project Location | Unit |
|---|---|---|

| | | |
|---|---|---|
| Temperature and Extreme Heat | 13.3 | annual days of extreme heat |
| Extreme Precipitation | 2.70 | annual days with precipitation above 20 mm |
| Sea Level Rise | — | meters of inundation depth |
| Wildfire | 14.4 | annual hectares burned |

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

## 6.2. Initial Climate Risk Scores

| Climate Hazard | Exposure Score | Sensitivity Score | Adaptive Capacity Score | Vulnerability Score |
|---|---|---|---|---|
| Temperature and Extreme Heat | N/A | N/A | N/A | N/A |
| Extreme Precipitation | N/A | N/A | N/A | N/A |
| Sea Level Rise | N/A | N/A | N/A | N/A |
| Wildfire | N/A | N/A | N/A | N/A |
| Flooding | N/A | N/A | N/A | N/A |
| Drought | N/A | N/A | N/A | N/A |
| Snowpack Reduction | N/A | N/A | N/A | N/A |
| Air Quality Degradation | 0 | 0 | 0 | N/A |

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

## 6.3. Adjusted Climate Risk Scores

| Climate Hazard | Exposure Score | Sensitivity Score | Adaptive Capacity Score | Vulnerability Score |
|---|---|---|---|---|
| Temperature and Extreme Heat | N/A | N/A | N/A | N/A |
| Extreme Precipitation | N/A | N/A | N/A | N/A |
| Sea Level Rise | N/A | N/A | N/A | N/A |
| Wildfire | N/A | N/A | N/A | N/A |
| Flooding | N/A | N/A | N/A | N/A |
| Drought | N/A | N/A | N/A | N/A |
| Snowpack Reduction | N/A | N/A | N/A | N/A |
| Air Quality Degradation | 1 | 1 | 1 | 2 |

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

## 6.4. Climate Risk Reduction Measures

# 7. Health and Equity Details

## 7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

| Indicator | Result for Project Census Tract |
|---|---|
| Exposure Indicators | — |
| AQ-Ozone | 20.8 |
| AQ-PM | 25.1 |
| AQ-DPM | 84.6 |
| Drinking Water | 22.7 |
| Lead Risk Housing | 37.8 |
| Pesticides | 0.00 |
| Toxic Releases | 34.1 |

| | |
|---|---|
| Traffic | 84.2 |
| Effect Indicators | — |
| CleanUp Sites | 0.00 |
| Groundwater | 71.7 |
| Haz Waste Facilities/Generators | 43.3 |
| Impaired Water Bodies | 0.00 |
| Solid Waste | 0.00 |
| Sensitive Population | — |
| Asthma | 18.0 |
| Cardio-vascular | 21.5 |
| Low Birth Weights | 75.3 |
| Socioeconomic Factor Indicators | — |
| Education | 48.8 |
| Housing | 21.6 |
| Linguistic | 87.9 |
| Poverty | 28.4 |
| Unemployment | 44.4 |

## 7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

| Indicator | Result for Project Census Tract |
|---|---|
| Economic | — |
| Above Poverty | 81.35506224 |
| Employed | 71.06377518 |
| Median HI | 86.60336199 |
| Education | — |
| Bachelor's or higher | 74.91338381 |
| High school enrollment | 3.233671243 |

| | |
|---|---|
| Preschool enrollment | 77.10766072 |
| Transportation | — |
| Auto Access | 47.37585012 |
| Active commuting | 64.98139356 |
| Social | — |
| 2-parent households | 90.20916207 |
| Voting | 62.83844476 |
| Neighborhood | — |
| Alcohol availability | 71.08943924 |
| Park access | 45.42538175 |
| Retail density | 55.6268446 |
| Supermarket access | 76.18375465 |
| Tree canopy | 23.52110869 |
| Housing | — |
| Homeownership | 61.88887463 |
| Housing habitability | 72.26998588 |
| Low-inc homeowner severe housing cost burden | 82.97189786 |
| Low-inc renter severe housing cost burden | 77.00500449 |
| Uncrowded housing | 23.82907738 |
| Health Outcomes | — |
| Insured adults | 81.30373412 |
| Arthritis | 92.2 |
| Asthma ER Admissions | 82.0 |
| High Blood Pressure | 71.3 |
| Cancer (excluding skin) | 71.8 |
| Asthma | 98.2 |
| Coronary Heart Disease | 92.9 |
| Chronic Obstructive Pulmonary Disease | 96.5 |

| | |
|---|---|
| Diagnosed Diabetes | 70.5 |
| Life Expectancy at Birth | 86.8 |
| Cognitively Disabled | 82.5 |
| Physically  Disabled | 67.1 |
| Heart Attack ER Admissions | 69.4 |
| Mental Health Not Good | 92.6 |
| Chronic Kidney Disease | 85.5 |
| Obesity | 98.0 |
| Pedestrian Injuries | 19.6 |
| Physical Health Not Good | 90.6 |
| Stroke | 91.3 |
| Health Risk Behaviors | — |
| Binge Drinking | 95.3 |
| Current Smoker | 91.5 |
| No Leisure Time for Physical Activity | 61.9 |
| Climate Change Exposures | — |
| Wildfire Risk | 0.0 |
| SLR Inundation Area | 0.0 |
| Children | 35.2 |
| Elderly | 55.7 |
| English Speaking | 17.6 |
| Foreign-born | 95.6 |
| Outdoor Workers | 87.2 |
| Climate Change Adaptive Capacity | — |
| Impervious Surface Cover | 34.0 |
| Traffic Density | 77.3 |
| Traffic Access | 87.4 |
| Other Indices | — |

| | |
|---|---|
| Hardship | 43.9 |
| Other Decision Support | — |
| 2016 Voting | 59.9 |

## 7.3. Overall Health & Equity Scores

| Metric | Result for Project Census Tract |
|---|---|
| CalEnviroScreen 4.0 Score for Project Location (a) | 32.0 |
| Healthy Places Index Score for Project Location (b) | 75.0 |
| Project Located in a Designated Disadvantaged Community (Senate Bill 535) | No |
| Project Located in a Low-Income Community (Assembly Bill 1550) | No |
| Project Located in a Community Air Protection Program Community (Assembly Bill 617) | No |

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

## 7.4. Health & Equity Measures

No Health & Equity Measures selected.

## 7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

## 7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

# 8. User Changes to Default Data

| Screen | Justification |
|---|---|
| Characteristics: Utility Information | San Jose Clean Energy is San Jose default clean energy provider. San Jose Clean Energy 2021 rate is 162 lb/MWh. |
| Construction: Construction Phases | From provided construction worksheet. |
| Construction: Off-Road Equipment | Information provided by filled out construction worksheet from applicant. |

| | |
|---|---|
| Land Use | Combined office/amenities with residential sf. Total lot acreage, square footage, and parking spaces from provided plans and filled out construction worksheet. |
| Construction: Trips and VMT | Demolition = Est. 1,250-sf of pavement demo'ed and hauled (0.6 trips/day) and 4 truck round trips (1.6 trips/day), Site Prep = 4 truck round trips (0.8 trips/day), Grading = 4 truck round trips (0.67 trips/day), Trenching = 3 truck round trips (0.4 trips/day), Building = 222 concrete truck round trips (1.71 trips/day), Paving = 200-cy asphalt (0.64 trip-s/day) and 3 truck round trips (0.08 trips/day). |
| Construction: On-Road Fugitive Dust | Air District recommended BMPS = 15 mph. Required by San Jose GP. |
| Operations: Hearths | No hearths. |
| Operations: Water and Waste Water | Wastewater treatment 100% aerobic - no septic tanks or lagoons. |
| Operations: Vehicle Data | Provided trip gen with reduction adjustments. |

# 24-143 1207 N. Capitol Ave, San Jose BMPs T4F HRA Detailed Report

## Table of Contents

1. Basic Project Information

1.1. Basic Project Information

1.2. Land Use Types

1.3. User-Selected Emission Reduction Measures by Emissions Sector

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

2.2. Construction Emissions by Year, Unmitigated

2.3. Construction Emissions by Year, Mitigated

3. Construction Emissions Details

3.1. Demolition (2026) - Unmitigated

3.2. Demolition (2026) - Mitigated

3.3. Site Preparation (2026) - Unmitigated

3.4. Site Preparation (2026) - Mitigated

3.5. Grading (2026) - Unmitigated

3.6. Grading (2026) - Mitigated

3.7. Building Construction (2026) - Unmitigated

3.8. Building Construction (2026) - Mitigated

3.9. Building Construction (2027) - Unmitigated

3.10. Building Construction (2027) - Mitigated

3.11. Paving (2027) - Unmitigated

3.12. Paving (2027) - Mitigated

3.13. Architectural Coating (2027) - Unmitigated

3.14. Architectural Coating (2027) - Mitigated

3.15. Trenching (2026) - Unmitigated

3.16. Trenching (2026) - Mitigated

4. Operations Emissions Details

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

4.10.4. Soil Carbon Accumulation By Vegetation Type - Mitigated

4.10.5. Above and Belowground Carbon Accumulation by Land Use Type - Mitigated

4.10.6. Avoided and Sequestered Emissions by Species - Mitigated

5. Activity Data

5.1. Construction Schedule

5.2. Off-Road Equipment

5.2.1. Unmitigated

5.2.2. Mitigated

5.3. Construction Vehicles

5.3.1. Unmitigated

5.3.2. Mitigated

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

5.5. Architectural Coatings

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

5.6.2. Construction Earthmoving Control Strategies

5.7. Construction Paving

5.8. Construction Electricity Consumption and Emissions Factors

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

5.18.1.2. Mitigated

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

5.18.1.2. Mitigated

5.18.2. Sequestration

5.18.2.1. Unmitigated

5.18.2.2. Mitigated

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

6.2. Initial Climate Risk Scores

6.3. Adjusted Climate Risk Scores

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

7.2. Healthy Places Index Scores

7.3. Overall Health & Equity Scores

7.4. Health & Equity Measures

7.5. Evaluation Scorecard

7.6. Health & Equity Custom Measures

8. User Changes to Default Data

# 1. Basic Project Information

## 1.1. Basic Project Information

| Data Field | Value |
|---|---|
| Project Name | 24-143 1207 N. Capitol Ave, San Jose BMPs T4F HRA |
| Construction Start Date | 1/1/2026 |
| Lead Agency | — |
| Land Use Scale | Project/site |
| Analysis Level for Defaults | County |
| Windspeed (m/s) | 3.00 |
| Precipitation (days) | 1.60 |
| Location | 1207 N Capitol Ave, San Jose, CA 95132, USA |
| County | Santa Clara |
| City | San Jose |
| Air District | Bay Area AQMD |
| Air Basin | San Francisco Bay Area |
| TAZ | 1986 |
| EDFZ | 1 |
| Electric Utility | San Jose Clean Energy |
| Gas Utility | Pacific Gas & Electric |
| App Version | 2022.1.1.28 |

## 1.2. Land Use Types

| Land Use Subtype | Size | Unit | Lot Acreage | Building Area (sq ft) | Landscape Area (sq ft) | Special Landscape Area (sq ft) | Population | Description |
|---|---|---|---|---|---|---|---|---|
| Apartments Mid Rise | 128 | Dwelling Unit | 1.50 | 135,639 | 0.00 | — | 383 | — |
| Parking Lot | 54.0 | Space | 0.00 | 0.00 | 0.00 | — | — | — |

### 1.3. User-Selected Emission Reduction Measures by Emissions Sector

| Sector | # | Measure Title |
|---|---|---|
| Construction | C-5 | Use Advanced Engine Tiers |

# 2. Emissions Summary

## 2.1. Construction Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Un/Mit. | ROG | NOx | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | CO2e |
|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — |
| Unmit. | 15.4 | 11.8 | 0.32 | 0.05 | 0.37 | 0.30 | 0.01 | 0.31 | 2,430 |
| Mit. | 14.2 | 7.00 | 0.06 | 0.05 | 0.09 | 0.05 | 0.01 | 0.06 | 2,430 |
| % Reduced | 7% | 41% | 83% | — | 76% | 82% | — | 82% | — |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — |
| Unmit. | 14.7 | 29.2 | 1.24 | 7.67 | 8.92 | 1.14 | 3.94 | 5.08 | 5,328 |
| Mit. | 14.0 | 5.85 | 0.10 | 7.67 | 7.77 | 0.10 | 3.94 | 4.04 | 5,328 |
| % Reduced | 5% | 80% | 92% | — | 13% | 91% | — | 21% | — |
| Average Daily (Max) | — | — | — | — | — | — | — | — | — |
| Unmit. | 5.99 | 5.48 | 0.18 | 0.33 | 0.51 | 0.17 | 0.16 | 0.32 | 1,149 |
| Mit. | 5.49 | 2.97 | 0.03 | 0.33 | 0.35 | 0.02 | 0.16 | 0.18 | 1,149 |
| % Reduced | 8% | 46% | 86% | — | 32% | 85% | — | 46% | — |
| Annual (Max) | — | — | — | — | — | — | — | — | — |
| Unmit. | 1.09 | 1.00 | 0.03 | 0.06 | 0.09 | 0.03 | 0.03 | 0.06 | 190 |
| Mit. | 1.00 | 0.54 | < 0.005 | 0.06 | 0.06 | < 0.005 | 0.03 | 0.03 | 190 |
| % Reduced | 8% | 46% | 86% | — | 32% | 85% | — | 46% | — |

## 2.2. Construction Emissions by Year, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Year | ROG | NOx | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | CO2e |
|---|---|---|---|---|---|---|---|---|---|
| Daily - Summer (Max) | — | — | — | — | — | — | — | — | — |
| 2026 | 1.42 | 9.66 | 0.30 | 0.04 | 0.34 | 0.28 | 0.01 | 0.29 | 2,008 |
| 2027 | 15.4 | 11.8 | 0.32 | 0.05 | 0.37 | 0.30 | 0.01 | 0.31 | 2,430 |
| Daily - Winter (Max) | — | — | — | — | — | — | — | — | — |
| 2026 | 3.19 | 29.2 | 1.24 | 7.67 | 8.92 | 1.14 | 3.94 | 5.08 | 5,328 |
| 2027 | 14.7 | 9.32 | 0.30 | 0.04 | 0.31 | 0.28 | 0.01 | 0.28 | 2,004 |
| Average Daily | — | — | — | — | — | — | — | — | — |
| 2026 | 0.70 | 5.25 | 0.18 | 0.33 | 0.51 | 0.17 | 0.16 | 0.32 | 1,062 |
| 2027 | 5.99 | 5.48 | 0.16 | 0.02 | 0.18 | 0.15 | < 0.005 | 0.16 | 1,149 |
| Annual | — | — | — | — | — | — | — | — | — |
| 2026 | 0.13 | 0.96 | 0.03 | 0.06 | 0.09 | 0.03 | 0.03 | 0.06 | 176 |
| 2027 | 1.09 | 1.00 | 0.03 | < 0.005 | 0.03 | 0.03 | < 0.005 | 0.03 | 190 |

## 2.3. Construction Emissions by Year, Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Year | ROG | NOx | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | CO2e |
|---|---|---|---|---|---|---|---|---|---|
| Daily - Summer (Max) | — | — | — | — | — | — | — | — | — |
| 2026 | 0.49 | 5.17 | 0.04 | 0.04 | 0.07 | 0.04 | 0.01 | 0.04 | 2,008 |
| 2027 | 14.2 | 7.00 | 0.06 | 0.05 | 0.09 | 0.05 | 0.01 | 0.06 | 2,430 |
| Daily - Winter (Max) | — | — | — | — | — | — | — | — | — |
| 2026 | 0.54 | 5.85 | 0.10 | 7.67 | 7.77 | 0.10 | 3.94 | 4.04 | 5,328 |
| 2027 | 14.0 | 5.18 | 0.06 | 0.04 | 0.07 | 0.05 | 0.01 | 0.06 | 2,004 |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Average Daily | — | — | — | — | — | — | — | — | — |
| 2026 | 0.21 | 2.21 | 0.02 | 0.33 | 0.35 | 0.02 | 0.16 | 0.18 | 1,062 |
| 2027 | 5.49 | 2.97 | 0.03 | 0.02 | 0.04 | 0.02 | < 0.005 | 0.03 | 1,149 |
| Annual | — | — | — | — | — | — | — | — | — |
| 2026 | 0.04 | 0.40 | < 0.005 | 0.06 | 0.06 | < 0.005 | 0.03 | 0.03 | 176 |
| 2027 | 1.00 | 0.54 | < 0.005 | < 0.005 | 0.01 | < 0.005 | < 0.005 | 0.01 | 190 |

# 3. Construction Emissions Details

## 3.1. Demolition (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | CO2e |
|---|---|---|---|---|---|---|---|---|---|
| Onsite | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 2.11 | 19.1 | 0.81 | — | 0.81 | 0.74 | — | 0.74 | 3,175 |
| Demolition | — | — | — | 1.01 | 1.01 | — | 0.15 | 0.15 | — |
| Onsite truck | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Average Daily | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.03 | 0.26 | 0.01 | — | 0.01 | 0.01 | — | 0.01 | 43.5 |
| Demolition | — | — | — | 0.01 | 0.01 | — | < 0.005 | < 0.005 | — |
| Onsite truck | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Annual | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.01 | 0.05 | < 0.005 | — | < 0.005 | < 0.005 | — | < 0.005 | 7.20 |
| Demolition | — | — | — | < 0.005 | < 0.005 | — | < 0.005 | < 0.005 | — |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Onsite truck | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Offsite | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — |
| Worker | 0.03 | 0.01 | 0.00 | < 0.005 | < 0.005 | 0.00 | < 0.005 | < 0.005 | 6.67 |
| Vendor | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Hauling | 0.01 | 0.23 | < 0.005 | 0.01 | 0.01 | < 0.005 | < 0.005 | < 0.005 | 49.1 |
| Average Daily | — | — | — | — | — | — | — | — | — |
| Worker | < 0.005 | < 0.005 | 0.00 | < 0.005 | < 0.005 | 0.00 | < 0.005 | < 0.005 | 0.09 |
| Vendor | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Hauling | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | 0.67 |
| Annual | — | — | — | — | — | — | — | — | — |
| Worker | < 0.005 | < 0.005 | 0.00 | < 0.005 | < 0.005 | 0.00 | < 0.005 | < 0.005 | 0.01 |
| Vendor | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Hauling | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | 0.11 |

## 3.2. Demolition (2026) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | CO2e |
|---|---|---|---|---|---|---|---|---|---|
| Onsite | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.32 | 3.25 | 0.06 | — | 0.06 | 0.06 | — | 0.06 | 3,175 |
| Demolition | — | — | — | 1.01 | 1.01 | — | 0.15 | 0.15 | — |
| Onsite truck | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Average Daily | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | < 0.005 | 0.04 | < 0.005 | — | < 0.005 | < 0.005 | — | < 0.005 | 43.5 |
| Demolition | — | — | — | 0.01 | 0.01 | — | < 0.005 | < 0.005 | — |
| Onsite truck | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Annual | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | < 0.005 | 0.01 | < 0.005 | — | < 0.005 | < 0.005 | — | < 0.005 | 7.20 |
| Demolition | — | — | — | < 0.005 | < 0.005 | — | < 0.005 | < 0.005 | — |
| Onsite truck | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Offsite | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — |
| Worker | 0.03 | 0.01 | 0.00 | < 0.005 | < 0.005 | 0.00 | < 0.005 | < 0.005 | 6.67 |
| Vendor | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Hauling | 0.01 | 0.23 | < 0.005 | 0.01 | 0.01 | < 0.005 | < 0.005 | < 0.005 | 49.1 |
| Average Daily | — | — | — | — | — | — | — | — | — |
| Worker | < 0.005 | < 0.005 | 0.00 | < 0.005 | < 0.005 | 0.00 | < 0.005 | < 0.005 | 0.09 |
| Vendor | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Hauling | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | 0.67 |
| Annual | — | — | — | — | — | — | — | — | — |
| Worker | < 0.005 | < 0.005 | 0.00 | < 0.005 | < 0.005 | 0.00 | < 0.005 | < 0.005 | 0.01 |
| Vendor | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Hauling | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | 0.11 |

## 3.3. Site Preparation (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | CO2e |
|---|---|---|---|---|---|---|---|---|---|
| Onsite | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 3.14 | 29.2 | 1.24 | — | 1.24 | 1.14 | — | 1.14 | 5,316 |
| Dust From Material Movement | — | — | — | 7.67 | 7.67 | — | 3.94 | 3.94 | — |
| Onsite truck | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Average Daily | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.09 | 0.80 | 0.03 | — | 0.03 | 0.03 | — | 0.03 | 146 |
| Dust From Material Movement | — | — | — | 0.21 | 0.21 | — | 0.11 | 0.11 | — |
| Onsite truck | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Annual | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.02 | 0.15 | 0.01 | — | 0.01 | 0.01 | — | 0.01 | 24.1 |
| Dust From Material Movement | — | — | — | 0.04 | 0.04 | — | 0.02 | 0.02 | — |
| Onsite truck | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Offsite | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — |
| Worker | 0.04 | 0.01 | 0.00 | 0.01 | 0.01 | 0.00 | < 0.005 | < 0.005 | 9.33 |
| Vendor | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Hauling | < 0.005 | 0.01 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | 2.84 |
| Average Daily | — | — | — | — | — | — | — | — | — |
| Worker | < 0.005 | < 0.005 | 0.00 | < 0.005 | < 0.005 | 0.00 | < 0.005 | < 0.005 | 0.25 |
| Vendor | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Hauling | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | 0.08 |
| Annual | — | — | — | — | — | — | — | — | — |
| Worker | < 0.005 | < 0.005 | 0.00 | < 0.005 | < 0.005 | 0.00 | < 0.005 | < 0.005 | 0.04 |
| Vendor | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Hauling | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | 0.01 |

## 3.4. Site Preparation (2026) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | CO2e |
|---|---|---|---|---|---|---|---|---|---|
| Onsite | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.50 | 2.59 | 0.10 | — | 0.10 | 0.10 | — | 0.10 | 5,316 |
| Dust From Material Movement | — | — | — | 7.67 | 7.67 | — | 3.94 | 3.94 | — |
| Onsite truck | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Average Daily | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.01 | 0.07 | < 0.005 | — | < 0.005 | < 0.005 | — | < 0.005 | 146 |
| Dust From Material Movement | — | — | — | 0.21 | 0.21 | — | 0.11 | 0.11 | — |
| Onsite truck | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Annual | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | < 0.005 | 0.01 | < 0.005 | — | < 0.005 | < 0.005 | — | < 0.005 | 24.1 |
| Dust From Material Movement | — | — | — | 0.04 | 0.04 | — | 0.02 | 0.02 | — |
| Onsite truck | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Offsite | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — |
| Worker | 0.04 | 0.01 | 0.00 | 0.01 | 0.01 | 0.00 | < 0.005 | < 0.005 | 9.33 |
| Vendor | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Hauling | < 0.005 | 0.01 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | 2.84 |
| Average Daily | — | — | — | — | — | — | — | — | — |
| Worker | < 0.005 | < 0.005 | 0.00 | < 0.005 | < 0.005 | 0.00 | < 0.005 | < 0.005 | 0.25 |
| Vendor | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Hauling | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | 0.08 |
| Annual | — | — | — | — | — | — | — | — | — |
| Worker | < 0.005 | < 0.005 | 0.00 | < 0.005 | < 0.005 | 0.00 | < 0.005 | < 0.005 | 0.04 |
| Vendor | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Hauling | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | 0.01 |

## 3.5. Grading (2026) - Unmitigated

### Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | CO2e |
|---|---|---|---|---|---|---|---|---|---|
| Onsite | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 1.97 | 18.5 | 0.75 | — | 0.75 | 0.69 | — | 0.69 | 3,895 |
| Dust From Material Movement | — | — | — | 2.77 | 2.77 | — | 1.34 | 1.34 | — |
| Onsite truck | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Average Daily | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.06 | 0.61 | 0.02 | — | 0.02 | 0.02 | — | 0.02 | 128 |
| Dust From Material Movement | — | — | — | 0.09 | 0.09 | — | 0.04 | 0.04 | — |
| Onsite truck | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Annual | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.01 | 0.11 | < 0.005 | — | < 0.005 | < 0.005 | — | < 0.005 | 21.2 |
| Dust From Material Movement | — | — | — | 0.02 | 0.02 | — | 0.01 | 0.01 | — |
| Onsite truck | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Offsite | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — |
| Worker | 0.06 | 0.02 | 0.00 | 0.01 | 0.01 | 0.00 | < 0.005 | < 0.005 | 13.3 |
| Vendor | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Hauling | 0.02 | 0.44 | < 0.005 | 0.01 | 0.01 | < 0.005 | < 0.005 | < 0.005 | 95.1 |
| Average Daily | — | — | — | — | — | — | — | — | — |
| Worker | < 0.005 | < 0.005 | 0.00 | < 0.005 | < 0.005 | 0.00 | < 0.005 | < 0.005 | 0.43 |
| Vendor | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Hauling | < 0.005 | 0.01 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | 3.11 |
| Annual | — | — | — | — | — | — | — | — | — |
| Worker | < 0.005 | < 0.005 | 0.00 | < 0.005 | < 0.005 | 0.00 | < 0.005 | < 0.005 | 0.07 |
| Vendor | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Hauling | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | 0.52 |

## 3.6. Grading (2026) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | CO2e |
|---|---|---|---|---|---|---|---|---|---|
| Onsite | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.42 | 5.39 | 0.07 | — | 0.07 | 0.07 | — | 0.07 | 3,895 |
| Dust From Material Movement | — | — | — | 2.77 | 2.77 | — | 1.34 | 1.34 | — |
| Onsite truck | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Average Daily | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.01 | 0.18 | < 0.005 | — | < 0.005 | < 0.005 | — | < 0.005 | 128 |
| Dust From Material Movement | — | — | — | 0.09 | 0.09 | — | 0.04 | 0.04 | — |
| Onsite truck | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Annual | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | < 0.005 | 0.03 | < 0.005 | — | < 0.005 | < 0.005 | — | < 0.005 | 21.2 |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Dust From Material Movement | — | — | — | 0.02 | 0.02 | — | 0.01 | 0.01 | — |
| Onsite truck | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Offsite | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — |
| Worker | 0.06 | 0.02 | 0.00 | 0.01 | 0.01 | 0.00 | < 0.005 | < 0.005 | 13.3 |
| Vendor | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Hauling | 0.02 | 0.44 | < 0.005 | 0.01 | 0.01 | < 0.005 | < 0.005 | < 0.005 | 95.1 |
| Average Daily | — | — | — | — | — | — | — | — | — |
| Worker | < 0.005 | < 0.005 | 0.00 | < 0.005 | < 0.005 | 0.00 | < 0.005 | < 0.005 | 0.43 |
| Vendor | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Hauling | < 0.005 | 0.01 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | 3.11 |
| Annual | — | — | — | — | — | — | — | — | — |
| Worker | < 0.005 | < 0.005 | 0.00 | < 0.005 | < 0.005 | 0.00 | < 0.005 | < 0.005 | 0.07 |
| Vendor | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Hauling | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | 0.52 |

## 3.7. Building Construction (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | CO2e |
|---|---|---|---|---|---|---|---|---|---|
| Onsite | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 1.17 | 9.42 | 0.30 | — | 0.30 | 0.28 | — | 0.28 | 1,914 |
| Onsite truck | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 1.17 | 9.42 | 0.30 | — | 0.30 | 0.28 | — | 0.28 | 1,914 |
| Onsite truck | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Average Daily | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.42 | 3.39 | 0.11 | — | 0.11 | 0.10 | — | 0.10 | 689 |
| Onsite truck | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Annual | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.08 | 0.62 | 0.02 | — | 0.02 | 0.02 | — | 0.02 | 114 |
| Onsite truck | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Offsite | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — |
| Worker | 0.25 | 0.06 | 0.00 | 0.03 | 0.03 | 0.00 | 0.01 | 0.01 | 50.5 |
| Vendor | 0.01 | 0.15 | < 0.005 | 0.01 | 0.01 | < 0.005 | < 0.005 | < 0.005 | 36.7 |
| Hauling | < 0.005 | 0.03 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | 6.04 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — |
| Worker | 0.23 | 0.07 | 0.00 | 0.03 | 0.03 | 0.00 | 0.01 | 0.01 | 49.1 |
| Vendor | 0.01 | 0.16 | < 0.005 | 0.01 | 0.01 | < 0.005 | < 0.005 | < 0.005 | 36.9 |
| Hauling | < 0.005 | 0.03 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | 6.08 |
| Average Daily | — | — | — | — | — | — | — | — | — |
| Worker | 0.08 | 0.02 | 0.00 | 0.01 | 0.01 | 0.00 | < 0.005 | < 0.005 | 17.5 |
| Vendor | < 0.005 | 0.06 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | 13.2 |
| Hauling | < 0.005 | 0.01 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | 2.18 |
| Annual | — | — | — | — | — | — | — | — | — |
| Worker | 0.02 | < 0.005 | 0.00 | < 0.005 | < 0.005 | 0.00 | < 0.005 | < 0.005 | 2.90 |
| Vendor | < 0.005 | 0.01 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | 2.19 |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Hauling | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | 0.36 |

## 3.8. Building Construction (2026) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | CO2e |
|---|---|---|---|---|---|---|---|---|---|
| Onsite | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.24 | 4.93 | 0.03 | — | 0.03 | 0.03 | — | 0.03 | 1,914 |
| Onsite truck | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.24 | 4.93 | 0.03 | — | 0.03 | 0.03 | — | 0.03 | 1,914 |
| Onsite truck | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Average Daily | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.09 | 1.77 | 0.01 | — | 0.01 | 0.01 | — | 0.01 | 689 |
| Onsite truck | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Annual | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.02 | 0.32 | < 0.005 | — | < 0.005 | < 0.005 | — | < 0.005 | 114 |
| Onsite truck | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Offsite | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — |
| Worker | 0.25 | 0.06 | 0.00 | 0.03 | 0.03 | 0.00 | 0.01 | 0.01 | 50.5 |
| Vendor | 0.01 | 0.15 | < 0.005 | 0.01 | 0.01 | < 0.005 | < 0.005 | < 0.005 | 36.7 |
| Hauling | < 0.005 | 0.03 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | 6.04 |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — |
| Worker | 0.23 | 0.07 | 0.00 | 0.03 | 0.03 | 0.00 | 0.01 | 0.01 | 49.1 |
| Vendor | 0.01 | 0.16 | < 0.005 | 0.01 | 0.01 | < 0.005 | < 0.005 | < 0.005 | 36.9 |
| Hauling | < 0.005 | 0.03 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | 6.08 |
| Average Daily | — | — | — | — | — | — | — | — | — |
| Worker | 0.08 | 0.02 | 0.00 | 0.01 | 0.01 | 0.00 | < 0.005 | < 0.005 | 17.5 |
| Vendor | < 0.005 | 0.06 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | 13.2 |
| Hauling | < 0.005 | 0.01 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | 2.18 |
| Annual | — | — | — | — | — | — | — | — | — |
| Worker | 0.02 | < 0.005 | 0.00 | < 0.005 | < 0.005 | 0.00 | < 0.005 | < 0.005 | 2.90 |
| Vendor | < 0.005 | 0.01 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | 2.19 |
| Hauling | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | 0.36 |

## 3.9. Building Construction (2027) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | CO2e |
|---|---|---|---|---|---|---|---|---|---|
| Onsite | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 1.11 | 9.06 | 0.26 | — | 0.26 | 0.24 | — | 0.24 | 1,914 |
| Onsite truck | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 1.11 | 9.06 | 0.26 | — | 0.26 | 0.24 | — | 0.24 | 1,914 |
| Onsite truck | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Average Daily | — | — | — | — | — | — | — | — | — |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Off-Road Equipment | 0.39 | 3.19 | 0.09 | — | 0.09 | 0.09 | — | 0.09 | 674 |
| Onsite truck | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Annual | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.07 | 0.58 | 0.02 | — | 0.02 | 0.02 | — | 0.02 | 112 |
| Onsite truck | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Offsite | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — |
| Worker | 0.23 | 0.06 | 0.00 | 0.03 | 0.03 | 0.00 | 0.01 | 0.01 | 49.5 |
| Vendor | 0.01 | 0.15 | < 0.005 | 0.01 | 0.01 | < 0.005 | < 0.005 | < 0.005 | 36.0 |
| Hauling | < 0.005 | 0.03 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | 5.92 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — |
| Worker | 0.22 | 0.07 | 0.00 | 0.03 | 0.03 | 0.00 | 0.01 | 0.01 | 47.6 |
| Vendor | 0.01 | 0.16 | < 0.005 | 0.01 | 0.01 | < 0.005 | < 0.005 | < 0.005 | 36.3 |
| Hauling | < 0.005 | 0.03 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | 5.97 |
| Average Daily | — | — | — | — | — | — | — | — | — |
| Worker | 0.08 | 0.02 | 0.00 | 0.01 | 0.01 | 0.00 | < 0.005 | < 0.005 | 16.8 |
| Vendor | < 0.005 | 0.05 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | 12.7 |
| Hauling | < 0.005 | 0.01 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | 2.09 |
| Annual | — | — | — | — | — | — | — | — | — |
| Worker | 0.01 | < 0.005 | 0.00 | < 0.005 | < 0.005 | 0.00 | < 0.005 | < 0.005 | 2.78 |
| Vendor | < 0.005 | 0.01 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | 2.11 |
| Hauling | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | 0.35 |

## 3.10. Building Construction (2027) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | CO2e |
|---|---|---|---|---|---|---|---|---|---|
| Onsite | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.24 | 4.93 | 0.03 | — | 0.03 | 0.03 | — | 0.03 | 1,914 |
| Onsite truck | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.24 | 4.93 | 0.03 | — | 0.03 | 0.03 | — | 0.03 | 1,914 |
| Onsite truck | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Average Daily | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.08 | 1.74 | 0.01 | — | 0.01 | 0.01 | — | 0.01 | 674 |
| Onsite truck | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Annual | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.02 | 0.32 | < 0.005 | — | < 0.005 | < 0.005 | — | < 0.005 | 112 |
| Onsite truck | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Offsite | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — |
| Worker | 0.23 | 0.06 | 0.00 | 0.03 | 0.03 | 0.00 | 0.01 | 0.01 | 49.5 |
| Vendor | 0.01 | 0.15 | < 0.005 | 0.01 | 0.01 | < 0.005 | < 0.005 | < 0.005 | 36.0 |
| Hauling | < 0.005 | 0.03 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | 5.92 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — |
| Worker | 0.22 | 0.07 | 0.00 | 0.03 | 0.03 | 0.00 | 0.01 | 0.01 | 47.6 |
| Vendor | 0.01 | 0.16 | < 0.005 | 0.01 | 0.01 | < 0.005 | < 0.005 | < 0.005 | 36.3 |
| Hauling | < 0.005 | 0.03 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | 5.97 |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Average Daily | — | — | — | — | — | — | — | — | — |
| Worker | 0.08 | 0.02 | 0.00 | 0.01 | 0.01 | 0.00 | < 0.005 | < 0.005 | 16.8 |
| Vendor | < 0.005 | 0.05 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | 12.7 |
| Hauling | < 0.005 | 0.01 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | 2.09 |
| Annual | — | — | — | — | — | — | — | — | — |
| Worker | 0.01 | < 0.005 | 0.00 | < 0.005 | < 0.005 | 0.00 | < 0.005 | < 0.005 | 2.78 |
| Vendor | < 0.005 | 0.01 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | 2.11 |
| Hauling | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | 0.35 |

## 3.11. Paving (2027) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | CO2e |
|---|---|---|---|---|---|---|---|---|---|
| Onsite | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.66 | 6.09 | 0.24 | — | 0.24 | 0.22 | — | 0.22 | 1,355 |
| Paving | 0.00 | — | — | — | — | — | — | — | — |
| Onsite truck | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.66 | 6.09 | 0.24 | — | 0.24 | 0.22 | — | 0.22 | 1,355 |
| Paving | 0.00 | — | — | — | — | — | — | — | — |
| Onsite truck | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Average Daily | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.14 | 1.25 | 0.05 | — | 0.05 | 0.05 | — | 0.05 | 278 |
| Paving | 0.00 | — | — | — | — | — | — | — | — |
| Onsite truck | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Annual | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.02 | 0.23 | 0.01 | — | 0.01 | 0.01 | — | 0.01 | 46.1 |
| Paving | 0.00 | — | — | — | — | — | — | — | — |
| Onsite truck | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Offsite | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — |
| Worker | 0.05 | 0.01 | 0.00 | 0.01 | 0.01 | 0.00 | < 0.005 | < 0.005 | 10.7 |
| Vendor | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Hauling | < 0.005 | 0.01 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | 2.49 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — |
| Worker | 0.05 | 0.01 | 0.00 | 0.01 | 0.01 | 0.00 | < 0.005 | < 0.005 | 10.3 |
| Vendor | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Hauling | < 0.005 | 0.01 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | 2.51 |
| Average Daily | — | — | — | — | — | — | — | — | — |
| Worker | 0.01 | < 0.005 | 0.00 | < 0.005 | < 0.005 | 0.00 | < 0.005 | < 0.005 | 2.13 |
| Vendor | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Hauling | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | 0.51 |
| Annual | — | — | — | — | — | — | — | — | — |
| Worker | < 0.005 | < 0.005 | 0.00 | < 0.005 | < 0.005 | 0.00 | < 0.005 | < 0.005 | 0.35 |
| Vendor | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Hauling | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | 0.09 |

## 3.12. Paving (2027) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | CO2e |
|---|---|---|---|---|---|---|---|---|---|
| Onsite | — | — | — | — | — | — | — | — | — |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.21 | 2.14 | 0.05 | — | 0.05 | 0.05 | — | 0.05 | 1,355 |
| Paving | 0.00 | — | — | — | — | — | — | — | — |
| Onsite truck | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.21 | 2.14 | 0.05 | — | 0.05 | 0.05 | — | 0.05 | 1,355 |
| Paving | 0.00 | — | — | — | — | — | — | — | — |
| Onsite truck | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Average Daily | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.04 | 0.44 | 0.01 | — | 0.01 | 0.01 | — | 0.01 | 278 |
| Paving | 0.00 | — | — | — | — | — | — | — | — |
| Onsite truck | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Annual | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.01 | 0.08 | < 0.005 | — | < 0.005 | < 0.005 | — | < 0.005 | 46.1 |
| Paving | 0.00 | — | — | — | — | — | — | — | — |
| Onsite truck | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Offsite | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — |
| Worker | 0.05 | 0.01 | 0.00 | 0.01 | 0.01 | 0.00 | < 0.005 | < 0.005 | 10.7 |
| Vendor | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Hauling | < 0.005 | 0.01 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | 2.49 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — |
| Worker | 0.05 | 0.01 | 0.00 | 0.01 | 0.01 | 0.00 | < 0.005 | < 0.005 | 10.3 |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Vendor | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Hauling | < 0.005 | 0.01 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | 2.51 |
| Average Daily | — | — | — | — | — | — | — | — | — |
| Worker | 0.01 | < 0.005 | 0.00 | < 0.005 | < 0.005 | 0.00 | < 0.005 | < 0.005 | 2.13 |
| Vendor | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Hauling | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | 0.51 |
| Annual | — | — | — | — | — | — | — | — | — |
| Worker | < 0.005 | < 0.005 | 0.00 | < 0.005 | < 0.005 | 0.00 | < 0.005 | < 0.005 | 0.35 |
| Vendor | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Hauling | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | 0.09 |

## 3.13. Architectural Coating (2027) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | CO2e |
|---|---|---|---|---|---|---|---|---|---|
| Onsite | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.32 | 2.46 | 0.06 | — | 0.06 | 0.05 | — | 0.05 | 414 |
| Architectural Coatings | 13.6 | — | — | — | — | — | — | — | — |
| Onsite truck | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.32 | 2.46 | 0.06 | — | 0.06 | 0.05 | — | 0.05 | 414 |
| Architectural Coatings | 13.6 | — | — | — | — | — | — | — | — |
| Onsite truck | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Average Daily | — | — | — | — | — | — | — | — | — |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Off-Road Equipment | 0.12 | 0.94 | 0.02 | — | 0.02 | 0.02 | — | 0.02 | 159 |
| Architectural Coatings | 5.23 | — | — | — | — | — | — | — | — |
| Onsite truck | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Annual | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.02 | 0.17 | < 0.005 | — | < 0.005 | < 0.005 | — | < 0.005 | 26.3 |
| Architectural Coatings | 0.96 | — | — | — | — | — | — | — | — |
| Onsite truck | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Offsite | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — |
| Worker | 0.05 | 0.01 | 0.00 | 0.01 | 0.01 | 0.00 | < 0.005 | < 0.005 | 9.90 |
| Vendor | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Hauling | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — |
| Worker | 0.04 | 0.01 | 0.00 | 0.01 | 0.01 | 0.00 | < 0.005 | < 0.005 | 9.52 |
| Vendor | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Hauling | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Average Daily | — | — | — | — | — | — | — | — | — |
| Worker | 0.02 | < 0.005 | 0.00 | < 0.005 | < 0.005 | 0.00 | < 0.005 | < 0.005 | 3.66 |
| Vendor | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Hauling | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Annual | — | — | — | — | — | — | — | — | — |
| Worker | < 0.005 | < 0.005 | 0.00 | < 0.005 | < 0.005 | 0.00 | < 0.005 | < 0.005 | 0.61 |
| Vendor | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Hauling | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |

## 3.14. Architectural Coating (2027) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | CO2e |
|---|---|---|---|---|---|---|---|---|---|
| Onsite | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.06 | 1.83 | 0.01 | — | 0.01 | 0.01 | — | 0.01 | 414 |
| Architectural Coatings | 13.6 | — | — | — | — | — | — | — | — |
| Onsite truck | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.06 | 1.83 | 0.01 | — | 0.01 | 0.01 | — | 0.01 | 414 |
| Architectural Coatings | 13.6 | — | — | — | — | — | — | — | — |
| Onsite truck | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Average Daily | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.02 | 0.70 | < 0.005 | — | < 0.005 | < 0.005 | — | < 0.005 | 159 |
| Architectural Coatings | 5.23 | — | — | — | — | — | — | — | — |
| Onsite truck | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Annual | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | < 0.005 | 0.13 | < 0.005 | — | < 0.005 | < 0.005 | — | < 0.005 | 26.3 |
| Architectural Coatings | 0.96 | — | — | — | — | — | — | — | — |
| Onsite truck | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Offsite | — | — | — | — | — | — | — | — | — |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — |
| Worker | 0.05 | 0.01 | 0.00 | 0.01 | 0.01 | 0.00 | < 0.005 | < 0.005 | 9.90 |
| Vendor | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Hauling | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — |
| Worker | 0.04 | 0.01 | 0.00 | 0.01 | 0.01 | 0.00 | < 0.005 | < 0.005 | 9.52 |
| Vendor | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Hauling | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Average Daily | — | — | — | — | — | — | — | — | — |
| Worker | 0.02 | < 0.005 | 0.00 | < 0.005 | < 0.005 | 0.00 | < 0.005 | < 0.005 | 3.66 |
| Vendor | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Hauling | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Annual | — | — | — | — | — | — | — | — | — |
| Worker | < 0.005 | < 0.005 | 0.00 | < 0.005 | < 0.005 | 0.00 | < 0.005 | < 0.005 | 0.61 |
| Vendor | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Hauling | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |

## 3.15. Trenching (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | CO2e |
|---|---|---|---|---|---|---|---|---|---|
| Onsite | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.20 | 1.86 | 0.06 | — | 0.06 | 0.05 | — | 0.05 | 433 |
| Onsite truck | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Average Daily | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.01 | 0.08 | < 0.005 | — | < 0.005 | < 0.005 | — | < 0.005 | 17.8 |
| Onsite truck | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Annual | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | < 0.005 | 0.01 | < 0.005 | — | < 0.005 | < 0.005 | — | < 0.005 | 2.95 |
| Onsite truck | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Offsite | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — |
| Worker | 0.01 | < 0.005 | 0.00 | < 0.005 | < 0.005 | 0.00 | < 0.005 | < 0.005 | 2.74 |
| Vendor | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Hauling | < 0.005 | 0.01 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | 1.41 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — |
| Average Daily | — | — | — | — | — | — | — | — | — |
| Worker | < 0.005 | < 0.005 | 0.00 | < 0.005 | < 0.005 | 0.00 | < 0.005 | < 0.005 | 0.11 |
| Vendor | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Hauling | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | 0.06 |
| Annual | — | — | — | — | — | — | — | — | — |
| Worker | < 0.005 | < 0.005 | 0.00 | < 0.005 | < 0.005 | 0.00 | < 0.005 | < 0.005 | 0.02 |
| Vendor | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Hauling | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | 0.01 |

## 3.16. Trenching (2026) - Mitigated

### Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | CO2e |
|---|---|---|---|---|---|---|---|---|---|
| Onsite | — | — | — | — | — | — | — | — | — |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.05 | 0.81 | 0.01 | — | 0.01 | 0.01 | — | 0.01 | 433 |
| Onsite truck | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — |
| Average Daily | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | < 0.005 | 0.03 | < 0.005 | — | < 0.005 | < 0.005 | — | < 0.005 | 17.8 |
| Onsite truck | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Annual | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | < 0.005 | 0.01 | < 0.005 | — | < 0.005 | < 0.005 | — | < 0.005 | 2.95 |
| Onsite truck | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Offsite | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — |
| Worker | 0.01 | < 0.005 | 0.00 | < 0.005 | < 0.005 | 0.00 | < 0.005 | < 0.005 | 2.74 |
| Vendor | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Hauling | < 0.005 | 0.01 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | 1.41 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — |
| Average Daily | — | — | — | — | — | — | — | — | — |
| Worker | < 0.005 | < 0.005 | 0.00 | < 0.005 | < 0.005 | 0.00 | < 0.005 | < 0.005 | 0.11 |
| Vendor | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Hauling | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | 0.06 |
| Annual | — | — | — | — | — | — | — | — | — |
| Worker | < 0.005 | < 0.005 | 0.00 | < 0.005 | < 0.005 | 0.00 | < 0.005 | < 0.005 | 0.02 |
| Vendor | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Hauling | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | 0.01 |

# 4. Operations Emissions Details

## 4.10. Soil Carbon Accumulation By Vegetation Type

### 4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Vegetation | ROG | NOx | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | CO2e |
|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — |
| Annual | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — |

### 4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Land Use | ROG | NOx | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | CO2e |
|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — |
| Annual | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — |

### 4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Species | ROG | NOx | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | CO2e |
|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — |
| Avoided | — | — | — | — | — | — | — | — | — |
| Subtotal | — | — | — | — | — | — | — | — | — |
| Sequestered | — | — | — | — | — | — | — | — | — |
| Subtotal | — | — | — | — | — | — | — | — | — |
| Removed | — | — | — | — | — | — | — | — | — |
| Subtotal | — | — | — | — | — | — | — | — | — |
| — | — | — | — | — | — | — | — | — | — |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — |
| Avoided | — | — | — | — | — | — | — | — | — |
| Subtotal | — | — | — | — | — | — | — | — | — |
| Sequestered | — | — | — | — | — | — | — | — | — |
| Subtotal | — | — | — | — | — | — | — | — | — |
| Removed | — | — | — | — | — | — | — | — | — |
| Subtotal | — | — | — | — | — | — | — | — | — |
| — | — | — | — | — | — | — | — | — | — |
| Annual | — | — | — | — | — | — | — | — | — |
| Avoided | — | — | — | — | — | — | — | — | — |
| Subtotal | — | — | — | — | — | — | — | — | — |
| Sequestered | — | — | — | — | — | — | — | — | — |
| Subtotal | — | — | — | — | — | — | — | — | — |
| Removed | — | — | — | — | — | — | — | — | — |
| Subtotal | — | — | — | — | — | — | — | — | — |
| — | — | — | — | — | — | — | — | — | — |

### 4.10.4. Soil Carbon Accumulation By Vegetation Type - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Vegetation | ROG | NOx | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | CO2e |
|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — |
| Annual | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — |

### 4.10.5. Above and Belowground Carbon Accumulation by Land Use Type - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Land Use | ROG | NOx | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | CO2e |
|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — |
| Annual | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — |

### 4.10.6. Avoided and Sequestered Emissions by Species - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Species | ROG | NOx | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | CO2e |
|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Avoided | — | — | — | — | — | — | — | — | — |
| Subtotal | — | — | — | — | — | — | — | — | — |
| Sequestered | — | — | — | — | — | — | — | — | — |
| Subtotal | — | — | — | — | — | — | — | — | — |
| Removed | — | — | — | — | — | — | — | — | — |
| Subtotal | — | — | — | — | — | — | — | — | — |
| — | — | — | — | — | — | — | — | — | — |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — |
| Avoided | — | — | — | — | — | — | — | — | — |
| Subtotal | — | — | — | — | — | — | — | — | — |
| Sequestered | — | — | — | — | — | — | — | — | — |
| Subtotal | — | — | — | — | — | — | — | — | — |
| Removed | — | — | — | — | — | — | — | — | — |
| Subtotal | — | — | — | — | — | — | — | — | — |
| — | — | — | — | — | — | — | — | — | — |
| Annual | — | — | — | — | — | — | — | — | — |
| Avoided | — | — | — | — | — | — | — | — | — |
| Subtotal | — | — | — | — | — | — | — | — | — |
| Sequestered | — | — | — | — | — | — | — | — | — |
| Subtotal | — | — | — | — | — | — | — | — | — |
| Removed | — | — | — | — | — | — | — | — | — |
| Subtotal | — | — | — | — | — | — | — | — | — |
| — | — | — | — | — | — | — | — | — | — |

# 5. Activity Data

## 5.1. Construction Schedule

| Phase Name | Phase Type | Start Date | End Date | Days Per Week | Work Days per Phase | Phase Description |
|---|---|---|---|---|---|---|
| Demolition | Demolition | 1/1/2026 | 1/7/2026 | 5.00 | 5.00 | — |
| Site Preparation | Site Preparation | 2/1/2026 | 2/13/2026 | 5.00 | 10.0 | — |
| Grading | Grading | 3/1/2026 | 3/17/2026 | 5.00 | 12.0 | — |
| Building Construction | Building Construction | 7/1/2026 | 6/29/2027 | 5.00 | 260 | — |
| Paving | Paving | 9/1/2027 | 12/14/2027 | 5.00 | 75.0 | — |
| Architectural Coating | Architectural Coating | 5/1/2027 | 11/12/2027 | 5.00 | 140 | — |
| Trenching | Trenching | 5/1/2026 | 5/21/2026 | 5.00 | 15.0 | — |

## 5.2. Off-Road Equipment

### 5.2.1. Unmitigated

| Phase Name | Equipment Type | Fuel Type | Engine Tier | Number per Day | Hours Per Day | Horsepower | Load Factor |
|---|---|---|---|---|---|---|---|
| Demolition | Rubber Tired Dozers | Diesel | Average | 2.00 | 8.00 | 367 | 0.40 |
| Demolition | Other General Industrial Equipment | Diesel | Average | 1.00 | 8.00 | 35.0 | 0.34 |
| Demolition | Excavators | Diesel | Average | 2.00 | 8.00 | 36.0 | 0.38 |
| Site Preparation | Rubber Tired Dozers | Diesel | Average | 3.00 | 8.00 | 367 | 0.40 |
| Site Preparation | Tractors/Loaders/Backhoes | Diesel | Average | 4.00 | 8.00 | 84.0 | 0.37 |
| Grading | Rubber Tired Dozers | Diesel | Average | 1.00 | 8.00 | 367 | 0.40 |
| Grading | Tractors/Loaders/Backhoes | Diesel | Average | 4.00 | 8.00 | 84.0 | 0.37 |
| Grading | Excavators | Diesel | Average | 2.00 | 8.00 | 36.0 | 0.38 |
| Grading | Graders | Diesel | Average | 1.00 | 8.00 | 148 | 0.41 |
| Grading | Skid Steer Loaders | Diesel | Average | 2.00 | 8.00 | 71.0 | 0.37 |
| Building Construction | Cranes | Diesel | Average | 1.00 | 5.90 | 367 | 0.29 |
| Building Construction | Forklifts | Diesel | Average | 2.00 | 3.80 | 82.0 | 0.20 |
| Building Construction | Tractors/Loaders/Backhoes | Diesel | Average | 1.00 | 3.10 | 84.0 | 0.37 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Building Construction | Air Compressors | Diesel | Average | 4.00 | 7.70 | 37.0 | 0.48 |
| Building Construction | Concrete/Industrial Saws | Diesel | Average | 1.00 | 7.70 | 33.0 | 0.73 |
| Paving | Cement and Mortar Mixers | Diesel | Average | 2.00 | 6.00 | 10.0 | 0.56 |
| Paving | Pavers | Diesel | Average | 1.00 | 8.00 | 81.0 | 0.42 |
| Paving | Paving Equipment | Diesel | Average | 2.00 | 6.00 | 89.0 | 0.36 |
| Paving | Rollers | Diesel | Average | 2.00 | 6.00 | 36.0 | 0.38 |
| Paving | Tractors/Loaders/Backhoes | Diesel | Average | 1.00 | 8.00 | 84.0 | 0.37 |
| Architectural Coating | Air Compressors | Diesel | Average | 2.00 | 8.00 | 37.0 | 0.48 |
| Architectural Coating | Aerial Lifts | Diesel | Average | 1.00 | 1.00 | 46.0 | 0.31 |
| Architectural Coating | Forklifts | Diesel | Average | 1.00 | 2.00 | 82.0 | 0.20 |
| Trenching | Tractors/Loaders/Backhoes | Diesel | Average | 1.00 | 8.00 | 84.0 | 0.37 |
| Trenching | Excavators | Diesel | Average | 1.00 | 8.00 | 36.0 | 0.38 |

### 5.2.2. Mitigated

| Phase Name | Equipment Type | Fuel Type | Engine Tier | Number per Day | Hours Per Day | Horsepower | Load Factor |
|---|---|---|---|---|---|---|---|
| Demolition | Rubber Tired Dozers | Diesel | Tier 4 Final | 2.00 | 8.00 | 367 | 0.40 |
| Demolition | Other General Industrial Equipment | Diesel | Tier 4 Final | 1.00 | 8.00 | 35.0 | 0.34 |
| Demolition | Excavators | Diesel | Tier 4 Final | 2.00 | 8.00 | 36.0 | 0.38 |
| Site Preparation | Rubber Tired Dozers | Diesel | Tier 4 Final | 3.00 | 8.00 | 367 | 0.40 |
| Site Preparation | Tractors/Loaders/Backhoes | Diesel | Tier 4 Final | 4.00 | 8.00 | 84.0 | 0.37 |
| Grading | Rubber Tired Dozers | Diesel | Tier 4 Final | 1.00 | 8.00 | 367 | 0.40 |
| Grading | Tractors/Loaders/Backhoes | Diesel | Tier 4 Final | 4.00 | 8.00 | 84.0 | 0.37 |
| Grading | Excavators | Diesel | Tier 4 Final | 2.00 | 8.00 | 36.0 | 0.38 |
| Grading | Graders | Diesel | Tier 4 Final | 1.00 | 8.00 | 148 | 0.41 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Grading | Skid Steer Loaders | Diesel | Tier 4 Final | 2.00 | 8.00 | 71.0 | 0.37 |
| Building Construction | Cranes | Diesel | Tier 4 Final | 1.00 | 5.90 | 367 | 0.29 |
| Building Construction | Forklifts | Diesel | Tier 4 Final | 2.00 | 3.80 | 82.0 | 0.20 |
| Building Construction | Tractors/Loaders/Backhoes | Diesel | Tier 4 Final | 1.00 | 3.10 | 84.0 | 0.37 |
| Building Construction | Air Compressors | Diesel | Tier 4 Final | 4.00 | 7.70 | 37.0 | 0.48 |
| Building Construction | Concrete/Industrial Saws | Diesel | Tier 4 Final | 1.00 | 7.70 | 33.0 | 0.73 |
| Paving | Cement and Mortar Mixers | Diesel | Average | 2.00 | 6.00 | 10.0 | 0.56 |
| Paving | Pavers | Diesel | Tier 4 Final | 1.00 | 8.00 | 81.0 | 0.42 |
| Paving | Paving Equipment | Diesel | Tier 4 Final | 2.00 | 6.00 | 89.0 | 0.36 |
| Paving | Rollers | Diesel | Tier 4 Final | 2.00 | 6.00 | 36.0 | 0.38 |
| Paving | Tractors/Loaders/Backhoes | Diesel | Tier 4 Final | 1.00 | 8.00 | 84.0 | 0.37 |
| Architectural Coating | Air Compressors | Diesel | Tier 4 Final | 2.00 | 8.00 | 37.0 | 0.48 |
| Architectural Coating | Aerial Lifts | Diesel | Tier 4 Final | 1.00 | 1.00 | 46.0 | 0.31 |
| Architectural Coating | Forklifts | Diesel | Tier 4 Final | 1.00 | 2.00 | 82.0 | 0.20 |
| Trenching | Tractors/Loaders/Backhoes | Diesel | Tier 4 Final | 1.00 | 8.00 | 84.0 | 0.37 |
| Trenching | Excavators | Diesel | Tier 4 Final | 1.00 | 8.00 | 36.0 | 0.38 |

## 5.3. Construction Vehicles

### 5.3.1. Unmitigated

| Phase Name | Trip Type | One-Way Trips per Day | Miles per Trip | Vehicle Mix |
|---|---|---|---|---|
| Demolition | — | — | — | — |
| Demolition | Worker | 12.5 | 0.50 | LDA,LDT1,LDT2 |
| Demolition | Vendor | — | 0.50 | HHDT,MHDT |
| Demolition | Hauling | 13.8 | 0.50 | HHDT |

| | | | | |
|---|---|---|---|---|
| Demolition | Onsite truck | — | — | HHDT |
| Site Preparation | — | — | — | — |
| Site Preparation | Worker | 17.5 | 0.50 | LDA,LDT1,LDT2 |
| Site Preparation | Vendor | — | 0.50 | HHDT,MHDT |
| Site Preparation | Hauling | 0.80 | 0.50 | HHDT |
| Site Preparation | Onsite truck | — | — | HHDT |
| Grading | — | — | — | — |
| Grading | Worker | 25.0 | 0.50 | LDA,LDT1,LDT2 |
| Grading | Vendor | — | 0.50 | HHDT,MHDT |
| Grading | Hauling | 26.8 | 0.50 | HHDT |
| Grading | Onsite truck | — | — | HHDT |
| Building Construction | — | — | — | — |
| Building Construction | Worker | 92.2 | 0.50 | LDA,LDT1,LDT2 |
| Building Construction | Vendor | 13.7 | 0.50 | HHDT,MHDT |
| Building Construction | Hauling | 1.71 | 0.50 | HHDT |
| Building Construction | Onsite truck | — | — | HHDT |
| Paving | — | — | — | — |
| Paving | Worker | 20.0 | 0.50 | LDA,LDT1,LDT2 |
| Paving | Vendor | — | 0.50 | HHDT,MHDT |
| Paving | Hauling | 0.72 | 0.50 | HHDT |
| Paving | Onsite truck | — | — | HHDT |
| Architectural Coating | — | — | — | — |
| Architectural Coating | Worker | 18.4 | 0.50 | LDA,LDT1,LDT2 |
| Architectural Coating | Vendor | — | 0.50 | HHDT,MHDT |
| Architectural Coating | Hauling | 0.00 | 0.50 | HHDT |
| Architectural Coating | Onsite truck | — | — | HHDT |
| Trenching | — | — | — | — |
| Trenching | Worker | 5.00 | 0.50 | LDA,LDT1,LDT2 |

| | | | | |
|---|---|---|---|---|
| Trenching | Vendor | — | 0.50 | HHDT,MHDT |
| Trenching | Hauling | 0.40 | 0.50 | HHDT |
| Trenching | Onsite truck | — | — | HHDT |

### 5.3.2. Mitigated

| Phase Name | Trip Type | One-Way Trips per Day | Miles per Trip | Vehicle Mix |
|---|---|---|---|---|
| Demolition | — | — | — | — |
| Demolition | Worker | 12.5 | 0.50 | LDA,LDT1,LDT2 |
| Demolition | Vendor | — | 0.50 | HHDT,MHDT |
| Demolition | Hauling | 13.8 | 0.50 | HHDT |
| Demolition | Onsite truck | — | — | HHDT |
| Site Preparation | — | — | — | — |
| Site Preparation | Worker | 17.5 | 0.50 | LDA,LDT1,LDT2 |
| Site Preparation | Vendor | — | 0.50 | HHDT,MHDT |
| Site Preparation | Hauling | 0.80 | 0.50 | HHDT |
| Site Preparation | Onsite truck | — | — | HHDT |
| Grading | — | — | — | — |
| Grading | Worker | 25.0 | 0.50 | LDA,LDT1,LDT2 |
| Grading | Vendor | — | 0.50 | HHDT,MHDT |
| Grading | Hauling | 26.8 | 0.50 | HHDT |
| Grading | Onsite truck | — | — | HHDT |
| Building Construction | — | — | — | — |
| Building Construction | Worker | 92.2 | 0.50 | LDA,LDT1,LDT2 |
| Building Construction | Vendor | 13.7 | 0.50 | HHDT,MHDT |
| Building Construction | Hauling | 1.71 | 0.50 | HHDT |
| Building Construction | Onsite truck | — | — | HHDT |
| Paving | — | — | — | — |
| Paving | Worker | 20.0 | 0.50 | LDA,LDT1,LDT2 |

| | | | | |
|---|---|---|---|---|
| Paving | Vendor | — | 0.50 | HHDT,MHDT |
| Paving | Hauling | 0.72 | 0.50 | HHDT |
| Paving | Onsite truck | — | — | HHDT |
| Architectural Coating | — | — | — | — |
| Architectural Coating | Worker | 18.4 | 0.50 | LDA,LDT1,LDT2 |
| Architectural Coating | Vendor | — | 0.50 | HHDT,MHDT |
| Architectural Coating | Hauling | 0.00 | 0.50 | HHDT |
| Architectural Coating | Onsite truck | — | — | HHDT |
| Trenching | — | — | — | — |
| Trenching | Worker | 5.00 | 0.50 | LDA,LDT1,LDT2 |
| Trenching | Vendor | — | 0.50 | HHDT,MHDT |
| Trenching | Hauling | 0.40 | 0.50 | HHDT |
| Trenching | Onsite truck | — | — | HHDT |

## 5.4. Vehicles

### 5.4.1. Construction Vehicle Control Strategies

Non-applicable. No control strategies activated by user.

## 5.5. Architectural Coatings

| Phase Name | Residential Interior Area Coated (sq ft) | Residential Exterior Area Coated (sq ft) | Non-Residential Interior Area Coated (sq ft) | Non-Residential Exterior Area Coated (sq ft) | Parking Area Coated (sq ft) |
|---|---|---|---|---|---|
| Architectural Coating | 274,669 | 91,556 | 0.00 | 0.00 | — |

## 5.6. Dust Mitigation

### 5.6.1. Construction Earthmoving Activities

| Phase Name | Material Imported (cy) | Material Exported (cy) | Acres Graded (acres) | Material Demolished (Building Square Footage) | Acres Paved (acres) |
|---|---|---|---|---|---|

| | | | | | |
|---|---|---|---|---|---|
| Demolition | 0.00 | 0.00 | 0.00 | 5,000 | — |
| Site Preparation | — | — | 15.0 | 0.00 | — |
| Grading | 1,500 | 1,000 | 12.0 | 0.00 | — |
| Paving | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |

### 5.6.2. Construction Earthmoving Control Strategies

| Control Strategies Applied | Frequency (per day) | PM10 Reduction | PM2.5 Reduction |
|---|---|---|---|
| Water Exposed Area | 2 | 61% | 61% |

## 5.7. Construction Paving

| Land Use | Area Paved (acres) | % Asphalt |
|---|---|---|
| Apartments Mid Rise | — | 0% |
| Parking Lot | 0.00 | 100% |

## 5.8. Construction Electricity Consumption and Emissions Factors

### kWh per Year and Emission Factor (lb/MWh)

| Year | kWh per Year | CO2 | CH4 | N2O |
|---|---|---|---|---|
| 2026 | 0.00 | 809 | 0.03 | < 0.005 |
| 2027 | 0.00 | 809 | 0.03 | < 0.005 |

## 5.18. Vegetation

### 5.18.1. Land Use Change

#### 5.18.1.1. Unmitigated

| Vegetation Land Use Type | Vegetation Soil Type | Initial Acres | Final Acres |
|---|---|---|---|

#### 5.18.1.2. Mitigated

| Vegetation Land Use Type | Vegetation Soil Type | Initial Acres | Final Acres |
|---|---|---|---|

### 5.18.1. Biomass Cover Type

#### 5.18.1.1. Unmitigated

| Biomass Cover Type | Initial Acres | Final Acres |
|---|---|---|

#### 5.18.1.2. Mitigated

| Biomass Cover Type | Initial Acres | Final Acres |
|---|---|---|

### 5.18.2. Sequestration

#### 5.18.2.1. Unmitigated

| Tree Type | Number | Electricity Saved (kWh/year) | Natural Gas Saved (btu/year) |
|---|---|---|---|

#### 5.18.2.2. Mitigated

| Tree Type | Number | Electricity Saved (kWh/year) | Natural Gas Saved (btu/year) |
|---|---|---|---|

# 6. Climate Risk Detailed Report

## 6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

| Climate Hazard | Result for Project Location | Unit |
|---|---|---|
| Temperature and Extreme Heat | 13.3 | annual days of extreme heat |
| Extreme Precipitation | 2.70 | annual days with precipitation above 20 mm |

| | | |
|---|---|---|
| Sea Level Rise | — | meters of inundation depth |
| Wildfire | 14.4 | annual hectares burned |

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

## 6.2. Initial Climate Risk Scores

| Climate Hazard | Exposure Score | Sensitivity Score | Adaptive Capacity Score | Vulnerability Score |
|---|---|---|---|---|
| Temperature and Extreme Heat | N/A | N/A | N/A | N/A |
| Extreme Precipitation | N/A | N/A | N/A | N/A |
| Sea Level Rise | N/A | N/A | N/A | N/A |
| Wildfire | N/A | N/A | N/A | N/A |
| Flooding | N/A | N/A | N/A | N/A |
| Drought | N/A | N/A | N/A | N/A |
| Snowpack Reduction | N/A | N/A | N/A | N/A |
| Air Quality Degradation | 0 | 0 | 0 | N/A |

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

## 6.3. Adjusted Climate Risk Scores

| Climate Hazard | Exposure Score | Sensitivity Score | Adaptive Capacity Score | Vulnerability Score |
|---|---|---|---|---|
| Temperature and Extreme Heat | N/A | N/A | N/A | N/A |

| | | | | |
|---|---|---|---|---|
| Extreme Precipitation | N/A | N/A | N/A | N/A |
| Sea Level Rise | N/A | N/A | N/A | N/A |
| Wildfire | N/A | N/A | N/A | N/A |
| Flooding | N/A | N/A | N/A | N/A |
| Drought | N/A | N/A | N/A | N/A |
| Snowpack Reduction | N/A | N/A | N/A | N/A |
| Air Quality Degradation | 1 | 1 | 1 | 2 |

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

### 6.4. Climate Risk Reduction Measures

# 7. Health and Equity Details

## 7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

| Indicator | Result for Project Census Tract |
|---|---|
| Exposure Indicators | — |
| AQ-Ozone | 20.8 |
| AQ-PM | 25.1 |
| AQ-DPM | 84.6 |
| Drinking Water | 22.7 |
| Lead Risk Housing | 37.8 |
| Pesticides | 0.00 |
| Toxic Releases | 34.1 |
| Traffic | 84.2 |
| Effect Indicators | — |

| | |
|---|---|
| CleanUp Sites | 0.00 |
| Groundwater | 71.7 |
| Haz Waste Facilities/Generators | 43.3 |
| Impaired Water Bodies | 0.00 |
| Solid Waste | 0.00 |
| Sensitive Population | — |
| Asthma | 18.0 |
| Cardio-vascular | 21.5 |
| Low Birth Weights | 75.3 |
| Socioeconomic Factor Indicators | — |
| Education | 48.8 |
| Housing | 21.6 |
| Linguistic | 87.9 |
| Poverty | 28.4 |
| Unemployment | 44.4 |

## 7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

| Indicator | Result for Project Census Tract |
|---|---|
| Economic | — |
| Above Poverty | 81.35506224 |
| Employed | 71.06377518 |
| Median HI | 86.60336199 |
| Education | — |
| Bachelor's or higher | 74.91338381 |
| High school enrollment | 3.233671243 |
| Preschool enrollment | 77.10766072 |
| Transportation | — |

| | |
|---|---|
| Auto Access | 47.37585012 |
| Active commuting | 64.98139356 |
| Social | — |
| 2-parent households | 90.20916207 |
| Voting | 62.83844476 |
| Neighborhood | — |
| Alcohol availability | 71.08943924 |
| Park access | 45.42538175 |
| Retail density | 55.6268446 |
| Supermarket access | 76.18375465 |
| Tree canopy | 23.52110869 |
| Housing | — |
| Homeownership | 61.88887463 |
| Housing habitability | 72.26998588 |
| Low-inc homeowner severe housing cost burden | 82.97189786 |
| Low-inc renter severe housing cost burden | 77.00500449 |
| Uncrowded housing | 23.82907738 |
| Health Outcomes | — |
| Insured adults | 81.30373412 |
| Arthritis | 92.2 |
| Asthma ER Admissions | 82.0 |
| High Blood Pressure | 71.3 |
| Cancer (excluding skin) | 71.8 |
| Asthma | 98.2 |
| Coronary Heart Disease | 92.9 |
| Chronic Obstructive Pulmonary Disease | 96.5 |
| Diagnosed Diabetes | 70.5 |
| Life Expectancy at Birth | 86.8 |

| | |
|---|---|
| Cognitively Disabled | 82.5 |
| Physically  Disabled | 67.1 |
| Heart Attack ER Admissions | 69.4 |
| Mental Health Not Good | 92.6 |
| Chronic Kidney Disease | 85.5 |
| Obesity | 98.0 |
| Pedestrian Injuries | 19.6 |
| Physical Health Not Good | 90.6 |
| Stroke | 91.3 |
| Health Risk Behaviors | — |
| Binge Drinking | 95.3 |
| Current Smoker | 91.5 |
| No Leisure Time for Physical Activity | 61.9 |
| Climate Change Exposures | — |
| Wildfire Risk | 0.0 |
| SLR Inundation Area | 0.0 |
| Children | 35.2 |
| Elderly | 55.7 |
| English Speaking | 17.6 |
| Foreign-born | 95.6 |
| Outdoor Workers | 87.2 |
| Climate Change Adaptive Capacity | — |
| Impervious Surface Cover | 34.0 |
| Traffic Density | 77.3 |
| Traffic Access | 87.4 |
| Other Indices | — |
| Hardship | 43.9 |
| Other Decision Support | — |

| | |
|---|---|
| 2016 Voting | 59.9 |

## 7.3. Overall Health & Equity Scores

| Metric | Result for Project Census Tract |
|---|---|
| CalEnviroScreen 4.0 Score for Project Location (a) | 32.0 |
| Healthy Places Index Score for Project Location (b) | 75.0 |
| Project Located in a Designated Disadvantaged Community (Senate Bill 535) | No |
| Project Located in a Low-Income Community (Assembly Bill 1550) | No |
| Project Located in a Community Air Protection Program Community (Assembly Bill 617) | No |

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

## 7.4. Health & Equity Measures

No Health & Equity Measures selected.

## 7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

## 7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

# 8. User Changes to Default Data

| Screen | Justification |
|---|---|
| Characteristics: Utility Information | San Jose Clean Energy is San Jose default clean energy provider. San Jose Clean Energy 2021 rate is 162 lb/MWh. |
| Construction: Construction Phases | From provided construction worksheet. |
| Construction: Off-Road Equipment | Information provided by filled out construction worksheet from applicant. |
| Land Use | Combined office/amenities with residential sf. Total lot acreage, square footage, and parking spaces from provided plans and filled out construction worksheet. |

| | |
|---|---|
| Construction: Trips and VMT | Demolition = Est. 1,250-sf of pavement demo'ed and hauled (0.6 trips/day) and 4 truck round trips (1.6 trips/day), Site Prep = 4 truck round trips (0.8 trips/day), Grading = 4 truck round trips (0.67 trips/day), Trenching = 3 truck round trips (0.4 trips/day), Building = 222 concrete truck round trips (1.71 trips/day), Paving = 200-cy asphalt (0.64 trip-s/day) and 3 truck round trips (0.08 trips/day). HRA = 0.5 mile trip length for localized emissions. |
| Construction: On-Road Fugitive Dust | Air District recommended BMPS = 15 mph. Required by San Jose GP. |
| Operations: Hearths | No hearths. |
| Operations: Water and Waste Water | Wastewater treatment 100% aerobic - no septic tanks or lagoons. |

**Attachment 2: Project Construction Emissions and Health Risk Calculations**

## Construction Health Risk Assessment and Calculations

### 1207 N. Capitol Ave, San Jose, CA

### DPM Emissions and Modeling Emission Rates - Unmitigated

| Construction Year | Activity | DPM (ton/year) | Area Source | DPM Emissions (lb/yr) | DPM Emissions (lb/hr) | DPM Emissions (g/s) | Modeled Area ($m^2$) | DPM Emission Rate ($g/s/m^2$) |
|---|---|---|---|---|---|---|---|---|
| ***2026*** | Construction | 0.0331 | CON_DPM | 66.1 | 0.02543 | 3.20E-03 | 5,953 | 5.38E-07 |
| ***2027*** | Construction | 0.0301 | CON_DPM | 60.1 | 0.02313 | 2.91E-03 | 5,953 | 4.90E-07 |
| ***Total*** | | ***0.0631*** | | ***126.3*** | ***0.0486*** | ***0.0061*** | | |

*Construction Hours*

hr/day = 10 (7am - 5pm, Mon - Fri)

days/yr = 260

hours/year = 2600

### DPM Construction Emissions and Modeling Emission Rates - With Mitigation

| Construction Year | Activity | DPM (ton/year) | Area Source | DPM Emissions (lb/yr) | DPM Emissions (lb/hr) | DPM Emissions (g/s) | Modeled Area ($m^2$) | DPM Emission Rate ($g/s/m^2$) |
|---|---|---|---|---|---|---|---|---|
| ***2026*** | Construction | 0.0035 | CON_DPM | 6.9 | 0.00266 | 3.35E-04 | 5,953 | 5.63E-08 |
| ***2027*** | Construction | 0.0046 | CON_DPM | 9.1 | 0.00351 | 4.42E-04 | 5,953 | 7.43E-08 |
| ***Total*** | | ***0.0080*** | | ***16.0*** | ***0.0062*** | ***0.0008*** | | |

*Construction Hours*

hr/day = 10 (7am - 5pm, Mon - Fri)

days/yr = 260

hours/year = 2600

**1207 N. Capitol Ave, San Jose, CA**

## PM2.5 Fugitive Dust Emissions for Modeling - Unmitigated

| Construction Year | Activity | Area Source | PM2.5 Emissions (ton/year) | (lb/yr) | (lb/hr) | (g/s) | Modeled Area ($m^2$) | PM2.5 Emission Rate $g/s/m^2$ |
|---|---|---|---|---|---|---|---|---|
| ***2026*** | Construction | CON_FUG | 0.0288 | 57.5 | 0.02213 | 2.79E-03 | 5,953 | 4.68E-07 |
| ***2027*** | Construction | CON_FUG | 0.0008 | 1.6 | 0.00060 | 7.54E-05 | 5,953 | 1.27E-08 |
| ***Total*** | | | ***0.0295*** | ***59.1*** | ***0.0227*** | ***0.0029*** | | |

*Construction Hours*

| | | |
|---|---|---|
| hr/day = | 10 | (7am - 5pm, Mon - Fri) |
| days/yr = | 260 | |
| hours/year = | 2600 | |

## PM2.5 Fugitive Dust Construction Emissions for Modeling - With Mitigation

| Construction Year | Activity | Area Source | PM2.5 Emissions (ton/year) | (lb/yr) | (lb/hr) | (g/s) | Modeled Area ($m^2$) | PM2.5 Emission Rate $g/s/m^2$ |
|---|---|---|---|---|---|---|---|---|
| ***2026*** | Construction | CON_FUG | 0.0288 | 57.5 | 0.02213 | 2.79E-03 | 5,953 | 4.68E-07 |
| ***2027*** | Construction | CON_FUG | 0.0008 | 1.6 | 0.00060 | 7.54E-05 | 5,953 | 1.27E-08 |
| ***Total*** | | | ***0.0295*** | ***59.1*** | ***0.0227*** | ***0.0029*** | | |

*Construction Hours*

| | | |
|---|---|---|
| hr/day = | 10 | (7am - 5pm, Mon - Fri) |
| days/yr = | 260 | |
| hours/year = | 2600 | |

## 1207 N. Capitol Ave, San Jose, CA - Construction Health Impact Summary

### Maximum Impacts at MEI Residential Location - Without Mitigation

| Emissions Year | Maximum Concentrations | | Cancer Risk* (per million) | | Hazard Index | Maximum Annual PM2.5 Concentration* |
|---|---|---|---|---|---|---|
| | Exhaust PM10/DPM ($\mu g/m^3$) | Fugitive PM2.5 ($\mu g/m^3$) | Infant/Child | Adult | (-) | ($\mu g/m^3$) |
| 2026 | 0.1062 | 0.1555 | 18.89 | 0.30 | 0.02 | 0.24 |
| 2027 | 0.0967 | 0.0042 | 15.88 | 0.28 | 0.02 | 0.08 |
| **Total** | - | - | **34.77** | **0.58** | - | - |
| **Maximum** | 0.1062 | 0.1555 | **-** | **-** | **0.02** | **0.24** |

* Maximum cancer risk and maximum PM2.5 concentration occur at the same receptor on different levels.

### Maximum Impacts at MEI Residential Location - With Mitigation

| Emissions Year | Maximum Concentrations | | Cancer Risk* (per million) | | Hazard Index | Maximum Annual PM2.5 Concentration* |
|---|---|---|---|---|---|---|
| | Exhaust PM10/DPM ($\mu g/m^3$) | Fugitive PM2.5 ($\mu g/m^3$) | Infant/Child | Adult | (-) | ($\mu g/m^3$) |
| 2026 | 0.0111 | 0.1555 | 1.98 | 0.03 | 0.00 | 0.16 |
| 2027 | 0.0147 | 0.0042 | 2.41 | 0.04 | 0.00 | 0.02 |
| **Total** | - | - | **4.39** | **0.07** | - | - |
| **Maximum** | 0.0147 | 0.1555 | **-** | **-** | **0.00** | **0.16** |

* Maximum cancer risk and maximum PM2.5 concentration occur at the same receptor on different levels.
- Tier 4 Final Engines and BMPs Mitigation

**1207 N. Capitol Ave, San Jose, CA - Construction Impacts - Without Mitigation**
**Maximum DPM Cancer Risk and PM2.5 Calculations From Construction**
**Impacts at Off-Site MEI Location - 1.5 meter receptor height (1st Floor Level)**

Cancer Risk (per million) = CPF x Inhalation Dose x ASF x ED/AT x FAH x 1.0E6

Where: CPF = Cancer potency factor $(mg/kg\text{-}day)^{-1}$
ASF = Age sensitivity factor for specified age group
ED = Exposure duration (years)
AT = Averaging time for lifetime cancer risk (years)
FAH = Fraction of time spent at home (unitless)

Inhalation Dose = $C_{air}$ x DBR x A x (EF/365) x $10^{-6}$

Where: $C_{air}$ = concentration in air ($\mu g/m^3$)
DBR = daily breathing rate (L/kg body weight-day)
A = Inhalation absorption factor
EF = Exposure frequency (days/year)
$10^{-6}$ = Conversion factor

**Values**

| | Infant/Child | | | Adult |
|---|---|---|---|---|
| **Age -->** | **3rd Trimester** | **0 - 2** | **2 - 16** | **16 - 30** |
| **Parameter** | | | | |
| ASF = | 10 | 10 | 3 | 1 |
| CPF = | 1.10E+00 | 1.10E+00 | 1.10E+00 | 1.10E+00 |
| DBR* = | 361 | 1090 | 572 | 261 |
| A = | 1 | 1 | 1 | 1 |
| EF = | 350 | 350 | 350 | 350 |
| AT = | 70 | 70 | 70 | 70 |
| FAH = | 1.00 | 1.00 | 1.00 | 0.73 |

* 95th percentile breathing rates for infants and 80th percentile for children and adults

**Construction Cancer Risk by Year - Maximum Impact Receptor Location**

| | | | Infant/Child - Exposure Information | | | | Adult - Exposure Information | | | | Maximum | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | DPM Conc (ug/m3) | | Age | Infant/Child | Modeled DPM Conc (ug/m3) | | Age | Adult | | | |
| **Exposure Year** | **Exposure Duration (years)** | **Age** | **Year** | **Annual** | **Sensitivity Factor** | **Cancer Risk (per million)** | **Year** | **Annual** | **Sensitivity Factor** | **Cancer Risk (per million)** | **Hazard Index** | **Fugitive PM2.5** | **Total PM2.5** |
| 0 | 0.25 | -0.25 - 0* | 2026 | 0.0846 | 10 | 1.15 | 2026 | 0.0846 | - | - | | | |
| 1 | 1 | 0 - 1 | 2026 | 0.0846 | 10 | 13.89 | 2026 | 0.0846 | 1 | 0.24 | 0.02 | 0.16 | 0.24 |
| 2 | 1 | 1 - 2 | 2027 | 0.0770 | 10 | 12.65 | 2027 | 0.0770 | 1 | 0.22 | 0.02 | 0.004 | 0.08 |
| 3 | 1 | 2 - 3 | | 0.0000 | 3 | 0.00 | | 0.0000 | 1 | 0.00 | | | |
| 4 | 1 | 3 - 4 | | 0.0000 | 3 | 0.00 | | 0.0000 | 1 | 0.00 | | | |
| 5 | 1 | 4 - 5 | | 0.0000 | 3 | 0.00 | | 0.0000 | 1 | 0.00 | | | |
| 6 | 1 | 5 - 6 | | 0.0000 | 3 | 0.00 | | 0.0000 | 1 | 0.00 | | | |
| 7 | 1 | 6 - 7 | | 0.0000 | 3 | 0.00 | | 0.0000 | 1 | 0.00 | | | |
| 8 | 1 | 7 - 8 | | 0.0000 | 3 | 0.00 | | 0.0000 | 1 | 0.00 | | | |
| 9 | 1 | 8 - 9 | | 0.0000 | 3 | 0.00 | | 0.0000 | 1 | 0.00 | | | |
| 10 | 1 | 9 - 10 | | 0.0000 | 3 | 0.00 | | 0.0000 | 1 | 0.00 | | | |
| 11 | 1 | 10 - 11 | | 0.0000 | 3 | 0.00 | | 0.0000 | 1 | 0.00 | | | |
| 12 | 1 | 11 - 12 | | 0.0000 | 3 | 0.00 | | 0.0000 | 1 | 0.00 | | | |
| 13 | 1 | 12 - 13 | | 0.0000 | 3 | 0.00 | | 0.0000 | 1 | 0.00 | | | |
| 14 | 1 | 13 - 14 | | 0.0000 | 3 | 0.00 | | 0.0000 | 1 | 0.00 | | | |
| 15 | 1 | 14 - 15 | | 0.0000 | 3 | 0.00 | | 0.0000 | 1 | 0.00 | | | |
| 16 | 1 | 15 - 16 | | 0.0000 | 3 | 0.00 | | 0.0000 | 1 | 0.00 | | | |
| 17 | 1 | 16-17 | | 0.0000 | 1 | 0.00 | | 0.0000 | 1 | 0.00 | | | |
| 18 | 1 | 17-18 | | 0.0000 | 1 | 0.00 | | 0.0000 | 1 | 0.00 | | | |
| 19 | 1 | 18-19 | | 0.0000 | 1 | 0.00 | | 0.0000 | 1 | 0.00 | | | |
| 20 | 1 | 19-20 | | 0.0000 | 1 | 0.00 | | 0.0000 | 1 | 0.00 | | | |
| 21 | 1 | 20-21 | | 0.0000 | 1 | 0.00 | | 0.0000 | 1 | 0.00 | | | |
| 22 | 1 | 21-22 | | 0.0000 | 1 | 0.00 | | 0.0000 | 1 | 0.00 | | | |
| 23 | 1 | 22-23 | | 0.0000 | 1 | 0.00 | | 0.0000 | 1 | 0.00 | | | |
| 24 | 1 | 23-24 | | 0.0000 | 1 | 0.00 | | 0.0000 | 1 | 0.00 | | | |
| 25 | 1 | 24-25 | | 0.0000 | 1 | 0.00 | | 0.0000 | 1 | 0.00 | | | |
| 26 | 1 | 25-26 | | 0.0000 | 1 | 0.00 | | 0.0000 | 1 | 0.00 | | | |
| 27 | 1 | 26-27 | | 0.0000 | 1 | 0.00 | | 0.0000 | 1 | 0.00 | | | |
| 28 | 1 | 27-28 | | 0.0000 | 1 | 0.00 | | 0.0000 | 1 | 0.00 | | | |
| 29 | 1 | 28-29 | | 0.0000 | 1 | 0.00 | | 0.0000 | 1 | 0.00 | | | |
| 30 | 1 | 29-30 | | 0.0000 | 1 | 0.00 | | 0.0000 | 1 | 0.00 | | | |
| **Total Increased Cancer Risk** | | | | | | **27.69** | | | | **0.46** | | | |

* Third trimester of pregnancy

**1207 N. Capitol Ave, San Jose, CA - Construction Impacts - Without Mitigation**
**Maximum DPM Cancer Risk and PM2.5 Calculations From Construction**
**Impacts at Off-Site MEI Location - 4.5 meter receptor height (2nd Floor Level)**

Cancer Risk (per million) = CPF x Inhalation Dose x ASF x ED/AT x FAH x 1.0E6

Where: CPF = Cancer potency factor $(mg/kg\text{-}day)^{-1}$
ASF = Age sensitivity factor for specified age group
ED = Exposure duration (years)
AT = Averaging time for lifetime cancer risk (years)
FAH = Fraction of time spent at home (unitless)

Inhalation Dose = $C_{air}$ x DBR x A x (EF/365) x $10^{-6}$

Where: $C_{air}$ = concentration in air ($\mu g/m^3$)
DBR = daily breathing rate (L/kg body weight-day)
A = Inhalation absorption factor
EF = Exposure frequency (days/year)
$10^{-6}$ = Conversion factor

**Values**

| | Infant/Child | | | Adult |
|---|---|---|---|---|
| **Age –>** | **3rd Trimester** | **0 - 2** | **2 - 16** | **16 - 30** |
| **Parameter** | | | | |
| ASF = | 10 | 10 | 3 | 1 |
| CPF = | 1.10E+00 | 1.10E+00 | 1.10E+00 | 1.10E+00 |
| DBR* = | 361 | 1090 | 572 | 261 |
| A = | 1 | 1 | 1 | 1 |
| EF = | 350 | 350 | 350 | 350 |
| AT = | 70 | 70 | 70 | 70 |
| FAH = | 1.00 | 1.00 | 1.00 | 0.73 |

* 95th percentile breathing rates for infants and 80th percentile for children and adults

**Construction Cancer Risk by Year - Maximum Impact Receptor Location**

| | | | Infant/Child - Exposure Information | | | | Adult - Exposure Information | | | | Maximum | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | DPM Conc (ug/m3) | | Age | Infant/Child | Modeled DPM Conc (ug/m3) | | Age | Adult | | | |
| **Exposure Year** | **Exposure Duration (years)** | **Age** | **Year** | **Annual** | **Sensitivity Factor** | **Cancer Risk (per million)** | **Year** | **Annual** | **Sensitivity Factor** | **Cancer Risk (per million)** | **Hazard Index** | **Fugitive PM2.5** | **Total PM2.5** |
| 0 | 0.25 | -0.25 - 0* | 2026 | 0.1062 | 10 | 1.44 | 2026 | 0.1062 | - | - | | | |
| 1 | 1 | 0 - 1 | 2026 | 0.1062 | 10 | 17.44 | 2026 | 0.1062 | 1 | 0.30 | 0.02 | 0.10 | 0.21 |
| 2 | 1 | 1 - 2 | 2027 | 0.0967 | 10 | 15.88 | 2027 | 0.0967 | 1 | 0.28 | 0.02 | 0.003 | 0.10 |
| 3 | 1 | 2 - 3 | | 0.0000 | 3 | 0.00 | | 0.0000 | 1 | 0.00 | | | |
| 4 | 1 | 3 - 4 | | 0.0000 | 3 | 0.00 | | 0.0000 | 1 | 0.00 | | | |
| 5 | 1 | 4 - 5 | | 0.0000 | 3 | 0.00 | | 0.0000 | 1 | 0.00 | | | |
| 6 | 1 | 5 - 6 | | 0.0000 | 3 | 0.00 | | 0.0000 | 1 | 0.00 | | | |
| 7 | 1 | 6 - 7 | | 0.0000 | 3 | 0.00 | | 0.0000 | 1 | 0.00 | | | |
| 8 | 1 | 7 - 8 | | 0.0000 | 3 | 0.00 | | 0.0000 | 1 | 0.00 | | | |
| 9 | 1 | 8 - 9 | | 0.0000 | 3 | 0.00 | | 0.0000 | 1 | 0.00 | | | |
| 10 | 1 | 9 - 10 | | 0.0000 | 3 | 0.00 | | 0.0000 | 1 | 0.00 | | | |
| 11 | 1 | 10 - 11 | | 0.0000 | 3 | 0.00 | | 0.0000 | 1 | 0.00 | | | |
| 12 | 1 | 11 - 12 | | 0.0000 | 3 | 0.00 | | 0.0000 | 1 | 0.00 | | | |
| 13 | 1 | 12 - 13 | | 0.0000 | 3 | 0.00 | | 0.0000 | 1 | 0.00 | | | |
| 14 | 1 | 13 - 14 | | 0.0000 | 3 | 0.00 | | 0.0000 | 1 | 0.00 | | | |
| 15 | 1 | 14 - 15 | | 0.0000 | 3 | 0.00 | | 0.0000 | 1 | 0.00 | | | |
| 16 | 1 | 15 - 16 | | 0.0000 | 3 | 0.00 | | 0.0000 | 1 | 0.00 | | | |
| 17 | 1 | 16-17 | | 0.0000 | 1 | 0.00 | | 0.0000 | 1 | 0.00 | | | |
| 18 | 1 | 17-18 | | 0.0000 | 1 | 0.00 | | 0.0000 | 1 | 0.00 | | | |
| 19 | 1 | 18-19 | | 0.0000 | 1 | 0.00 | | 0.0000 | 1 | 0.00 | | | |
| 20 | 1 | 19-20 | | 0.0000 | 1 | 0.00 | | 0.0000 | 1 | 0.00 | | | |
| 21 | 1 | 20-21 | | 0.0000 | 1 | 0.00 | | 0.0000 | 1 | 0.00 | | | |
| 22 | 1 | 21-22 | | 0.0000 | 1 | 0.00 | | 0.0000 | 1 | 0.00 | | | |
| 23 | 1 | 22-23 | | 0.0000 | 1 | 0.00 | | 0.0000 | 1 | 0.00 | | | |
| 24 | 1 | 23-24 | | 0.0000 | 1 | 0.00 | | 0.0000 | 1 | 0.00 | | | |
| 25 | 1 | 24-25 | | 0.0000 | 1 | 0.00 | | 0.0000 | 1 | 0.00 | | | |
| 26 | 1 | 25-26 | | 0.0000 | 1 | 0.00 | | 0.0000 | 1 | 0.00 | | | |
| 27 | 1 | 26-27 | | 0.0000 | 1 | 0.00 | | 0.0000 | 1 | 0.00 | | | |
| 28 | 1 | 27-28 | | 0.0000 | 1 | 0.00 | | 0.0000 | 1 | 0.00 | | | |
| 29 | 1 | 28-29 | | 0.0000 | 1 | 0.00 | | 0.0000 | 1 | 0.00 | | | |
| 30 | 1 | 29-30 | | 0.0000 | 1 | 0.00 | | 0.0000 | 1 | 0.00 | | | |
| **Total Increased Cancer Risk** | | | | | | **34.77** | | | | **0.58** | | | |

* Third trimester of pregnancy

**1207 N. Capitol Ave, San Jose, CA - Construction Impacts - With Mitigation**
**Maximum DPM Cancer Risk and PM2.5 Calculations From Construction**
**Impacts at Off-Site MEI Location - 1.5 meter receptor height (1st Floor Level)**

Cancer Risk (per million) = CPF x Inhalation Dose x ASF x ED/AT x FAH x 1.0E6

Where: CPF = Cancer potency factor $(mg/kg\text{-}day)^{-1}$
ASF = Age sensitivity factor for specified age group
ED = Exposure duration (years)
AT = Averaging time for lifetime cancer risk (years)
FAH = Fraction of time spent at home (unitless)

Inhalation Dose = $C_{air}$ x DBR x A x (EF/365) x $10^{-6}$

Where: $C_{air}$ = concentration in air ($\mu g/m^3$)
DBR = daily breathing rate (L/kg body weight-day)
A = Inhalation absorption factor
EF = Exposure frequency (days/year)
$10^{-6}$ = Conversion factor

**Values**

| | Infant/Child | | | Adult |
|---|---|---|---|---|
| **Age -->** | **3rd Trimester** | **0 - 2** | **2 - 16** | **16 - 30** |
| **Parameter** | | | | |
| ASF = | 10 | 10 | 3 | 1 |
| CPF = | 1.10E+00 | 1.10E+00 | 1.10E+00 | 1.10E+00 |
| DBR* = | 361 | 1090 | 572 | 261 |
| A = | 1 | 1 | 1 | 1 |
| EF = | 350 | 350 | 350 | 350 |
| AT = | 70 | 70 | 70 | 70 |
| FAH = | 1.00 | 1.00 | 1.00 | 0.73 |

* 95th percentile breathing rates for infants and 80th percentile for children and adults

**Construction Cancer Risk by Year - Maximum Impact Receptor Location**

| | | | Infant/Child - Exposure Information | | | | Adult - Exposure Information | | | | Maximum | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | DPM Conc (ug/m3) | | Age | Infant/Child | Modeled DPM Conc (ug/m3) | | Age | Adult | | | |
| Exposure Year | Exposure Duration (years) | Age | Year | Annual | Sensitivity Factor | Cancer Risk (per million) | Year | Annual | Sensitivity Factor | Cancer Risk (per million) | Hazard Index | Fugitive PM2.5 | Total PM2.5 |
| 0 | 0.25 | -0.25 - 0* | 2026 | 0.0089 | 10 | 0.12 | 2026 | 0.0089 | - | - | | | |
| 1 | 1 | 0 - 1 | 2026 | 0.0089 | 10 | 1.45 | 2026 | 0.0089 | 1 | 0.03 | 0.002 | 0.16 | 0.16 |
| 2 | 1 | 1 - 2 | 2027 | 0.0117 | 10 | 1.92 | 2027 | 0.0117 | 1 | 0.03 | 0.002 | 0.004 | 0.02 |
| 3 | 1 | 2 - 3 | | 0.0000 | 3 | 0.00 | | 0.0000 | 1 | 0.00 | | | |
| 4 | 1 | 3 - 4 | | 0.0000 | 3 | 0.00 | | 0.0000 | 1 | 0.00 | | | |
| 5 | 1 | 4 - 5 | | 0.0000 | 3 | 0.00 | | 0.0000 | 1 | 0.00 | | | |
| 6 | 1 | 5 - 6 | | 0.0000 | 3 | 0.00 | | 0.0000 | 1 | 0.00 | | | |
| 7 | 1 | 6 - 7 | | 0.0000 | 3 | 0.00 | | 0.0000 | 1 | 0.00 | | | |
| 8 | 1 | 7 - 8 | | 0.0000 | 3 | 0.00 | | 0.0000 | 1 | 0.00 | | | |
| 9 | 1 | 8 - 9 | | 0.0000 | 3 | 0.00 | | 0.0000 | 1 | 0.00 | | | |
| 10 | 1 | 9 - 10 | | 0.0000 | 3 | 0.00 | | 0.0000 | 1 | 0.00 | | | |
| 11 | 1 | 10 - 11 | | 0.0000 | 3 | 0.00 | | 0.0000 | 1 | 0.00 | | | |
| 12 | 1 | 11 - 12 | | 0.0000 | 3 | 0.00 | | 0.0000 | 1 | 0.00 | | | |
| 13 | 1 | 12 - 13 | | 0.0000 | 3 | 0.00 | | 0.0000 | 1 | 0.00 | | | |
| 14 | 1 | 13 - 14 | | 0.0000 | 3 | 0.00 | | 0.0000 | 1 | 0.00 | | | |
| 15 | 1 | 14 - 15 | | 0.0000 | 3 | 0.00 | | 0.0000 | 1 | 0.00 | | | |
| 16 | 1 | 15 - 16 | | 0.0000 | 3 | 0.00 | | 0.0000 | 1 | 0.00 | | | |
| 17 | 1 | 16-17 | | 0.0000 | 1 | 0.00 | | 0.0000 | 1 | 0.00 | | | |
| 18 | 1 | 17-18 | | 0.0000 | 1 | 0.00 | | 0.0000 | 1 | 0.00 | | | |
| 19 | 1 | 18-19 | | 0.0000 | 1 | 0.00 | | 0.0000 | 1 | 0.00 | | | |
| 20 | 1 | 19-20 | | 0.0000 | 1 | 0.00 | | 0.0000 | 1 | 0.00 | | | |
| 21 | 1 | 20-21 | | 0.0000 | 1 | 0.00 | | 0.0000 | 1 | 0.00 | | | |
| 22 | 1 | 21-22 | | 0.0000 | 1 | 0.00 | | 0.0000 | 1 | 0.00 | | | |
| 23 | 1 | 22-23 | | 0.0000 | 1 | 0.00 | | 0.0000 | 1 | 0.00 | | | |
| 24 | 1 | 23-24 | | 0.0000 | 1 | 0.00 | | 0.0000 | 1 | 0.00 | | | |
| 25 | 1 | 24-25 | | 0.0000 | 1 | 0.00 | | 0.0000 | 1 | 0.00 | | | |
| 26 | 1 | 25-26 | | 0.0000 | 1 | 0.00 | | 0.0000 | 1 | 0.00 | | | |
| 27 | 1 | 26-27 | | 0.0000 | 1 | 0.00 | | 0.0000 | 1 | 0.00 | | | |
| 28 | 1 | 27-28 | | 0.0000 | 1 | 0.00 | | 0.0000 | 1 | 0.00 | | | |
| 29 | 1 | 28-29 | | 0.0000 | 1 | 0.00 | | 0.0000 | 1 | 0.00 | | | |
| 30 | 1 | 29-30 | | 0.0000 | 1 | 0.00 | | 0.0000 | 1 | 0.00 | | | |
| **Total Increased Cancer Risk** | | | | | | **3.49** | | | | **0.06** | | | |

* Third trimester of pregnancy

**1207 N. Capitol Ave, San Jose, CA - Construction Impacts - With Mitigation**
**Maximum DPM Cancer Risk and PM2.5 Calculations From Construction**
**Impacts at Off-Site MEI Location - 4.5 meter receptor height (2nd Floor Level)**

Cancer Risk (per million) = CPF x Inhalation Dose x ASF x ED/AT x FAH x 1.0E6

Where: CPF = Cancer potency factor $(mg/kg\text{-}day)^{-1}$
ASF = Age sensitivity factor for specified age group
ED = Exposure duration (years)
AT = Averaging time for lifetime cancer risk (years)
FAH = Fraction of time spent at home (unitless)

Inhalation Dose = $C_{air}$ x DBR x A x (EF/365) x $10^{-6}$

Where: $C_{air}$ = concentration in air ($\mu g/m^3$)
DBR = daily breathing rate (L/kg body weight-day)
A = Inhalation absorption factor
EF = Exposure frequency (days/year)
$10^{-6}$ = Conversion factor

**Values**

| | Infant/Child | | | Adult |
|---|---|---|---|---|
| **Age -->** | **3rd Trimester** | **0 - 2** | **2 - 16** | **16 - 30** |
| **Parameter** | | | | |
| ASF = | 10 | 10 | 3 | 1 |
| CPF = | 1.10E+00 | 1.10E+00 | 1.10E+00 | 1.10E+00 |
| DBR* = | 361 | 1090 | 572 | 261 |
| A = | 1 | 1 | 1 | 1 |
| EF = | 350 | 350 | 350 | 350 |
| AT = | 70 | 70 | 70 | 70 |
| FAH = | 1.00 | 1.00 | 1.00 | 0.73 |

* 95th percentile breathing rates for infants and 80th percentile for children and adults

**Construction Cancer Risk by Year - Maximum Impact Receptor Location**

| | | | Infant/Child - Exposure Information | | | Infant/Child | Adult - Exposure Information | | | Adult | Maximum | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | DPM Conc (ug/m3) | | Age | Cancer | Modeled DPM Conc (ug/m3) | | Age | Cancer | | | |
| Exposure Year | Exposure Duration (years) | Age | Year | Annual | Sensitivity Factor | Risk (per million) | Year | Annual | Sensitivity Factor | Risk (per million) | Hazard Index | Fugitive PM2.5 | Total PM2.5 |
| 0 | 0.25 | -0.25 - 0* | 2026 | 0.0111 | 10 | 0.15 | 2026 | 0.0111 | - | - | | | |
| 1 | 1 | 0 - 1 | 2026 | 0.0111 | 10 | 1.82 | 2026 | 0.0111 | 1 | 0.03 | 0.002 | 0.10 | 0.11 |
| 2 | 1 | 1 - 2 | 2027 | 0.0147 | 10 | 2.41 | 2027 | 0.0147 | 1 | 0.04 | 0.003 | 0.003 | 0.02 |
| 3 | 1 | 2 - 3 | | 0.0000 | 3 | 0.00 | | 0.0000 | 1 | 0.00 | | | |
| 4 | 1 | 3 - 4 | | 0.0000 | 3 | 0.00 | | 0.0000 | 1 | 0.00 | | | |
| 5 | 1 | 4 - 5 | | 0.0000 | 3 | 0.00 | | 0.0000 | 1 | 0.00 | | | |
| 6 | 1 | 5 - 6 | | 0.0000 | 3 | 0.00 | | 0.0000 | 1 | 0.00 | | | |
| 7 | 1 | 6 - 7 | | 0.0000 | 3 | 0.00 | | 0.0000 | 1 | 0.00 | | | |
| 8 | 1 | 7 - 8 | | 0.0000 | 3 | 0.00 | | 0.0000 | 1 | 0.00 | | | |
| 9 | 1 | 8 - 9 | | 0.0000 | 3 | 0.00 | | 0.0000 | 1 | 0.00 | | | |
| 10 | 1 | 9 - 10 | | 0.0000 | 3 | 0.00 | | 0.0000 | 1 | 0.00 | | | |
| 11 | 1 | 10 - 11 | | 0.0000 | 3 | 0.00 | | 0.0000 | 1 | 0.00 | | | |
| 12 | 1 | 11 - 12 | | 0.0000 | 3 | 0.00 | | 0.0000 | 1 | 0.00 | | | |
| 13 | 1 | 12 - 13 | | 0.0000 | 3 | 0.00 | | 0.0000 | 1 | 0.00 | | | |
| 14 | 1 | 13 - 14 | | 0.0000 | 3 | 0.00 | | 0.0000 | 1 | 0.00 | | | |
| 15 | 1 | 14 - 15 | | 0.0000 | 3 | 0.00 | | 0.0000 | 1 | 0.00 | | | |
| 16 | 1 | 15 - 16 | | 0.0000 | 3 | 0.00 | | 0.0000 | 1 | 0.00 | | | |
| 17 | 1 | 16-17 | | 0.0000 | 1 | 0.00 | | 0.0000 | 1 | 0.00 | | | |
| 18 | 1 | 17-18 | | 0.0000 | 1 | 0.00 | | 0.0000 | 1 | 0.00 | | | |
| 19 | 1 | 18-19 | | 0.0000 | 1 | 0.00 | | 0.0000 | 1 | 0.00 | | | |
| 20 | 1 | 19-20 | | 0.0000 | 1 | 0.00 | | 0.0000 | 1 | 0.00 | | | |
| 21 | 1 | 20-21 | | 0.0000 | 1 | 0.00 | | 0.0000 | 1 | 0.00 | | | |
| 22 | 1 | 21-22 | | 0.0000 | 1 | 0.00 | | 0.0000 | 1 | 0.00 | | | |
| 23 | 1 | 22-23 | | 0.0000 | 1 | 0.00 | | 0.0000 | 1 | 0.00 | | | |
| 24 | 1 | 23-24 | | 0.0000 | 1 | 0.00 | | 0.0000 | 1 | 0.00 | | | |
| 25 | 1 | 24-25 | | 0.0000 | 1 | 0.00 | | 0.0000 | 1 | 0.00 | | | |
| 26 | 1 | 25-26 | | 0.0000 | 1 | 0.00 | | 0.0000 | 1 | 0.00 | | | |
| 27 | 1 | 26-27 | | 0.0000 | 1 | 0.00 | | 0.0000 | 1 | 0.00 | | | |
| 28 | 1 | 27-28 | | 0.0000 | 1 | 0.00 | | 0.0000 | 1 | 0.00 | | | |
| 29 | 1 | 28-29 | | 0.0000 | 1 | 0.00 | | 0.0000 | 1 | 0.00 | | | |
| 30 | 1 | 29-30 | | 0.0000 | 1 | 0.00 | | 0.0000 | 1 | 0.00 | | | |
| **Total Increased Cancer Risk** | | | | | | **4.39** | | | | **0.07** | | | |

* Third trimester of pregnancy

# Attachment 3: Cumulative Health Risk Screening, Modeling, and Calculations

# CT-EMFAC2021 Emissions Factors for Santa Clara County 2026

| | |
|---|---|
| File Name: | 1207 N Capitol - Highway - Santa Clara (SF) - 2026 - Annual.EF |
| CT-EMFAC2017 Version: | 1.0.2.0 |
| Run Date: | 10/17/2024 11:58 |
| Area: | Santa Clara (SF) |
| Analysis Year: | 2026 |
| Season: | Annual |

| Vehicle Category | VMT Fraction Across Category | Diesel VMT Fraction Within Category | Gas VMT Fraction Within Category |
|---|---|---|---|
| Truck 1 | 0.018 | 0.416 | 0.563 |
| Truck 2 | 0.036 | 0.904 | 0.045 |
| Non-Truck | 0.946 | 0.007 | 0.914 |

| | | |
|---|---|---|
| Road Type: | Freeway | |
| Silt Loading Factor: | CARB | 0.015 g/m2 |
| Precipitation Correction: | CARB | P = 63 days N = 365 days |

Fleet Average Running Exhaust Emission Factors (grams/veh-mile)

| Pollutant Name | <= 5 mph | 10 mph | 15 mph | 20 mph | 25 mph | 30 mph | 35 mph | 40 mph | 45 mph | 50 mph | 55 mph | 60 mph | 65 mph | 70 mph | 75 mph |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PM2.5 | 0.008487 | 0.005616 | 0.003837 | 0.002757 | 0.002101 | 0.001699 | 0.001462 | 0.001345 | 0.001323 | 0.001383 | 0.00152 | 0.00173 | 0.002019 | 0.002119 | 0.002119 |
| TOG | 0.13451 | 0.087271 | 0.057798 | 0.041025 | 0.031111 | 0.024849 | 0.020779 | 0.018167 | 0.016604 | 0.015885 | 0.015916 | 0.016839 | 0.018641 | 0.019924 | 0.019925 |
| Diesel PM | 0.001304 | 0.001161 | 0.000876 | 0.000678 | 0.000566 | 0.000504 | 0.000481 | 0.000496 | 0.000549 | 0.00064 | 0.000768 | 0.000923 | 0.00110 | 0.00110 | 0.00110 |
| DEOG | 0.008147 | 0.00714 | 0.004404 | 0.002972 | 0.002376 | 0.00198 | 0.001669 | 0.001433 | 0.001266 | 0.001165 | 0.001129 | 0.001185 | 0.001259 | 0.001261 | 0.001262 |

Fleet Average Running Loss Emission Factors (grams/veh-hour)

| Pollutant Name | Emission Factor |
|---|---|
| TOG | 0.957299 |

Fleet Average Tire Wear Factors (grams/veh-mile)

| Pollutant Name | Emission Factor |
|---|---|
| PM2.5 | 0.002191 |

Fleet Average Brake Wear Factors (grams/veh-mile)

| Pollutant Name | <= 5 mph | 10 mph | 15 mph | 20 mph | 25 mph | 30 mph | 35 mph | 40 mph | 45 mph | 50 mph | 55 mph | 60 mph | 65 mph | 70 mph | 75 mph |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PM2.5 | 0.004179 | 0.004712 | 0.00523 | 0.005734 | 0.005977 | 0.006044 | 0.005978 | 0.005438 | 0.004364 | 0.00332 | 0.002692 | 0.002396 | 0.002099 | 0.002099 | 0.002099 |

Fleet Average Road Dust Factors (grams/veh-mile)

| Pollutant Name | Emission Factor |
|---|---|
| PM2.5 | 0.008686 |

END

CT-EMFAC2017 Version: 1.0.2.0
Run Date: 10/17/2024 12:03
Area: Santa Clara (SF)
Analysis Year: 2026
Season: Annual

| Vehicle Category | VMT Fraction Across Category | Diesel VMT Fraction Within Category | Gas VMT Fraction Within Category |
|---|---|---|---|
| Truck 1 | 0.017 | 0.416 | 0.563 |
| Truck 2 | 0.018 | 0.904 | 0.045 |
| Non-Truck | 0.965 | 0.007 | 0.914 |

Road Type: Major/Collector
Silt Loading Factor: CARB 0.032 g/m2
Precipitation Correction: CARB P = 64 days N = 365 days

Fleet Average Running Exhaust Emission Factors (grams/veh-mile)

| Pollutant Name | <= 5 mph | 10 mph | 15 mph | 20 mph | 25 mph | 30 mph | 35 mph | 40 mph | 45 mph |
|---|---|---|---|---|---|---|---|---|---|
| PM2.5 | 0.008267 | 0.005408 | 0.003684 | 0.00264 | 0.002 | 0.001601 | 0.001355 | 0.001217 | 0.001161 |
| TOG | 0.12603 | 0.081556 | 0.054567 | 0.038846 | 0.029403 | 0.023431 | 0.019575 | 0.017125 | 0.015684 |
| Diesel PM | 0.000987 | 0.000858 | 0.000659 | 0.000518 | 0.000432 | 0.000378 | 0.00035 | 0.000346 | 0.000366 |
| DEOG | 0.006209 | 0.005301 | 0.003435 | 0.002399 | 0.001938 | 0.001624 | 0.001375 | 0.001181 | 0.001038 |

Fleet Average Running Loss Emission Factors (grams/veh-hour)

| Pollutant Name | Emission Factor |
|---|---|
| TOG | 0.972931 |

Fleet Average Tire Wear Factors (grams/veh-mile)

| Pollutant Name | Emission Factor |
|---|---|
| PM2.5 | 0.002102 |

Fleet Average Brake Wear Factors (grams/veh-mile)

| Pollutant Name | <= 5 mph | 10 mph | 15 mph | 20 mph | 25 mph | 30 mph | 35 mph | 40 mph | 45 mph |
|---|---|---|---|---|---|---|---|---|---|
| PM2.5 | 0.003487 | 0.00403 | 0.004566 | 0.005095 | 0.005377 | 0.005465 | 0.005486 | 0.004993 | 0.003957 |

Fleet Average Road Dust Factors (grams/veh-mile)

| Pollutant Name | Emission Factor |
|---|---|
| PM2.5 | 0.015247 |

END

# I-680 2026 Traffic Emissions and Health Risk Calculations

**Analysis Year =** ***2026***

| Vehicle Type | 2022 Caltrans Vehicles (veh/day) | 2026 Vehicles (veh/day) |
|---|---|---|
| Truck 1 (MDT) | 2,892 | 3,008 |
| Truck 2 (HDT) | 5,640 | 5,865 |
| Non-Truck | 149,468 | 155,447 |
| **All** | **158,000** | **164,320** |

| | |
|---|---|
| Increase From 2022 | 1.04 |
| **Vehicles/Direction** | **82,160** |
| Avg Vehicles/Hour/Direction | 3,423 |

**Traffic Data Year =** ***2022***

| ***2022 Caltrans Truck AADT (% trucks) and 2022 Caltrans Traffic Volumes*** | AADT Total | Total Truck | Trucks by Axle 2 | 3 | 4 | 5 |
|---|---|---|---|---|---|---|
| I-680 | 158,000 | 8,532 | 2,892 | 939 | 538 | 4,164 |
| | | | 33.90% | 11.00% | 6.30% | 48.80% |
| Percent of Total Vehicles | | 5.40% | 1.83% | 0.59% | 0.34% | 2.64% |

Traffic Increase per Year (%) = *1.00%*

| | | |
|---|---|---|
| 8,532 | Trucks | 100.00% |
| 3.6% | HDT | T2 |
| 1.8% | MDT | T1 |
| 5.40% | Total | |
| 94.6% | Other | |

**1207 N Capitol Ave, San Jose, CA - Roadway Modeling Emissions**
**Interstate 680 Traffic**
**DPM Modeling - Roadway Links, Traffic Volumes, and DPM Emissions**
**Year = 2026**

| | | | | | | | | | | | Line Area | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Road Link | Description | Direction | No. Lanes | Link Length (m) | Link Length (mi) | Link Width (m) | Link Width (ft) | Release Height ( m) | Average Speed (mph) | Average Vehicles per Day | Area (sq m) | Emission (g/s/m2) | Initial Vertical height (m) | (Sigma z) Initial Vertical Dimension |
| DPM_NB680 | Northbound I-680 | SE-NW | 3 | 764 | 0.47 | 17.0 | 55.7 | 3.4 | variable | 82,160 | 12,962 | 3.822E-08 | 6.8 | 3.16 |
| DPM_SB680 | Southbound I-680 | NW-SE | 3 | 729 | 0.45 | 17.0 | 55.7 | 3.4 | variable | 82,160 | 12,369 | 4.006E-08 | 6.8 | 3.16 |
| | | | | | | | | | | 164,320 | | | | |

**Emission Factors - DPM**

| Speed Category | 1 | 2 | 3 | 4 |
|---|---|---|---|---|
| Travel Speed (mph) | 65 | 60 | 55 | 20 |
| Emissions per Vehicle (g/VMT) | 0.00110 | 0.00092 | 0.00077 | 0.000678 |

Emisson Factors from CT-EMFAC2021

**2026 Hourly Traffic Volumes and DPM Emissions - DPM_NB680**

| Hour | % Per Hour | VPH | g/s | Hour | % Per Hour | VPH | g/s | Hour | % Per Hour | VPH | g/s |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 3.98% | 3268 | 4.73E-04 | 9 | 6.44% | 5289 | 5.35E-04 | 17 | 5.53% | 4543 | 5.53E-04 |
| 2 | 2.67% | 2194 | 3.18E-04 | 10 | 7.40% | 6076 | 8.79E-04 | 18 | 3.14% | 2582 | 3.14E-04 |
| 3 | 2.84% | 2334 | 3.38E-04 | 11 | 6.32% | 5189 | 7.51E-04 | 19 | 2.35% | 1928 | 2.79E-04 |
| 4 | 3.30% | 2708 | 3.92E-04 | 12 | 6.88% | 5656 | 8.19E-04 | 20 | 0.86% | 707 | 1.02E-04 |
| 5 | 2.16% | 1774 | 2.57E-04 | 13 | 6.27% | 5149 | 7.45E-04 | 21 | 3.08% | 2528 | 3.66E-04 |
| 6 | 3.30% | 2708 | 3.92E-04 | 14 | 6.21% | 5103 | 7.39E-04 | 22 | 4.21% | 3462 | 5.01E-04 |
| 7 | 6.03% | 4955 | 7.17E-04 | 15 | 5.13% | 4216 | 6.10E-04 | 23 | 2.62% | 2155 | 3.12E-04 |
| 8 | 4.56% | 3749 | 3.80E-04 | 16 | 3.88% | 3189 | 4.62E-04 | 24 | 0.85% | 700 | 1.01E-04 |
| | | | | | | | | Total | | 82,160 | |

**2026 Hourly Traffic Volumes Per Direction and DPM Emissions - DPM_SB680**

| Hour | % Per Hour | VPH | g/mile | Hour | % Per Hour | VPH | g/mile | Hour | % Per Hour | VPH | g/mile |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 3.98% | 3268 | 4.51E-04 | 9 | 6.44% | 5289 | 6.14E-04 | 17 | 5.53% | 4543 | 3.87E-04 |
| 2 | 2.67% | 2194 | 3.03E-04 | 10 | 7.40% | 6076 | 8.39E-04 | 18 | 3.14% | 2582 | 2.20E-04 |
| 3 | 2.84% | 2334 | 3.22E-04 | 11 | 6.32% | 5189 | 7.17E-04 | 19 | 2.35% | 1928 | 2.66E-04 |
| 4 | 3.30% | 2708 | 3.74E-04 | 12 | 6.88% | 5656 | 7.81E-04 | 20 | 0.86% | 707 | 9.77E-05 |
| 5 | 2.16% | 1774 | 2.45E-04 | 13 | 6.27% | 5149 | 7.11E-04 | 21 | 3.08% | 2528 | 3.49E-04 |
| 6 | 3.30% | 2708 | 3.74E-04 | 14 | 6.21% | 5103 | 7.05E-04 | 22 | 4.21% | 3462 | 4.78E-04 |
| 7 | 6.03% | 4955 | 6.84E-04 | 15 | 5.13% | 4216 | 5.82E-04 | 23 | 2.62% | 2155 | 2.98E-04 |
| 8 | 4.56% | 3749 | 4.35E-04 | 16 | 3.88% | 3189 | 4.40E-04 | 24 | 0.85% | 700 | 9.67E-05 |
| | | | | | | | | Total | | 82,160 | |

**1207 N Capitol Ave, San Jose, CA - Roadway Modeling Emissions**
**Interstate 680 Traffic**
**PM2.5 Modeling - Roadway Links, Traffic Volumes, and PM2.5 Emissions**
**Year = 2026**

| | | | | | | | | | | | Line Area | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Road Link | Description | Direction | No. Lanes | Link Length (m) | Link Length (mi) | Link Width (m) | Link Width (ft) | Release Height ( m) | Average Speed (mph) | Average Vehicles per Day | Area (sq m) | Emission (g/s/m2) | Initial Vertical height (m) | (Sigma z) Initial Vertical Dimension |
| PM25_NB680 | Northbound I-680 | SE-NW | 3 | 764 | 0.47 | 17.0 | 56 | 1.3 | variable | 82,160 | 12,962 | 7.029E-08 | 2.6 | 1.21 |
| PM25_SB680 | Southbound I-680 | NW-SE | 3 | 729 | 0.45 | 17.0 | 56 | 1.3 | variable | 82,160 | 12,369 | 7.029E-08 | 2.6 | 1.21 |
| | | | | | | | | | Total | 164,320 | | | | |

**Emission Factors - PM2.5**

| Speed Category | 1 | 2 | 3 | 4 |
|---|---|---|---|---|
| Travel Speed (mph) | 65 | 60 | 55 | 20 |
| Emissions per Vehicle (g/VMT) | 0.00202 | 0.00173 | 0.00152 | 0.00276 |

Emisson Factors from CT-EMFAC2021

**2026 Hourly Traffic Volumes and PM2.5 Emissions - PM25_NB680**

| Hour | % Per Hour | VPH | g/s | Hour | % Per Hour | VPH | g/s | Hour | % Per Hour | VPH | g/s |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 1.15% | 944 | 2.51E-04 | 9 | 7.11% | 5843 | 1.17E-03 | 17 | 7.38% | 6067 | 1.38E-03 |
| 2 | 0.42% | 346 | 9.20E-05 | 10 | 4.39% | 3604 | 9.59E-04 | 18 | 8.18% | 6718 | 1.53E-03 |
| 3 | 0.41% | 333 | 8.86E-05 | 11 | 4.66% | 3831 | 1.02E-03 | 19 | 5.70% | 4682 | 1.25E-03 |
| 4 | 0.26% | 214 | 5.70E-05 | 12 | 5.89% | 4838 | 1.29E-03 | 20 | 4.27% | 3509 | 9.34E-04 |
| 5 | 0.50% | 410 | 1.09E-04 | 13 | 6.15% | 5055 | 1.35E-03 | 21 | 3.26% | 2677 | 7.12E-04 |
| 6 | 0.90% | 743 | 1.98E-04 | 14 | 6.04% | 4960 | 1.32E-03 | 22 | 3.30% | 2711 | 7.22E-04 |
| 7 | 3.79% | 3112 | 8.28E-04 | 15 | 7.01% | 5762 | 1.53E-03 | 23 | 2.46% | 2023 | 5.39E-04 |
| 8 | 7.76% | 6378 | 1.28E-03 | 16 | 7.14% | 5865 | 1.56E-03 | 24 | 1.87% | 1534 | 4.08E-04 |
| | | | | | | | | Total | | 82,160 | |

**2026 Hourly Traffic Volumes Per Direction and PM2.5 Emissions - PM25_SB680**

| Hour | % Per Hour | VPH | g/mile | Hour | % Per Hour | VPH | g/mile | Hour | % Per Hour | VPH | g/mile |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 1.15% | 944 | 2.40E-04 | 9 | 7.11% | 5843 | 1.27E-03 | 17 | 7.38% | 6067 | 2.10E-03 |
| 2 | 0.42% | 346 | 8.78E-05 | 10 | 4.39% | 3604 | 9.15E-04 | 18 | 8.18% | 6718 | 2.33E-03 |
| 3 | 0.41% | 333 | 8.46E-05 | 11 | 4.66% | 3831 | 9.73E-04 | 19 | 5.70% | 4682 | 1.19E-03 |
| 4 | 0.26% | 214 | 5.44E-05 | 12 | 5.89% | 4838 | 1.23E-03 | 20 | 4.27% | 3509 | 8.91E-04 |
| 5 | 0.50% | 410 | 1.04E-04 | 13 | 6.15% | 5055 | 1.28E-03 | 21 | 3.26% | 2677 | 6.80E-04 |
| 6 | 0.90% | 743 | 1.89E-04 | 14 | 6.04% | 4960 | 1.26E-03 | 22 | 3.30% | 2711 | 6.89E-04 |
| 7 | 3.79% | 3112 | 7.90E-04 | 15 | 7.01% | 5762 | 1.46E-03 | 23 | 2.46% | 2023 | 5.14E-04 |
| 8 | 7.76% | 6378 | 1.39E-03 | 16 | 7.14% | 5865 | 1.49E-03 | 24 | 1.87% | 1534 | 3.90E-04 |
| | | | | | | | | Total | | 82,160 | |

**1207 N Capitol Ave, San Jose, CA - Roadway Modeling Emissions**
**Interstate 680 Traffic**
**TOG Exhaust Modeling - Roadway Links, Traffic Volumes, and TOG Exhaust Emissions**
**Year = 2026**

| | | | | | | | | | | | Line Area | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Road Link | Description | Direction | No. Lanes | Link Length (m) | Link Length (mi) | Link Width (m) | Link Width (ft) | Release Height ( m) | Average Speed (mph) | Average Vehicles per Day | Area (sq m) | Emission (g/s/m2) | Initial Vertical height (m) | (Sigma z) Initial Vertical Dimensio |
| TEXH_NB680 | Northbound I-680 | SE-NW | 3 | 764 | 0.47 | 17.0 | 56 | 1.3 | variable | 82,160 | 12,962 | 6.051E-07 | 2.6 | 1.21 |
| TEXH_SB680 | Southbound I-680 | NW-SE | 3 | 729 | 0.45 | 17.0 | 56 | 1.3 | variable | 82,160 | 12,369 | 6.051E-07 | 2.6 | 1.21 |
| | | | | | | | | | Total | 164,320 | | | | |

**Emission Factors - TOG Exhaust**

| Speed Category | 1 | 2 | 3 | 4 |
|---|---|---|---|---|
| Travel Speed (mph) | 65 | 60 | 55 | 20 |
| All Vehicles TOG Emissions per Vehicle (g/VMT) | 0.01864 | 0.01684 | 0.01592 | 0.04103 |
| Diesel Vehicles TOG Emissions per Vehicle (g/VMT) | 0.00126 | 0.00119 | 0.00113 | 0.00297 |
| Gasoline Vehicles Emissions per Vehicle (g/VMT) | 0.01738 | 0.01565 | 0.01479 | 0.03805 |

Emisson Factors from CT-EMFAC2021

**2026 Hourly Traffic Volumes and TOG Exhaust Emissions - TEXH_NB680**

| Hour | % Per Hour | VPH | g/s | Hour | % Per Hour | VPH | g/s | Hour | % Per Hour | VPH | g/s |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 1.15% | 944 | 2.16E-03 | 9 | 7.11% | 5843 | 1.14E-02 | 17 | 7.38% | 6067 | 1.25E-02 |
| 2 | 0.42% | 346 | 7.92E-04 | 10 | 4.39% | 3604 | 8.26E-03 | 18 | 8.18% | 6718 | 1.39E-02 |
| 3 | 0.41% | 333 | 7.63E-04 | 11 | 4.66% | 3831 | 8.78E-03 | 19 | 5.70% | 4682 | 1.07E-02 |
| 4 | 0.26% | 214 | 4.91E-04 | 12 | 5.89% | 4838 | 1.11E-02 | 20 | 4.27% | 3509 | 8.04E-03 |
| 5 | 0.50% | 410 | 9.39E-04 | 13 | 6.15% | 5055 | 1.16E-02 | 21 | 3.26% | 2677 | 6.13E-03 |
| 6 | 0.90% | 743 | 1.70E-03 | 14 | 6.04% | 4960 | 1.14E-02 | 22 | 3.30% | 2711 | 6.21E-03 |
| 7 | 3.79% | 3112 | 7.13E-03 | 15 | 7.01% | 5762 | 1.32E-02 | 23 | 2.46% | 2023 | 4.64E-03 |
| 8 | 7.76% | 6378 | 1.24E-02 | 16 | 7.14% | 5865 | 1.34E-02 | 24 | 1.87% | 1534 | 3.51E-03 |
| | | | | | | | | Total | | 82,160 | |

**2026 Hourly Traffic Volumes Per Direction and TOG Exhaust Emissions - TEXH_SB680**

| Hour | % Per Hour | VPH | g/mile | Hour | % Per Hour | VPH | g/mile | Hour | % Per Hour | VPH | g/mile |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 1.15% | 944 | 2.06E-03 | 9 | 7.11% | 5843 | 1.15E-02 | 17 | 7.38% | 6067 | 2.90E-02 |
| 2 | 0.42% | 346 | 7.56E-04 | 10 | 4.39% | 3604 | 7.88E-03 | 18 | 8.18% | 6718 | 3.22E-02 |
| 3 | 0.41% | 333 | 7.28E-04 | 11 | 4.66% | 3831 | 8.38E-03 | 19 | 5.70% | 4682 | 1.02E-02 |
| 4 | 0.26% | 214 | 4.68E-04 | 12 | 5.89% | 4838 | 1.06E-02 | 20 | 4.27% | 3509 | 7.67E-03 |
| 5 | 0.50% | 410 | 8.96E-04 | 13 | 6.15% | 5055 | 1.11E-02 | 21 | 3.26% | 2677 | 5.85E-03 |
| 6 | 0.90% | 743 | 1.62E-03 | 14 | 6.04% | 4960 | 1.08E-02 | 22 | 3.30% | 2711 | 5.93E-03 |
| 7 | 3.79% | 3112 | 6.80E-03 | 15 | 7.01% | 5762 | 1.26E-02 | 23 | 2.46% | 2023 | 4.42E-03 |
| 8 | 7.76% | 6378 | 1.26E-02 | 16 | 7.14% | 5865 | 1.28E-02 | 24 | 1.87% | 1534 | 3.35E-03 |
| | | | | | | | | Total | | 82,160 | |

**1207 N Capitol Ave, San Jose, CA - Roadway Modeling Emissions**
**Interstate 680 Traffic**
**TOG Evaporative Emissions Modeling - Roadway Links, Traffic Volumes, and TOG Evaporative Emissions**
**Year = 2026**

| | | | | | | | | | | | Line Area | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Road Link | Description | Direction | No. Lanes | Link Length (m) | Link Length (mi) | Link Width (m) | Link Width (ft) | Release Height ( m) | Average Speed (mph) | Average Vehicles per Day | Area (sq m) | Emission (g/s/m2) | Initial Vertical height (m) | (Sigma z) Initial Vertical Dimensio |
| TEVAP_NB680 | Northbound I-680 | SE-NW | 3 | 764 | 0.47 | 17.0 | 56 | 1.3 | variable | 82,160 | 12,962 | 5.127E-07 | 2.6 | 1.21 |
| TEVAP_SB680 | Southbound I-680 | NW-SE | 3 | 729 | 0.45 | 17.0 | 56 | 1.3 | variable | 82,160 | 12,369 | 5.127E-07 | 2.6 | 1.21 |
| | | | | | | | | | Total | 164,320 | | | | |

**Emission Factors - PM2.5 - Evaporative TOG**

| Speed Category | 1 | 2 | 3 | 4 |
|---|---|---|---|---|
| Travel Speed (mph) | 65 | 60 | 55 | 20 |
| Emissions per Vehicle per Hour (g/hour) | 0.95730 | 0.95730 | 0.9573 | 0.95730 |
| Emissions per Vehicle per Mile (g/VMT) | 0.01473 | 0.01595 | 0.0174 | 0.04786 |

Emisson Factors from CT-EMFAC2021

**2026 Hourly Traffic Volumes and TOG Evaporative Emissions - TEVAP_NB680**

| Hour | % Per Hour | VPH | g/s | Hour | % Per Hour | VPH | g/s | Hour | % Per Hour | VPH | g/s |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 1.15% | 944 | 1.83E-03 | 9 | 7.11% | 5843 | 1.34E-02 | 17 | 7.38% | 6067 | 1.28E-02 |
| 2 | 0.42% | 346 | 6.71E-04 | 10 | 4.39% | 3604 | 7.00E-03 | 18 | 8.18% | 6718 | 1.41E-02 |
| 3 | 0.41% | 333 | 6.47E-04 | 11 | 4.66% | 3831 | 7.44E-03 | 19 | 5.70% | 4682 | 9.09E-03 |
| 4 | 0.26% | 214 | 4.16E-04 | 12 | 5.89% | 4838 | 9.39E-03 | 20 | 4.27% | 3509 | 6.81E-03 |
| 5 | 0.50% | 410 | 7.95E-04 | 13 | 6.15% | 5055 | 9.81E-03 | 21 | 3.26% | 2677 | 5.20E-03 |
| 6 | 0.90% | 743 | 1.44E-03 | 14 | 6.04% | 4960 | 9.63E-03 | 22 | 3.30% | 2711 | 5.26E-03 |
| 7 | 3.79% | 3112 | 6.04E-03 | 15 | 7.01% | 5762 | 1.12E-02 | 23 | 2.46% | 2023 | 3.93E-03 |
| 8 | 7.76% | 6378 | 1.46E-02 | 16 | 7.14% | 5865 | 1.14E-02 | 24 | 1.87% | 1534 | 2.98E-03 |
| | | | | | | | | Total | | 82,160 | |

**2026 Hourly Traffic Volumes Per Direction and TOG Evaporative Emissions - TEVAP_SB680**

| Hour | % Per Hour | VPH | g/mile | Hour | % Per Hour | VPH | g/mile | Hour | % Per Hour | VPH | g/mile |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 1.15% | 944 | 1.75E-03 | 9 | 7.11% | 5843 | 1.17E-02 | 17 | 7.38% | 6067 | 3.65E-02 |
| 2 | 0.42% | 346 | 6.40E-04 | 10 | 4.39% | 3604 | 6.68E-03 | 18 | 8.18% | 6718 | 4.04E-02 |
| 3 | 0.41% | 333 | 6.17E-04 | 11 | 4.66% | 3831 | 7.10E-03 | 19 | 5.70% | 4682 | 8.67E-03 |
| 4 | 0.26% | 214 | 3.97E-04 | 12 | 5.89% | 4838 | 8.96E-03 | 20 | 4.27% | 3509 | 6.50E-03 |
| 5 | 0.50% | 410 | 7.59E-04 | 13 | 6.15% | 5055 | 9.37E-03 | 21 | 3.26% | 2677 | 4.96E-03 |
| 6 | 0.90% | 743 | 1.38E-03 | 14 | 6.04% | 4960 | 9.19E-03 | 22 | 3.30% | 2711 | 5.02E-03 |
| 7 | 3.79% | 3112 | 5.76E-03 | 15 | 7.01% | 5762 | 1.07E-02 | 23 | 2.46% | 2023 | 3.75E-03 |
| 8 | 7.76% | 6378 | 1.28E-02 | 16 | 7.14% | 5865 | 1.09E-02 | 24 | 1.87% | 1534 | 2.84E-03 |
| | | | | | | | | Total | | 82,160 | |

**1207 N Capitol Ave, San Jose, CA - Roadway Modeling Emissions**
**Interstate 680 Traffic**
**Fugitive Road PM2.5 Modeling - Roadway Links, Traffic Volumes, and Fugitive Road PM2.5 Emissions**
**Year = 2026**

| | | | | | | | | | | | Line Area | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Road Link | Description | Direction | No. Lanes | Link Length (m) | Link Length (mi) | Link Width (m) | Link Width (ft) | Release Height ( m) | Average Speed (mph) | Average Vehicles per Day | Area (sq m) | Emission (g/s/m2) | Initial Vertical height (m) | (Sigma z) Initial Vertical Dimension |
| FUG_NB680 | Northbound I-680 | SE-NW | 3 | 764 | 0.47 | 17.0 | 56 | 1.3 | variable | 82,160 | 12,962 | 4.517E-07 | 2.6 | 1.21 |
| FUG_SB680 | Southbound I-680 | NW-SE | 3 | 729 | 0.45 | 17.0 | 56 | 1.3 | variable | 82,160 | 12,369 | 4.517E-07 | 2.6 | 1.21 |
| | | | | | | | | | Total | 164,320 | | | | |

**Emission Factors - Fugitive PM2.5**

| Speed Category | 1 | 2 | 3 | 4 |
|---|---|---|---|---|
| Travel Speed (mph) | 65 | 60 | 55 | 20 |
| Tire Wear - Emissions per Vehicle (g/VMT) | 0.00219 | 0.00219 | 0.00219 | 0.00219 |
| Brake Wear - Emissions per Vehicle (g/VMT) | 0.00210 | 0.00240 | 0.00269 | 0.00573 |
| Road Dust - Emissions per Vehicle (g/VMT) | 0.00869 | 0.00869 | 0.00869 | 0.00869 |
| Total Fugitive PM2.5 - Emissions per Vehicle (g/VMT) | 0.01298 | 0.01327 | 0.0136 | 0.01661 |

Emisson Factors from CT-EMFAC2021

## 2026 Hourly Traffic Volumes and Fugitive PM2.5 Emissions - FUG_NB680

| Hour | % Per Hour | VPH | g/s | Hour | % Per Hour | VPH | g/s | Hour | % Per Hour | VPH | g/s |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 1.15% | 944 | 1.62E-03 | 9 | 7.11% | 5843 | 1.05E-02 | 17 | 7.38% | 6067 | 1.06E-02 |
| 2 | 0.42% | 346 | 5.91E-04 | 10 | 4.39% | 3604 | 6.16E-03 | 18 | 8.18% | 6718 | 1.18E-02 |
| 3 | 0.41% | 333 | 5.70E-04 | 11 | 4.66% | 3831 | 6.55E-03 | 19 | 5.70% | 4682 | 8.01E-03 |
| 4 | 0.26% | 214 | 3.66E-04 | 12 | 5.89% | 4838 | 8.28E-03 | 20 | 4.27% | 3509 | 6.00E-03 |
| 5 | 0.50% | 410 | 7.01E-04 | 13 | 6.15% | 5055 | 8.65E-03 | 21 | 3.26% | 2677 | 4.58E-03 |
| 6 | 0.90% | 743 | 1.27E-03 | 14 | 6.04% | 4960 | 8.48E-03 | 22 | 3.30% | 2711 | 4.64E-03 |
| 7 | 3.79% | 3112 | 5.32E-03 | 15 | 7.01% | 5762 | 9.86E-03 | 23 | 2.46% | 2023 | 3.46E-03 |
| 8 | 7.76% | 6378 | 1.14E-02 | 16 | 7.14% | 5865 | 1.00E-02 | 24 | 1.87% | 1534 | 2.62E-03 |
| | | | | | | | | Total | | 82,160 | |

## 2026 Hourly Traffic Volumes Per Direction and Fugitive PM2.5 Emissions - FUG_SB680

| Hour | % Per Hour | VPH | g/mile | Hour | % Per Hour | VPH | g/mile | Hour | % Per Hour | VPH | g/mile |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 1.15% | 944 | 1.54E-03 | 9 | 7.11% | 5843 | 9.76E-03 | 17 | 7.38% | 6067 | 1.27E-02 |
| 2 | 0.42% | 346 | 5.64E-04 | 10 | 4.39% | 3604 | 5.88E-03 | 18 | 8.18% | 6718 | 1.40E-02 |
| 3 | 0.41% | 333 | 5.44E-04 | 11 | 4.66% | 3831 | 6.25E-03 | 19 | 5.70% | 4682 | 7.64E-03 |
| 4 | 0.26% | 214 | 3.50E-04 | 12 | 5.89% | 4838 | 7.90E-03 | 20 | 4.27% | 3509 | 5.73E-03 |
| 5 | 0.50% | 410 | 6.69E-04 | 13 | 6.15% | 5055 | 8.25E-03 | 21 | 3.26% | 2677 | 4.37E-03 |
| 6 | 0.90% | 743 | 1.21E-03 | 14 | 6.04% | 4960 | 8.10E-03 | 22 | 3.30% | 2711 | 4.43E-03 |
| 7 | 3.79% | 3112 | 5.08E-03 | 15 | 7.01% | 5762 | 9.40E-03 | 23 | 2.46% | 2023 | 3.30E-03 |
| 8 | 7.76% | 6378 | 1.06E-02 | 16 | 7.14% | 5865 | 9.57E-03 | 24 | 1.87% | 1534 | 2.50E-03 |
| | | | | | | | | Total | | 82,160 | |

**1207 N. Capitol Ave, San Jose, CA - Interstate 680 Traffic - TACs & PM2.5**
**AERMOD Risk Modeling Parameters and Maximum Concentrations**
**at Project MEI Receptors, 1.5m & 4.5m receptor heights**

| | |
|---|---|
| **Emission Year** | 2026 |
| **Receptor Information** | Project MEI receptors |
| Number of Receptors | 2 |
| Receptor Height | 1.5 & 4.5 meters |
| Receptor Distances | At Project MEI locations |
| | |
| **Meteorological Conditions** | |
| BAQMD San Jose Airport Met Data | 2013-2017 |
| Land Use Classification | Urban |
| Wind Speed | Variable |
| Wind Direction | Variable |

## Off-Site Cancer Risk Maximum Concentrations

| Meteorological Data Years | Concentration (µg/m3) | | | |
|---|---|---|---|---|
| | DPM | Exhaust TOG | Evaporative TOG | |
| 2013-2017 | 0.0049 | 0.0669 | 0.0622 | 2nd Floor |

## Off-Site PM2.5 Maximum Concentrations

| Meteorological Data Years | PM2.5 Concentration (µg/m3) | | | |
|---|---|---|---|---|
| | Total PM2.5 | Fugitive PM2.5 | Vehicle PM2.5 | |
| 2013-2017 | 0.0593 | 0.0517 | 0.0076 | 1st Floor |

**1207 N. Capitol Ave, San Jose, CA - Interstate 680 Cancer Risk & PM2.5**
**Impacts at Project MEIs - 1.5 meter (1st floor) and 4.5 meter (2nd floor) receptor heights**
**30 Year Residential Exposure**

### Cancer Risk Calculation Method

Cancer Risk (per million) = CPF x Inhalation Dose x ASF x ED/AT x FAH x 1.0E6

Where: CPF = Cancer potency factor $(mg/kg\text{-}day)^{-1}$
ASF = Age sensitivity factor for specified age group
ED = Exposure duration (years)
AT = Averaging time for lifetime cancer risk (years)
FAH = Fraction of time spent at home (unitless)

Inhalation Dose = $C_{air}$ x DBR x A x (EF/365) x $10^{-6}$

Where: $C_{air}$ = concentration in air $(\mu g/m^3)$
DBR = daily breathing rate (L/kg body weight-day)
A = Inhalation absorption factor
EF = Exposure frequency (days/year)
$10^{-6}$ = Conversion factor

**Cancer Potency Factors $(mg/kg\text{-}day)^{-1}$**

| TAC | CPF |
|---|---|
| DPM | 1.10E+00 |
| Vehicle TOG Exhaust | 6.28E-03 |
| Vehicle TOG Evaporative | 3.70E-04 |

**Values**

| | Infant/Child | | | Adult |
|---|---|---|---|---|
| Age --> | 3rd Trimester | 0 - 2 | 2 - 16 | 16 - 30 |
| Parameter | | | | |
| ASF = | 10 | 10 | 3 | 1 |
| DBR* = | 361 | 1090 | 572 | 261 |
| A = | 1 | 1 | 1 | 1 |
| EF = | 350 | 350 | 350 | 350 |
| AT = | 70 | 70 | 70 | 70 |
| FAH = | 1.00 | 1.00 | 1.00 | 0.73 |

* 95th percentile breathing rates for infants and 80th percentile for children and adults

### Construction Cancer Risk by Year - Maximum Impact Receptor Location

| Maximum - Exposure Information | | | | | Concentration (ug/m3) | | | Cancer Risk (per million) | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Exposure Year | Exposure Duration (years) | Age | Year | Age Sensitivity Factor | DPM | Exhaust TOG | Evaporative TOG | DPM | Exhaust TOG | Evaporative TOG | TOTAL |
| 0 | 0.25 | -0.25 - 0* | 2026 | 10 | 0.0049 | 0.0669 | 0.0622 | 0.066 | 0.005 | 0.0003 | 0.07 |
| 1 | 1 | 0 - 1 | 2026 | 10 | 0.0049 | 0.0669 | 0.0622 | 0.797 | 0.063 | 0.0034 | 0.86 |
| 2 | 1 | 1 - 2 | 2027 | 10 | 0.0049 | 0.0669 | 0.0622 | 0.797 | 0.063 | 0.0034 | 0.86 |
| 3 | 1 | 2 - 3 | 2028 | 3 | 0.0049 | 0.0669 | 0.0622 | 0.125 | 0.010 | 0.0005 | 0.14 |
| 4 | 1 | 3 - 4 | 2029 | 3 | 0.0049 | 0.0669 | 0.0622 | 0.125 | 0.010 | 0.0005 | 0.14 |
| 5 | 1 | 4 - 5 | 2030 | 3 | 0.0049 | 0.0669 | 0.0622 | 0.125 | 0.010 | 0.0005 | 0.14 |
| 6 | 1 | 5 - 6 | 2031 | 3 | 0.0049 | 0.0669 | 0.0622 | 0.125 | 0.010 | 0.0005 | 0.14 |
| 7 | 1 | 6 - 7 | 2032 | 3 | 0.0049 | 0.0669 | 0.0622 | 0.125 | 0.010 | 0.0005 | 0.14 |
| 8 | 1 | 7 - 8 | 2033 | 3 | 0.0049 | 0.0669 | 0.0622 | 0.125 | 0.010 | 0.0005 | 0.14 |
| 9 | 1 | 8 - 9 | 2034 | 3 | 0.0049 | 0.0669 | 0.0622 | 0.125 | 0.010 | 0.0005 | 0.14 |
| 10 | 1 | 9 - 10 | 2035 | 3 | 0.0049 | 0.0669 | 0.0622 | 0.125 | 0.010 | 0.0005 | 0.14 |
| 11 | 1 | 10 - 11 | 2036 | 3 | 0.0049 | 0.0669 | 0.0622 | 0.125 | 0.010 | 0.0005 | 0.14 |
| 12 | 1 | 11 - 12 | 2037 | 3 | 0.0049 | 0.0669 | 0.0622 | 0.125 | 0.010 | 0.0005 | 0.14 |
| 13 | 1 | 12 - 13 | 2038 | 3 | 0.0049 | 0.0669 | 0.0622 | 0.125 | 0.010 | 0.0005 | 0.14 |
| 14 | 1 | 13 - 14 | 2039 | 3 | 0.0049 | 0.0669 | 0.0622 | 0.125 | 0.010 | 0.0005 | 0.14 |
| 15 | 1 | 14 - 15 | 2040 | 3 | 0.0049 | 0.0669 | 0.0622 | 0.125 | 0.010 | 0.0005 | 0.14 |
| 16 | 1 | 15 - 16 | 2041 | 3 | 0.0049 | 0.0669 | 0.0622 | 0.125 | 0.010 | 0.0005 | 0.14 |
| 17 | 1 | 16-17 | 2042 | 1 | 0.0049 | 0.0669 | 0.0622 | 0.014 | 0.001 | 0.0001 | 0.02 |
| 18 | 1 | 17-18 | 2043 | 1 | 0.0049 | 0.0669 | 0.0622 | 0.014 | 0.001 | 0.0001 | 0.02 |
| 19 | 1 | 18-19 | 2044 | 1 | 0.0049 | 0.0669 | 0.0622 | 0.014 | 0.001 | 0.0001 | 0.02 |
| 20 | 1 | 19-20 | 2045 | 1 | 0.0049 | 0.0669 | 0.0622 | 0.014 | 0.001 | 0.0001 | 0.02 |
| 21 | 1 | 20-21 | 2046 | 1 | 0.0049 | 0.0669 | 0.0622 | 0.014 | 0.001 | 0.0001 | 0.02 |
| 22 | 1 | 21-22 | 2047 | 1 | 0.0049 | 0.0669 | 0.0622 | 0.014 | 0.001 | 0.0001 | 0.02 |
| 23 | 1 | 22-23 | 2048 | 1 | 0.0049 | 0.0669 | 0.0622 | 0.014 | 0.001 | 0.0001 | 0.02 |
| 24 | 1 | 23-24 | 2049 | 1 | 0.0049 | 0.0669 | 0.0622 | 0.014 | 0.001 | 0.0001 | 0.02 |
| 25 | 1 | 24-25 | 2050 | 1 | 0.0049 | 0.0669 | 0.0622 | 0.014 | 0.001 | 0.0001 | 0.02 |
| 26 | 1 | 25-26 | 2051 | 1 | 0.0049 | 0.0669 | 0.0622 | 0.014 | 0.001 | 0.0001 | 0.02 |
| 27 | 1 | 26-27 | 2052 | 1 | 0.0049 | 0.0669 | 0.0622 | 0.014 | 0.001 | 0.0001 | 0.02 |
| 28 | 1 | 27-28 | 2053 | 1 | 0.0049 | 0.0669 | 0.0622 | 0.014 | 0.001 | 0.0001 | 0.02 |
| 29 | 1 | 28-29 | 2054 | 1 | 0.0049 | 0.0669 | 0.0622 | 0.014 | 0.001 | 0.0001 | 0.02 |
| 30 | 1 | 29-30 | 2055 | 1 | 0.0049 | 0.0669 | 0.0622 | 0.014 | 0.001 | 0.0001 | 0.02 |
| **Total Increased Cancer Risk** | | | | | | | | 3.61 | 0.284 | 0.016 | **3.91** |

| Maximum Hazard Index | Maximum Fugitive PM2.5 | Total PM2.5 |
|---|---|---|
| 0.001 | 0.05 | 0.06 |

* Third trimester of pregnancy

# N. Capitol Ave 2026 Traffic Emissions and Health Risk Calculations

**Analysis Year =** ***2026***

| **Vehicle Type** | **2025 Caltrans Vehicles (veh/day)** | **2026 Vehicles (veh/day)** |
|---|---|---|
| Truck 1 (MDT) | 343 | 347 |
| Truck 2 (HDT) | 363 | 367 |
| Non-Truck | 19,479 | 19,673 |
| **All** | **20,185** | **20,387** |

| | |
|---|---|
| Increase From 2025 | 1.01 |
| **Vehicles/Direction** | **10,193** |
| Avg Vehicles/Hour/Direction | 425 |

**Traffic Data Year =** ***2025***

| ***Project Traffic Analysis Background Plus Project*** | AADT Total |
|---|---|
| N. Captol Ave & Berryessa Road | 20,185 |
| | |

Percent of Total Vehicles

Traffic Increase per Year (%) = *1.00%*

**1207 N Capitol Ave Daycare, San Jose, CA - Roadway Modeling Emissions**
**North Capitol Avenue Traffic**
**DPM Modeling - Roadway Links, Traffic Volumes, and DPM Emissions**
**Year = 2026**

| | | | | | | | | | | | Line Area | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Road Link | Description | Direction | No. Lanes | Link Length (m) | Link Length (mi) | Link Width (m) | Link Width (ft) | Release Height ( m) | Average Speed (mph) | Average Vehicles per Day | Area (sq m) | Emission (g/s/m2) | Initial Vertical height (m) | (Sigma z) Initial Vertical Dimension |
| DPM_NBCAP | Northbound N Capitol | SE-NW | 2 | 893 | 0.55 | 13.3 | 43.7 | 3.4 | 30 | 10,193 | 11,889 | 2.081E-09 | 6.8 | 3.16 |
| DPM_SBCAP | Southbound N Capitol | NW-SE | 2 | 895 | 0.56 | 13.3 | 43.7 | 3.4 | 30 | 10,193 | 11,922 | 2.075E-09 | 6.8 | 3.16 |
| | | | | | | | | | | 20,387 | | | | |

**Emission Factors - DPM**

| Speed Category | 1 | 2 | 3 | 4 |
|---|---|---|---|---|
| Travel Speed (mph) | 30 | | | |
| Emissions per Vehicle (g/VMT) | 0.00038 | | | |

Emisson Factors from CT-EMFAC2021

**2026 Hourly Traffic Volumes and DPM Emissions - DPM_NBCAP**

| Hour | % Per Hour | VPH | g/s | Hour | % Per Hour | VPH | g/s | Hour | % Per Hour | VPH | g/s |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 3.98% | 405 | 2.36E-05 | 9 | 6.44% | 656 | 3.82E-05 | 17 | 5.53% | 564 | 3.28E-05 |
| 2 | 2.67% | 272 | 1.59E-05 | 10 | 7.40% | 754 | 4.39E-05 | 18 | 3.14% | 320 | 1.87E-05 |
| 3 | 2.84% | 290 | 1.69E-05 | 11 | 6.32% | 644 | 3.75E-05 | 19 | 2.35% | 239 | 1.39E-05 |
| 4 | 3.30% | 336 | 1.96E-05 | 12 | 6.88% | 702 | 4.09E-05 | 20 | 0.86% | 88 | 5.11E-06 |
| 5 | 2.16% | 220 | 1.28E-05 | 13 | 6.27% | 639 | 3.72E-05 | 21 | 3.08% | 314 | 1.83E-05 |
| 6 | 3.30% | 336 | 1.96E-05 | 14 | 6.21% | 633 | 3.69E-05 | 22 | 4.21% | 429 | 2.50E-05 |
| 7 | 6.03% | 615 | 3.58E-05 | 15 | 5.13% | 523 | 3.05E-05 | 23 | 2.62% | 267 | 1.56E-05 |
| 8 | 4.56% | 465 | 2.71E-05 | 16 | 3.88% | 396 | 2.30E-05 | 24 | 0.85% | 87 | 5.06E-06 |
| | | | | | | | | Total | | 10,193 | |

**2026 Hourly Traffic Volumes Per Direction and DPM Emissions - DPM_SBCAP**

| Hour | % Per Hour | VPH | g/mile | Hour | % Per Hour | VPH | g/mile | Hour | % Per Hour | VPH | g/mile |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 3.98% | 405 | 2.37E-05 | 9 | 6.44% | 656 | 3.83E-05 | 17 | 5.53% | 564 | 3.29E-05 |
| 2 | 2.67% | 272 | 1.59E-05 | 10 | 7.40% | 754 | 4.40E-05 | 18 | 3.14% | 320 | 1.87E-05 |
| 3 | 2.84% | 290 | 1.69E-05 | 11 | 6.32% | 644 | 3.76E-05 | 19 | 2.35% | 239 | 1.40E-05 |
| 4 | 3.30% | 336 | 1.96E-05 | 12 | 6.88% | 702 | 4.10E-05 | 20 | 0.86% | 88 | 5.13E-06 |
| 5 | 2.16% | 220 | 1.29E-05 | 13 | 6.27% | 639 | 3.73E-05 | 21 | 3.08% | 314 | 1.83E-05 |
| 6 | 3.30% | 336 | 1.96E-05 | 14 | 6.21% | 633 | 3.70E-05 | 22 | 4.21% | 429 | 2.51E-05 |
| 7 | 6.03% | 615 | 3.59E-05 | 15 | 5.13% | 523 | 3.06E-05 | 23 | 2.62% | 267 | 1.56E-05 |
| 8 | 4.56% | 465 | 2.72E-05 | 16 | 3.88% | 396 | 2.31E-05 | 24 | 0.85% | 87 | 5.08E-06 |
| | | | | | | | | Total | | 10,193 | |

**1207 N Capitol Ave Daycare, San Jose, CA - Roadway Modeling Emissions**
**North Capitol Avenue Traffic**
**PM2.5 Modeling - Roadway Links, Traffic Volumes, and PM2.5 Emissions**
**Year = 2026**

| | | | | | | | | | | | Line Area | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Road Link | Description | Direction | No. Lanes | Link Length (m) | Link Length (mi) | Link Width (m) | Link Width (ft) | Release Height ( m) | Average Speed (mph) | Average Vehicles per Day | Area (sq m) | Emission (g/s/m2) | Initial Vertical height (m) | (Sigma z) Initial Vertical Dimension |
| PM25_NBCAP | Northbound N Capitol | SE-NW | 2 | 893 | 0.55 | 13.3 | 44 | 1.3 | 30 | 10,193 | 11,889 | 8.815E-09 | 2.6 | 1.21 |
| PM25_SBCAP | Southbound N Capitol | NW-SE | 2 | 895 | 0.56 | 13.3 | 44 | 1.3 | 30 | 10,193 | 11,922 | 8.815E-09 | 2.6 | 1.21 |
| | | | | | | | | | Total | 20,387 | | | | |

**Emission Factors - PM2.5**

| Speed Category | 1 | 2 | 3 | 4 |
|---|---|---|---|---|
| Travel Speed (mph) | 30 | | | |
| Emissions per Vehicle (g/VMT) | 0.00160 | | | |

Emisson Factors from CT-EMFAC2021

**2026 Hourly Traffic Volumes and PM2.5 Emissions - PM25_NBCAP**

| Hour | % Per Hour | VPH | g/s | Hour | % Per Hour | VPH | g/s | Hour | % Per Hour | VPH | g/s |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 1.15% | 117 | 2.89E-05 | 9 | 7.11% | 725 | 1.79E-04 | 17 | 7.38% | 753 | 1.86E-04 |
| 2 | 0.42% | 43 | 1.06E-05 | 10 | 4.39% | 447 | 1.10E-04 | 18 | 8.18% | 833 | 2.06E-04 |
| 3 | 0.41% | 41 | 1.02E-05 | 11 | 4.66% | 475 | 1.17E-04 | 19 | 5.70% | 581 | 1.43E-04 |
| 4 | 0.26% | 27 | 6.56E-06 | 12 | 5.89% | 600 | 1.48E-04 | 20 | 4.27% | 435 | 1.07E-04 |
| 5 | 0.50% | 51 | 1.25E-05 | 13 | 6.15% | 627 | 1.55E-04 | 21 | 3.26% | 332 | 8.20E-05 |
| 6 | 0.90% | 92 | 2.27E-05 | 14 | 6.04% | 615 | 1.52E-04 | 22 | 3.30% | 336 | 8.30E-05 |
| 7 | 3.79% | 386 | 9.53E-05 | 15 | 7.01% | 715 | 1.76E-04 | 23 | 2.46% | 251 | 6.19E-05 |
| 8 | 7.76% | 791 | 1.95E-04 | 16 | 7.14% | 728 | 1.80E-04 | 24 | 1.87% | 190 | 4.70E-05 |
| | | | | | | | | Total | | 10,193 | |

**2026 Hourly Traffic Volumes Per Direction and PM2.5 Emissions - PM25_SBCAP**

| Hour | % Per Hour | VPH | g/mile | Hour | % Per Hour | VPH | g/mile | Hour | % Per Hour | VPH | g/mile |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 1.15% | 117 | 2.90E-05 | 9 | 7.11% | 725 | 1.79E-04 | 17 | 7.38% | 753 | 1.86E-04 |
| 2 | 0.42% | 43 | 1.06E-05 | 10 | 4.39% | 447 | 1.11E-04 | 18 | 8.18% | 833 | 2.06E-04 |
| 3 | 0.41% | 41 | 1.02E-05 | 11 | 4.66% | 475 | 1.18E-04 | 19 | 5.70% | 581 | 1.44E-04 |
| 4 | 0.26% | 27 | 6.58E-06 | 12 | 5.89% | 600 | 1.49E-04 | 20 | 4.27% | 435 | 1.08E-04 |
| 5 | 0.50% | 51 | 1.26E-05 | 13 | 6.15% | 627 | 1.55E-04 | 21 | 3.26% | 332 | 8.22E-05 |
| 6 | 0.90% | 92 | 2.28E-05 | 14 | 6.04% | 615 | 1.52E-04 | 22 | 3.30% | 336 | 8.32E-05 |
| 7 | 3.79% | 386 | 9.55E-05 | 15 | 7.01% | 715 | 1.77E-04 | 23 | 2.46% | 251 | 6.21E-05 |
| 8 | 7.76% | 791 | 1.96E-04 | 16 | 7.14% | 728 | 1.80E-04 | 24 | 1.87% | 190 | 4.71E-05 |
| | | | | | | | | Total | | 10,193 | |

**1207 N Capitol Ave Daycare, San Jose, CA - Roadway Modeling Emissions**
**North Capitol Avenue Traffic**
**TOG Exhaust Modeling - Roadway Links, Traffic Volumes, and TOG Exhaust Emissions**
**Year = 2026**

| | | | | | | | | | | | Line Area | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Road Link | Description | Direction | No. Lanes | Link Length (m) | Link Length (mi) | Link Width (m) | Link Width (ft) | Release Height ( m) | Average Speed (mph) | Average Vehicles per Day | Area (sq m) | Emission (g/s/m2) | Initial Vertical height (m) | (Sigma z) Initial Vertical Dimensio |
| TEXH_NBCAP | Northbound N Capitol | SE-NW | 2 | 893 | 0.55 | 13.3 | 44 | 1.3 | 30 | 10,193 | 11,889 | 1.201E-07 | 2.6 | 1.21 |
| TEXH_SBCAP | Southbound N Capitol | NW-SE | 2 | 895 | 0.56 | 13.3 | 44 | 1.3 | 30 | 10,193 | 11,922 | 1.201E-07 | 2.6 | 1.21 |
| | | | | | | | | | Total | 20,387 | | | | |

**Emission Factors - TOG Exhaust**

| Speed Category | 1 | 2 | 3 | 4 |
|---|---|---|---|---|
| Travel Speed (mph) | 30 | | | |
| All Vehicles TOG Emissions per Vehicle (g/VMT) | 0.02343 | | | |
| Diesel Vehicles TOG Emissions per Vehicle (g/VMT) | 0.00162 | | | |
| Gasoline Vehicles Emissions per Vehicle (g/VMT) | 0.02181 | | | |

Emisson Factors from CT-EMFAC2021

**2026 Hourly Traffic Volumes and TOG Exhaust Emissions - TEXH_NBCAP**

| Hour | % Per Hour | VPH | g/s | Hour | % Per Hour | VPH | g/s | Hour | % Per Hour | VPH | g/s |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 1.15% | 117 | 3.94E-04 | 9 | 7.11% | 725 | 2.44E-03 | 17 | 7.38% | 753 | 2.53E-03 |
| 2 | 0.42% | 43 | 1.44E-04 | 10 | 4.39% | 447 | 1.50E-03 | 18 | 8.18% | 833 | 2.80E-03 |
| 3 | 0.41% | 41 | 1.39E-04 | 11 | 4.66% | 475 | 1.60E-03 | 19 | 5.70% | 581 | 1.95E-03 |
| 4 | 0.26% | 27 | 8.93E-05 | 12 | 5.89% | 600 | 2.02E-03 | 20 | 4.27% | 435 | 1.46E-03 |
| 5 | 0.50% | 51 | 1.71E-04 | 13 | 6.15% | 627 | 2.11E-03 | 21 | 3.26% | 332 | 1.12E-03 |
| 6 | 0.90% | 92 | 3.10E-04 | 14 | 6.04% | 615 | 2.07E-03 | 22 | 3.30% | 336 | 1.13E-03 |
| 7 | 3.79% | 386 | 1.30E-03 | 15 | 7.01% | 715 | 2.40E-03 | 23 | 2.46% | 251 | 8.44E-04 |
| 8 | 7.76% | 791 | 2.66E-03 | 16 | 7.14% | 728 | 2.45E-03 | 24 | 1.87% | 190 | 6.40E-04 |
| | | | | | | | | Total | | 10,193 | |

**2026 Hourly Traffic Volumes Per Direction and TOG Exhaust Emissions - TEXH_SBCAP**

| Hour | % Per Hour | VPH | g/mile | Hour | % Per Hour | VPH | g/mile | Hour | % Per Hour | VPH | g/mile |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 1.15% | 117 | 3.95E-04 | 9 | 7.11% | 725 | 2.44E-03 | 17 | 7.38% | 753 | 2.54E-03 |
| 2 | 0.42% | 43 | 1.44E-04 | 10 | 4.39% | 447 | 1.51E-03 | 18 | 8.18% | 833 | 2.81E-03 |
| 3 | 0.41% | 41 | 1.39E-04 | 11 | 4.66% | 475 | 1.60E-03 | 19 | 5.70% | 581 | 1.96E-03 |
| 4 | 0.26% | 27 | 8.96E-05 | 12 | 5.89% | 600 | 2.02E-03 | 20 | 4.27% | 435 | 1.47E-03 |
| 5 | 0.50% | 51 | 1.71E-04 | 13 | 6.15% | 627 | 2.11E-03 | 21 | 3.26% | 332 | 1.12E-03 |
| 6 | 0.90% | 92 | 3.11E-04 | 14 | 6.04% | 615 | 2.07E-03 | 22 | 3.30% | 336 | 1.13E-03 |
| 7 | 3.79% | 386 | 1.30E-03 | 15 | 7.01% | 715 | 2.41E-03 | 23 | 2.46% | 251 | 8.46E-04 |
| 8 | 7.76% | 791 | 2.67E-03 | 16 | 7.14% | 728 | 2.45E-03 | 24 | 1.87% | 190 | 6.41E-04 |
| | | | | | | | | Total | | 10,193 | |

**1207 N Capitol Ave Daycare, San Jose, CA - Roadway Modeling Emissions**
**North Capitol Avenue Traffic**
**TOG Evaporative Emissions Modeling - Roadway Links, Traffic Volumes, and TOG Evaporative Emissions**
**Year = 2026**

| | | | | | | | | | | | Line Area | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Road Link | Description | Direction | No. Lanes | Link Length (m) | Link Length (mi) | Link Width (m) | Link Width (ft) | Release Height ( m) | Average Speed (mph) | Average Vehicles per Day | Area (sq m) | Emission (g/s/m2) | Initial Vertical height (m) | (Sigma z) Initial Vertical Dimensio |
| TEVAP_NBCAP | Northbound N Capitol | SE-NW | 2 | 893 | 0.55 | 13.3 | 44 | 1.3 | 30 | 10,193 | 11,889 | 1.786E-07 | 2.6 | 1.21 |
| TEVAP_SBCAP | Southbound N Capitol | NW-SE | 2 | 895 | 0.56 | 13.3 | 44 | 1.3 | 30 | 10,193 | 11,922 | 1.786E-07 | 2.6 | 1.21 |
| | | | | | | | | | Total | 20,387 | | | | |

**Emission Factors - PM2.5 - Evaporative TOG**

| Speed Category | 1 | 2 | 3 | 4 |
|---|---|---|---|---|
| Travel Speed (mph) | 30 | 0 | 0 | 0 |
| Emissions per Vehicle per Hour (g/hour) | 0.97293 | | | |
| Emissions per Vehicle per Mile (g/VMT) | 0.03243 | | | |

Emisson Factors from CT-EMFAC2021

**2026 Hourly Traffic Volumes and TOG Evaporative Emissions - TEVAP_NBCAP**

| Hour | % Per Hour | VPH | g/s | Hour | % Per Hour | VPH | g/s | Hour | % Per Hour | VPH | g/s |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 1.15% | 117 | 5.86E-04 | 9 | 7.11% | 725 | 3.62E-03 | 17 | 7.38% | 753 | 3.76E-03 |
| 2 | 0.42% | 43 | 2.14E-04 | 10 | 4.39% | 447 | 2.24E-03 | 18 | 8.18% | 833 | 4.17E-03 |
| 3 | 0.41% | 41 | 2.07E-04 | 11 | 4.66% | 475 | 2.38E-03 | 19 | 5.70% | 581 | 2.90E-03 |
| 4 | 0.26% | 27 | 1.33E-04 | 12 | 5.89% | 600 | 3.00E-03 | 20 | 4.27% | 435 | 2.18E-03 |
| 5 | 0.50% | 51 | 2.54E-04 | 13 | 6.15% | 627 | 3.13E-03 | 21 | 3.26% | 332 | 1.66E-03 |
| 6 | 0.90% | 92 | 4.61E-04 | 14 | 6.04% | 615 | 3.08E-03 | 22 | 3.30% | 336 | 1.68E-03 |
| 7 | 3.79% | 386 | 1.93E-03 | 15 | 7.01% | 715 | 3.57E-03 | 23 | 2.46% | 251 | 1.25E-03 |
| 8 | 7.76% | 791 | 3.96E-03 | 16 | 7.14% | 728 | 3.64E-03 | 24 | 1.87% | 190 | 9.51E-04 |
| | | | | | | | | Total | | 10,193 | |

**2026 Hourly Traffic Volumes Per Direction and TOG Evaporative Emissions - TEVAP_SBCAP**

| Hour | % Per Hour | VPH | g/mile | Hour | % Per Hour | VPH | g/mile | Hour | % Per Hour | VPH | g/mile |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 1.15% | 117 | 5.87E-04 | 9 | 7.11% | 725 | 3.63E-03 | 17 | 7.38% | 753 | 3.77E-03 |
| 2 | 0.42% | 43 | 2.15E-04 | 10 | 4.39% | 447 | 2.24E-03 | 18 | 8.18% | 833 | 4.18E-03 |
| 3 | 0.41% | 41 | 2.07E-04 | 11 | 4.66% | 475 | 2.38E-03 | 19 | 5.70% | 581 | 2.91E-03 |
| 4 | 0.26% | 27 | 1.33E-04 | 12 | 5.89% | 600 | 3.01E-03 | 20 | 4.27% | 435 | 2.18E-03 |
| 5 | 0.50% | 51 | 2.55E-04 | 13 | 6.15% | 627 | 3.14E-03 | 21 | 3.26% | 332 | 1.66E-03 |
| 6 | 0.90% | 92 | 4.62E-04 | 14 | 6.04% | 615 | 3.08E-03 | 22 | 3.30% | 336 | 1.69E-03 |
| 7 | 3.79% | 386 | 1.94E-03 | 15 | 7.01% | 715 | 3.58E-03 | 23 | 2.46% | 251 | 1.26E-03 |
| 8 | 7.76% | 791 | 3.97E-03 | 16 | 7.14% | 728 | 3.65E-03 | 24 | 1.87% | 190 | 9.54E-04 |
| | | | | | | | | Total | | 10,193 | |

**1207 N Capitol Ave Daycare, San Jose, CA - Roadway Modeling Emissions**
**North Capitol Avenue Traffic**
**Fugitive Road PM2.5 Modeling - Roadway Links, Traffic Volumes, and Fugitive Road PM2.5 Emissions**
**Year = 2026**

| | | | | | | | | | | | Line Area | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Road Link | Description | Direction | No. Lanes | Link Length (m) | Link Length (mi) | Link Width (m) | Link Width (ft) | Release Height ( m) | Average Speed (mph) | Average Vehicles per Day | Area (sq m) | Emission (g/s/m2) | Initial Vertical height (m) | (Sigma z) Initial Vertical Dimension |
| FUG_NBCAP | Northbound N Capitol | SE-NW | 2 | 893 | 0.55 | 13.3 | 44 | 1.3 | 30 | 10,193 | 11,889 | 1.256E-07 | 2.6 | 1.21 |
| FUG_SBCAP | Southbound N Capitol | NW-SE | 2 | 895 | 0.56 | 13.3 | 44 | 1.3 | 30 | 10,193 | 11,922 | 1.256E-07 | 2.6 | 1.21 |
| | | | | | | | | | Total | 20,387 | | | | |

**Emission Factors - Fugitive PM2.5**

| Speed Category | 1 | 2 | 3 | 4 |
|---|---|---|---|---|
| Travel Speed (mph) | 30 | | | |
| Tire Wear - Emissions per Vehicle (g/VMT) | 0.00210 | | | |
| Brake Wear - Emissions per Vehicle (g/VMT) | 0.00547 | | | |
| Road Dust - Emissions per Vehicle (g/VMT) | 0.01525 | | | |
| Total Fugitive PM2.5 - Emissions per Vehicle (g/VMT) | 0.02281 | | | |

Emisson Factors from CT-EMFAC2021

**2026 Hourly Traffic Volumes and Fugitive PM2.5 Emissions - FUG_NBCAP**

| Hour | % Per Hour | VPH | g/s | Hour | % Per Hour | VPH | g/s | Hour | % Per Hour | VPH | g/s |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 1.15% | 117 | 4.12E-04 | 9 | 7.11% | 725 | 2.55E-03 | 17 | 7.38% | 753 | 2.65E-03 |
| 2 | 0.42% | 43 | 1.51E-04 | 10 | 4.39% | 447 | 1.57E-03 | 18 | 8.18% | 833 | 2.93E-03 |
| 3 | 0.41% | 41 | 1.45E-04 | 11 | 4.66% | 475 | 1.67E-03 | 19 | 5.70% | 581 | 2.04E-03 |
| 4 | 0.26% | 27 | 9.34E-05 | 12 | 5.89% | 600 | 2.11E-03 | 20 | 4.27% | 435 | 1.53E-03 |
| 5 | 0.50% | 51 | 1.79E-04 | 13 | 6.15% | 627 | 2.21E-03 | 21 | 3.26% | 332 | 1.17E-03 |
| 6 | 0.90% | 92 | 3.24E-04 | 14 | 6.04% | 615 | 2.16E-03 | 22 | 3.30% | 336 | 1.18E-03 |
| 7 | 3.79% | 386 | 1.36E-03 | 15 | 7.01% | 715 | 2.51E-03 | 23 | 2.46% | 251 | 8.83E-04 |
| 8 | 7.76% | 791 | 2.78E-03 | 16 | 7.14% | 728 | 2.56E-03 | 24 | 1.87% | 190 | 6.69E-04 |
| | | | | | | | | Total | | 10,193 | |

**2026 Hourly Traffic Volumes Per Direction and Fugitive PM2.5 Emissions - FUG_SBCAP**

| Hour | % Per Hour | VPH | g/mile | Hour | % Per Hour | VPH | g/mile | Hour | % Per Hour | VPH | g/mile |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 1.15% | 117 | 4.13E-04 | 9 | 7.11% | 725 | 2.56E-03 | 17 | 7.38% | 753 | 2.65E-03 |
| 2 | 0.42% | 43 | 1.51E-04 | 10 | 4.39% | 447 | 1.58E-03 | 18 | 8.18% | 833 | 2.94E-03 |
| 3 | 0.41% | 41 | 1.46E-04 | 11 | 4.66% | 475 | 1.68E-03 | 19 | 5.70% | 581 | 2.05E-03 |
| 4 | 0.26% | 27 | 9.37E-05 | 12 | 5.89% | 600 | 2.12E-03 | 20 | 4.27% | 435 | 1.53E-03 |
| 5 | 0.50% | 51 | 1.79E-04 | 13 | 6.15% | 627 | 2.21E-03 | 21 | 3.26% | 332 | 1.17E-03 |
| 6 | 0.90% | 92 | 3.25E-04 | 14 | 6.04% | 615 | 2.17E-03 | 22 | 3.30% | 336 | 1.19E-03 |
| 7 | 3.79% | 386 | 1.36E-03 | 15 | 7.01% | 715 | 2.52E-03 | 23 | 2.46% | 251 | 8.85E-04 |
| 8 | 7.76% | 791 | 2.79E-03 | 16 | 7.14% | 728 | 2.57E-03 | 24 | 1.87% | 190 | 6.71E-04 |
| | | | | | | | | Total | | 10,193 | |

**1207 N. Capitol Ave, San Jose, CA - N. Capitol Ave Traffic - TACs & PM2.5**
**AERMOD Risk Modeling Parameters and Maximum Concentrations**
**at Project MEI Receptors, 1.5m & 4.5m receptor heights**

| | |
|---|---|
| **Emission Year** | 2026 |
| **Receptor Information** | Project MEI receptors |
| Number of Receptors | 2 |
| Receptor Height | 1.5 & 4.5 meters |
| Receptor Distances | At Project MEI locations |
| | |
| **Meteorological Conditions** | |
| BAQMD San Jose Airport Met Data | 2013-2017 |
| Land Use Classification | Urban |
| Wind Speed | Variable |
| Wind Direction | Variable |

## Off-Site Cancer Risk Maximum Concentrations

| Meteorological Data Years | Concentration (µg/m3) | | | |
|---|---|---|---|---|
| | DPM | Exhaust TOG | Evaporative TOG | |
| 2013-2017 | 0.0012 | 0.0527 | 0.0784 | 2nd Floor |

## Off-Site PM2.5 Maximum Concentrations

| Meteorological Data Years | PM2.5 Concentration (µg/m3) | | | |
|---|---|---|---|---|
| | Total PM2.5 | Fugitive PM2.5 | Vehicle PM2.5 | |
| 2013-2017 | 0.0659 | 0.0616 | 0.0043 | 1st Floor |

**1207 N. Capitol Ave, San Jose, CA - N. Capitol Ave Cancer Risk & PM2.5**
**Impacts at Project MEIs - 1.5 meter (1st floor) and 4.5 meter (2nd floor) receptor heights**
**30 Year Residential Exposure**

### Cancer Risk Calculation Method

Cancer Risk (per million) = CPF x Inhalation Dose x ASF x ED/AT x FAH x 1.0E6

Where: CPF = Cancer potency factor $(mg/kg\text{-}day)^{-1}$
ASF = Age sensitivity factor for specified age group
ED = Exposure duration (years)
AT = Averaging time for lifetime cancer risk (years)
FAH = Fraction of time spent at home (unitless)

Inhalation Dose = $C_{air}$ x DBR x A x (EF/365) x $10^{-6}$

Where: $C_{air}$ = concentration in air $(\mu g/m^3)$
DBR = daily breathing rate (L/kg body weight-day)
A = Inhalation absorption factor
EF = Exposure frequency (days/year)
$10^{-6}$ = Conversion factor

**Cancer Potency Factors $(mg/kg\text{-}day)^{-1}$**

| TAC | CPF |
|---|---|
| DPM | 1.10E+00 |
| Vehicle TOG Exhaust | 6.28E-03 |
| Vehicle TOG Evaporative | 3.70E-04 |

**Values**

| | Infant/Child | | | Adult |
|---|---|---|---|---|
| Age --> | 3rd Trimester | 0 - 2 | 2 - 16 | 16 - 30 |
| Parameter | | | | |
| ASF = | 10 | 10 | 3 | 1 |
| DBR* = | 361 | 1090 | 572 | 261 |
| A = | 1 | 1 | 1 | 1 |
| EF = | 350 | 350 | 350 | 350 |
| AT = | 70 | 70 | 70 | 70 |
| FAH = | 1.00 | 1.00 | 1.00 | 0.73 |

* 95th percentile breathing rates for infants and 80th percentile for children and adults

### Construction Cancer Risk by Year - Maximum Impact Receptor Location

| Maximum - Exposure Information | | | | | Concentration (ug/m3) | | | Cancer Risk (per million) | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Exposure Year | Exposure Duration (years) | Age | Year | Age Sensitivity Factor | DPM | Exhaust TOG | Evaporative TOG | DPM | Exhaust TOG | Evaporative TOG | TOTAL |
| 0 | 0.25 | -0.25 - 0* | 2026 | 10 | 0.0012 | 0.0527 | 0.0784 | 0.016 | 0.004 | 0.0004 | 0.02 |
| 1 | 1 | 0 - 1 | 2026 | 10 | 0.0012 | 0.0527 | 0.0784 | 0.197 | 0.049 | 0.0043 | 0.25 |
| 2 | 1 | 1 - 2 | 2027 | 10 | 0.0012 | 0.0527 | 0.0784 | 0.197 | 0.049 | 0.0043 | 0.25 |
| 3 | 1 | 2 - 3 | 2028 | 3 | 0.0012 | 0.0527 | 0.0784 | 0.031 | 0.008 | 0.0007 | 0.04 |
| 4 | 1 | 3 - 4 | 2029 | 3 | 0.0012 | 0.0527 | 0.0784 | 0.031 | 0.008 | 0.0007 | 0.04 |
| 5 | 1 | 4 - 5 | 2030 | 3 | 0.0012 | 0.0527 | 0.0784 | 0.031 | 0.008 | 0.0007 | 0.04 |
| 6 | 1 | 5 - 6 | 2031 | 3 | 0.0012 | 0.0527 | 0.0784 | 0.031 | 0.008 | 0.0007 | 0.04 |
| 7 | 1 | 6 - 7 | 2032 | 3 | 0.0012 | 0.0527 | 0.0784 | 0.031 | 0.008 | 0.0007 | 0.04 |
| 8 | 1 | 7 - 8 | 2033 | 3 | 0.0012 | 0.0527 | 0.0784 | 0.031 | 0.008 | 0.0007 | 0.04 |
| 9 | 1 | 8 - 9 | 2034 | 3 | 0.0012 | 0.0527 | 0.0784 | 0.031 | 0.008 | 0.0007 | 0.04 |
| 10 | 1 | 9 - 10 | 2035 | 3 | 0.0012 | 0.0527 | 0.0784 | 0.031 | 0.008 | 0.0007 | 0.04 |
| 11 | 1 | 10 - 11 | 2036 | 3 | 0.0012 | 0.0527 | 0.0784 | 0.031 | 0.008 | 0.0007 | 0.04 |
| 12 | 1 | 11 - 12 | 2037 | 3 | 0.0012 | 0.0527 | 0.0784 | 0.031 | 0.008 | 0.0007 | 0.04 |
| 13 | 1 | 12 - 13 | 2038 | 3 | 0.0012 | 0.0527 | 0.0784 | 0.031 | 0.008 | 0.0007 | 0.04 |
| 14 | 1 | 13 - 14 | 2039 | 3 | 0.0012 | 0.0527 | 0.0784 | 0.031 | 0.008 | 0.0007 | 0.04 |
| 15 | 1 | 14 - 15 | 2040 | 3 | 0.0012 | 0.0527 | 0.0784 | 0.031 | 0.008 | 0.0007 | 0.04 |
| 16 | 1 | 15 - 16 | 2041 | 3 | 0.0012 | 0.0527 | 0.0784 | 0.031 | 0.008 | 0.0007 | 0.04 |
| 17 | 1 | 16-17 | 2042 | 1 | 0.0012 | 0.0527 | 0.0784 | 0.003 | 0.001 | 0.0001 | 0.00 |
| 18 | 1 | 17-18 | 2043 | 1 | 0.0012 | 0.0527 | 0.0784 | 0.003 | 0.001 | 0.0001 | 0.00 |
| 19 | 1 | 18-19 | 2044 | 1 | 0.0012 | 0.0527 | 0.0784 | 0.003 | 0.001 | 0.0001 | 0.00 |
| 20 | 1 | 19-20 | 2045 | 1 | 0.0012 | 0.0527 | 0.0784 | 0.003 | 0.001 | 0.0001 | 0.00 |
| 21 | 1 | 20-21 | 2046 | 1 | 0.0012 | 0.0527 | 0.0784 | 0.003 | 0.001 | 0.0001 | 0.00 |
| 22 | 1 | 21-22 | 2047 | 1 | 0.0012 | 0.0527 | 0.0784 | 0.003 | 0.001 | 0.0001 | 0.00 |
| 23 | 1 | 22-23 | 2048 | 1 | 0.0012 | 0.0527 | 0.0784 | 0.003 | 0.001 | 0.0001 | 0.00 |
| 24 | 1 | 23-24 | 2049 | 1 | 0.0012 | 0.0527 | 0.0784 | 0.003 | 0.001 | 0.0001 | 0.00 |
| 25 | 1 | 24-25 | 2050 | 1 | 0.0012 | 0.0527 | 0.0784 | 0.003 | 0.001 | 0.0001 | 0.00 |
| 26 | 1 | 25-26 | 2051 | 1 | 0.0012 | 0.0527 | 0.0784 | 0.003 | 0.001 | 0.0001 | 0.00 |
| 27 | 1 | 26-27 | 2052 | 1 | 0.0012 | 0.0527 | 0.0784 | 0.003 | 0.001 | 0.0001 | 0.00 |
| 28 | 1 | 27-28 | 2053 | 1 | 0.0012 | 0.0527 | 0.0784 | 0.003 | 0.001 | 0.0001 | 0.00 |
| 29 | 1 | 28-29 | 2054 | 1 | 0.0012 | 0.0527 | 0.0784 | 0.003 | 0.001 | 0.0001 | 0.00 |
| 30 | 1 | 29-30 | 2055 | 1 | 0.0012 | 0.0527 | 0.0784 | 0.003 | 0.001 | 0.0001 | 0.00 |
| **Total Increased Cancer Risk** | | | | | | | | 0.89 | 0.224 | 0.020 | **1.14** |

| Maximum Hazard Index | Maximum Fugitive PM2.5 | Total PM2.5 |
|---|---|---|
| 0.0002 | 0.06 | 0.07 |

* Third trimester of pregnancy

# Berryessa Road 2026 Traffic Emissions and Health Risk Calculations

**Analysis Year =** ***2026***

| Vehicle Type | 2025 Caltrans Vehicles (veh/day) | 2026 Vehicles (veh/day) |
|---|---|---|
| Truck 1 (MDT) | 526 | 531 |
| Truck 2 (HDT) | 556 | 562 |
| Non-Truck | 29,833 | 30,131 |
| **All** | **30,915** | **31,224** |

| | |
|---|---|
| Increase From 2025 | 1.01 |
| **Vehicles/Direction** | **15,612** |
| Avg Vehicles/Hour/Direction | 651 |

**Traffic Data Year =** ***2025***

| ***Project Traffic Analysis*** ***Background Plus Project*** | AADT Total |
|---|---|
| N. Captol Ave & Berryessa Road | 30,915 |
| | |

Percent of Total Vehicles

Traffic Increase per Year (%) = *1.00%*

**1207 N Capitol Ave Daycare, San Jose, CA - Roadway Modeling Emissions**
**Berryessa Road Traffic**
**DPM Modeling - Roadway Links, Traffic Volumes, and DPM Emissions**
**Year = 2026**

| | | | | | | | | | | | Line Area | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Road Link | Description | Direction | No. Lanes | Link Length (m) | Link Length (mi) | Link Width (m) | Link Width (ft) | Release Height ( m) | Average Speed (mph) | Average Vehicles per Day | Area (sq m) | Emission (g/s/m2) | Initial Vertical height (m) | (Sigma z) Initial Vertical Dimension |
| DPM_BERRY | Berryessa Road | SW-NE | 2 | 713 | 0.44 | 13.3 | 43.7 | 3.4 | 30 | 31,224 | 9,500 | 6.375E-09 | 6.8 | 3.16 |
| | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | |

**Emission Factors - DPM**

| Speed Category | 1 | 2 | 3 | 4 |
|---|---|---|---|---|
| Travel Speed (mph) | 30 | | | |
| Emissions per Vehicle (g/VMT) | 0.00038 | | | |

Emisson Factors from CT-EMFAC2021

**2026 Hourly Traffic Volumes and DPM Emissions - DPM_BERRY**

| Hour | % Per Hour | VPH | g/s | Hour | % Per Hour | VPH | g/s | Hour | % Per Hour | VPH | g/s |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 3.98% | 1242 | 5.78E-05 | 9 | 6.44% | 2010 | 9.36E-05 | 17 | 5.53% | 1726 | 8.04E-05 |
| 2 | 2.67% | 834 | 3.88E-05 | 10 | 7.40% | 2309 | 1.07E-04 | 18 | 3.14% | 981 | 4.57E-05 |
| 3 | 2.84% | 887 | 4.13E-05 | 11 | 6.32% | 1972 | 9.18E-05 | 19 | 2.35% | 733 | 3.41E-05 |
| 4 | 3.30% | 1029 | 4.79E-05 | 12 | 6.88% | 2149 | 1.00E-04 | 20 | 0.86% | 269 | 1.25E-05 |
| 5 | 2.16% | 674 | 3.14E-05 | 13 | 6.27% | 1957 | 9.11E-05 | 21 | 3.08% | 961 | 4.47E-05 |
| 6 | 3.30% | 1029 | 4.79E-05 | 14 | 6.21% | 1939 | 9.03E-05 | 22 | 4.21% | 1316 | 6.12E-05 |
| 7 | 6.03% | 1883 | 8.77E-05 | 15 | 5.13% | 1602 | 7.46E-05 | 23 | 2.62% | 819 | 3.81E-05 |
| 8 | 4.56% | 1425 | 6.63E-05 | 16 | 3.88% | 1212 | 5.64E-05 | 24 | 0.85% | 266 | 1.24E-05 |
| | | | | | | | | Total | | 31,224 | |

**1207 N Capitol Ave Daycare, San Jose, CA - Roadway Modeling Emissions**
**Berryessa Road Traffic**
**PM2.5 Modeling - Roadway Links, Traffic Volumes, and PM2.5 Emissions**
**Year = 2026**

| | | | | | | | | | | | Line Area | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Road Link | Description | Direction | No. Lanes | Link Length (m) | Link Length (mi) | Link Width (m) | Link Width (ft) | Release Height ( m) | Average Speed (mph) | Average Vehicles per Day | Area (sq m) | Emission (g/s/m2) | Initial Vertical height (m) | (Sigma z) Initial Vertical Dimension |
| PM25_BERRY | Berryessa Road | SW-NE | 2 | 713 | 0.44 | 13.3 | 44 | 1.3 | 30 | 31,224 | 9,500 | 2.700E-08 | 2.6 | 1.21 |
| | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | |

**Emission Factors - PM2.5**

| Speed Category | 1 | 2 | 3 | 4 |
|---|---|---|---|---|
| Travel Speed (mph) | 30 | | | |
| Emissions per Vehicle (g/VMT) | 0.00160 | | | |

Emisson Factors from CT-EMFAC2021

**2026 Hourly Traffic Volumes and PM2.5 Emissions - PM25_BERRY**

| Hour | % Per Hour | VPH | g/s | Hour | % Per Hour | VPH | g/s | Hour | % Per Hour | VPH | g/s |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 1.15% | 359 | 7.08E-05 | 9 | 7.11% | 2221 | 4.38E-04 | 17 | 7.38% | 2306 | 4.55E-04 |
| 2 | 0.42% | 131 | 2.59E-05 | 10 | 4.39% | 1370 | 2.70E-04 | 18 | 8.18% | 2553 | 5.03E-04 |
| 3 | 0.41% | 127 | 2.50E-05 | 11 | 4.66% | 1456 | 2.87E-04 | 19 | 5.70% | 1779 | 3.51E-04 |
| 4 | 0.26% | 81 | 1.61E-05 | 12 | 5.89% | 1839 | 3.63E-04 | 20 | 4.27% | 1334 | 2.63E-04 |
| 5 | 0.50% | 156 | 3.07E-05 | 13 | 6.15% | 1921 | 3.79E-04 | 21 | 3.26% | 1017 | 2.01E-04 |
| 6 | 0.90% | 282 | 5.57E-05 | 14 | 6.04% | 1885 | 3.72E-04 | 22 | 3.30% | 1030 | 2.03E-04 |
| 7 | 3.79% | 1183 | 2.33E-04 | 15 | 7.01% | 2190 | 4.32E-04 | 23 | 2.46% | 769 | 1.52E-04 |
| 8 | 7.76% | 2424 | 4.78E-04 | 16 | 7.14% | 2229 | 4.39E-04 | 24 | 1.87% | 583 | 1.15E-04 |
| | | | | | | | | Total | | 31,224 | |

**1207 N Capitol Ave Daycare, San Jose, CA - Roadway Modeling Emissions**
**Berryessa Road Traffic**
**TOG Exhaust Modeling - Roadway Links, Traffic Volumes, and TOG Exhaust Emissions**
**Year = 2026**

| | | | | | | | | | | | Line Area | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Road Link | Description | Direction | No. Lanes | Link Length (m) | Link Length (mi) | Link Width (m) | Link Width (ft) | Release Height ( m) | Average Speed (mph) | Average Vehicles per Day | Area (sq m) | Emission (g/s/m2) | Initial Vertical height (m) | (Sigma z) Initial Vertical Dimensio |
| TEXH_BERRY | Berryessa Road | SW-NE | 2 | 713 | 0.44 | 13.3 | 44 | 1.3 | 30 | 31,224 | 9,500 | 3.678E-07 | 2.6 | 1.21 |
| | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | |

**Emission Factors - TOG Exhaust**

| Speed Category | 1 | 2 | 3 | 4 |
|---|---|---|---|---|
| Travel Speed (mph) | 30 | | | |
| All Vehicles TOG Emissions per Vehicle (g/VMT) | 0.02343 | | | |
| Diesel Vehicles TOG Emissions per Vehicle (g/VMT) | 0.00162 | | | |
| Gasoline Vehicles Emissions per Vehicle (g/VMT) | 0.02181 | | | |

Emisson Factors from CT-EMFAC2021

**2026 Hourly Traffic Volumes and TOG Exhaust Emissions - TEXH_BERRY**

| Hour | % Per Hour | VPH | g/s | Hour | % Per Hour | VPH | g/s | Hour | % Per Hour | VPH | g/s |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 1.15% | 359 | 9.64E-04 | 9 | 7.11% | 2221 | 5.96E-03 | 17 | 7.38% | 2306 | 6.19E-03 |
| 2 | 0.42% | 131 | 3.53E-04 | 10 | 4.39% | 1370 | 3.68E-03 | 18 | 8.18% | 2553 | 6.86E-03 |
| 3 | 0.41% | 127 | 3.40E-04 | 11 | 4.66% | 1456 | 3.91E-03 | 19 | 5.70% | 1779 | 4.78E-03 |
| 4 | 0.26% | 81 | 2.19E-04 | 12 | 5.89% | 1839 | 4.94E-03 | 20 | 4.27% | 1334 | 3.58E-03 |
| 5 | 0.50% | 156 | 4.18E-04 | 13 | 6.15% | 1921 | 5.16E-03 | 21 | 3.26% | 1017 | 2.73E-03 |
| 6 | 0.90% | 282 | 7.58E-04 | 14 | 6.04% | 1885 | 5.06E-03 | 22 | 3.30% | 1030 | 2.77E-03 |
| 7 | 3.79% | 1183 | 3.18E-03 | 15 | 7.01% | 2190 | 5.88E-03 | 23 | 2.46% | 769 | 2.07E-03 |
| 8 | 7.76% | 2424 | 6.51E-03 | 16 | 7.14% | 2229 | 5.99E-03 | 24 | 1.87% | 583 | 1.57E-03 |
| | | | | | | | | Total | | 31,224 | |

**1207 N Capitol Ave Daycare, San Jose, CA - Roadway Modeling Emissions**
**Berryessa Road Traffic**
**TOG Evaporative Emissions Modeling - Roadway Links, Traffic Volumes, and TOG Evaporative Emissions**
**Year = 2026**

| | | | | | | | | | | | Line Area | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Road Link | Description | Direction | No. Lanes | Link Length (m) | Link Length (mi) | Link Width (m) | Link Width (ft) | Release Height ( m) | Average Speed (mph) | Average Vehicles per Day | Area (sq m) | Emission (g/s/m2) | Initial Vertical height (m) | (Sigma z) Initial Vertical Dimensio |
| TEVAP_BERRY | Berryessa Road | SW-NE | 2 | 713 | 0.44 | 13.3 | 44 | 1.3 | 30 | 31,224 | 9,500 | 5.469E-07 | 2.6 | 1.21 |
| | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | |

**Emission Factors - PM2.5 - Evaporative TOG**

| Speed Category | 1 | 2 | 3 | 4 |
|---|---|---|---|---|
| Travel Speed (mph) | 30 | 0 | 0 | 0 |
| Emissions per Vehicle per Hour (g/hour) | 0.97293 | | | |
| Emissions per Vehicle per Mile (g/VMT) | 0.03243 | | | |

Emisson Factors from CT-EMFAC2021

## 2026 Hourly Traffic Volumes and TOG Evaporative Emissions - TEVAP_BERRY

| Hour | % Per Hour | VPH | g/s | Hour | % Per Hour | VPH | g/s | Hour | % Per Hour | VPH | g/s |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 1.15% | 359 | 1.43E-03 | 9 | 7.11% | 2221 | 8.87E-03 | 17 | 7.38% | 2306 | 9.21E-03 |
| 2 | 0.42% | 131 | 5.25E-04 | 10 | 4.39% | 1370 | 5.47E-03 | 18 | 8.18% | 2553 | 1.02E-02 |
| 3 | 0.41% | 127 | 5.06E-04 | 11 | 4.66% | 1456 | 5.81E-03 | 19 | 5.70% | 1779 | 7.11E-03 |
| 4 | 0.26% | 81 | 3.25E-04 | 12 | 5.89% | 1839 | 7.34E-03 | 20 | 4.27% | 1334 | 5.33E-03 |
| 5 | 0.50% | 156 | 6.22E-04 | 13 | 6.15% | 1921 | 7.67E-03 | 21 | 3.26% | 1017 | 4.06E-03 |
| 6 | 0.90% | 282 | 1.13E-03 | 14 | 6.04% | 1885 | 7.53E-03 | 22 | 3.30% | 1030 | 4.12E-03 |
| 7 | 3.79% | 1183 | 4.72E-03 | 15 | 7.01% | 2190 | 8.75E-03 | 23 | 2.46% | 769 | 3.07E-03 |
| 8 | 7.76% | 2424 | 9.68E-03 | 16 | 7.14% | 2229 | 8.90E-03 | 24 | 1.87% | 583 | 2.33E-03 |
| | | | | | | | | Total | | 31,224 | |

**1207 N Capitol Ave Daycare, San Jose, CA - Roadway Modeling Emissions**
**Berryessa Road Traffic**
**Fugitive Road PM2.5 Modeling - Roadway Links, Traffic Volumes, and Fugitive Road PM2.5 Emissions**
**Year = 2026**

| | | | | | | | | | | | Line Area | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Road Link | Description | Direction | No. Lanes | Link Length (m) | Link Length (mi) | Link Width (m) | Link Width (ft) | Release Height ( m) | Average Speed (mph) | Average Vehicles per Day | Area (sq m) | Emission (g/s/m2) | Initial Vertical height (m) | (Sigma z) Initial Vertical Dimension |
| FUG_BERRY | Berryessa Road | SW-NE | 2 | 713 | 0.44 | 13.3 | 44 | 1.3 | 30 | 31,224 | 9,500 | 3.848E-07 | 2.6 | 1.21 |
| | | | | | | | | | | | | | | |

**Emission Factors - Fugitive PM2.5**

| Speed Category | 1 | 2 | 3 | 4 |
|---|---|---|---|---|
| Travel Speed (mph) | 30 | | | |
| Tire Wear - Emissions per Vehicle (g/VMT) | 0.00210 | | | |
| Brake Wear - Emissions per Vehicle (g/VMT) | 0.00547 | | | |
| Road Dust - Emissions per Vehicle (g/VMT) | 0.01525 | | | |
| Total Fugitive PM2.5 - Emissions per Vehicle (g/VMT) | 0.02281 | | | |

Emisson Factors from CT-EMFAC2021

## 2026 Hourly Traffic Volumes and Fugitive PM2.5 Emissions - FUG_BERRY

| Hour | % Per Hour | VPH | g/s | Hour | % Per Hour | VPH | g/s | Hour | % Per Hour | VPH | g/s |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 1.15% | 359 | 1.01E-03 | 9 | 7.11% | 2221 | 6.24E-03 | 17 | 7.38% | 2306 | 6.48E-03 |
| 2 | 0.42% | 131 | 3.69E-04 | 10 | 4.39% | 1370 | 3.85E-03 | 18 | 8.18% | 2553 | 7.17E-03 |
| 3 | 0.41% | 127 | 3.56E-04 | 11 | 4.66% | 1456 | 4.09E-03 | 19 | 5.70% | 1779 | 5.00E-03 |
| 4 | 0.26% | 81 | 2.29E-04 | 12 | 5.89% | 1839 | 5.17E-03 | 20 | 4.27% | 1334 | 3.75E-03 |
| 5 | 0.50% | 156 | 4.37E-04 | 13 | 6.15% | 1921 | 5.40E-03 | 21 | 3.26% | 1017 | 2.86E-03 |
| 6 | 0.90% | 282 | 7.93E-04 | 14 | 6.04% | 1885 | 5.30E-03 | 22 | 3.30% | 1030 | 2.90E-03 |
| 7 | 3.79% | 1183 | 3.32E-03 | 15 | 7.01% | 2190 | 6.15E-03 | 23 | 2.46% | 769 | 2.16E-03 |
| 8 | 7.76% | 2424 | 6.81E-03 | 16 | 7.14% | 2229 | 6.26E-03 | 24 | 1.87% | 583 | 1.64E-03 |
| | | | | | | | | Total | | 31,224 | |

**1207 N. Capitol Ave, San Jose, CA - Berryessa Road Traffic - TACs & PM2.5**
**AERMOD Risk Modeling Parameters and Maximum Concentrations**
**at Project MEI Receptors, 1.5m & 4.5m receptor heights**

| | |
|---|---|
| **Emission Year** | 2026 |
| **Receptor Information** | Project MEI receptors |
| Number of Receptors | 2 |
| Receptor Height | 1.5 & 4.5 meters |
| Receptor Distances | At Project MEI locations |

| | |
|---|---|
| **Meteorological Conditions** | |
| BAQMD San Jose Airport Met Data | 2013-2017 |
| Land Use Classification | Urban |
| Wind Speed | Variable |
| Wind Direction | Variable |

## Off-Site Cancer Risk Maximum Concentrations

| Meteorological Data Years | Concentration (µg/m3) | | | |
|---|---|---|---|---|
| | DPM | Exhaust TOG | Evaporative TOG | |
| 2013-2017 | 0.0004 | 0.0152 | 0.0227 | 2nd Floor |

## Off-Site PM2.5 Maximum Concentrations

| Meteorological Data Years | PM2.5 Concentration (µg/m3) | | | |
|---|---|---|---|---|
| | Total PM2.5 | Fugitive PM2.5 | Vehicle PM2.5 | |
| 2013-2017 | 0.0175 | 0.0163 | 0.0012 | 1st Floor |

**1207 N. Capitol Ave, San Jose, CA - Berryessa Road Cancer Risk & PM2.5**
**Impacts at Project MEIs - 1.5 meter (1st floor) and 4.5 meter (2nd floor) receptor heights**
**30 Year Residential Exposure**

### Cancer Risk Calculation Method

Cancer Risk (per million) = CPF x Inhalation Dose x ASF x ED/AT x FAH x 1.0E6

Where: CPF = Cancer potency factor $(mg/kg\text{-}day)^{-1}$
ASF = Age sensitivity factor for specified age group
ED = Exposure duration (years)
AT = Averaging time for lifetime cancer risk (years)
FAH = Fraction of time spent at home (unitless)

Inhalation Dose = $C_{air}$ x DBR x A x (EF/365) x $10^{-6}$

Where: $C_{air}$ = concentration in air $(\mu g/m^3)$
DBR = daily breathing rate (L/kg body weight-day)
A = Inhalation absorption factor
EF = Exposure frequency (days/year)
$10^{-6}$ = Conversion factor

**Cancer Potency Factors $(mg/kg\text{-}day)^{-1}$**

| TAC | CPF |
|---|---|
| DPM | 1.10E+00 |
| Vehicle TOG Exhaust | 6.28E-03 |
| Vehicle TOG Evaporative | 3.70E-04 |

**Values**

| | Infant/Child | | | Adult |
|---|---|---|---|---|
| Age --> | 3rd Trimester | 0 - 2 | 2 - 16 | 16 - 30 |
| Parameter | | | | |
| ASF = | 10 | 10 | 3 | 1 |
| DBR* = | 361 | 1090 | 572 | 261 |
| A = | 1 | 1 | 1 | 1 |
| EF = | 350 | 350 | 350 | 350 |
| AT = | 70 | 70 | 70 | 70 |
| FAH = | 1.00 | 1.00 | 1.00 | 0.73 |

* 95th percentile breathing rates for infants and 80th percentile for children and adults

### Construction Cancer Risk by Year - Maximum Impact Receptor Location

| Maximum - Exposure Information | | | | | Concentration (ug/m3) | | | Cancer Risk (per million) | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Exposure Year | Exposure Duration (years) | Age | Year | Age Sensitivity Factor | DPM | Exhaust TOG | Evaporative TOG | DPM | Exhaust TOG | Evaporative TOG | TOTAL |
| 0 | 0.25 | -0.25 - 0* | 2026 | 10 | 0.0004 | 0.0152 | 0.0227 | 0.005 | 0.001 | 0.0001 | 0.01 |
| 1 | 1 | 0 - 1 | 2026 | 10 | 0.0004 | 0.0152 | 0.0227 | 0.064 | 0.014 | 0.0013 | 0.08 |
| 2 | 1 | 1 - 2 | 2027 | 10 | 0.0004 | 0.0152 | 0.0227 | 0.064 | 0.014 | 0.0013 | 0.08 |
| 3 | 1 | 2 - 3 | 2028 | 3 | 0.0004 | 0.0152 | 0.0227 | 0.010 | 0.002 | 0.0002 | 0.01 |
| 4 | 1 | 3 - 4 | 2029 | 3 | 0.0004 | 0.0152 | 0.0227 | 0.010 | 0.002 | 0.0002 | 0.01 |
| 5 | 1 | 4 - 5 | 2030 | 3 | 0.0004 | 0.0152 | 0.0227 | 0.010 | 0.002 | 0.0002 | 0.01 |
| 6 | 1 | 5 - 6 | 2031 | 3 | 0.0004 | 0.0152 | 0.0227 | 0.010 | 0.002 | 0.0002 | 0.01 |
| 7 | 1 | 6 - 7 | 2032 | 3 | 0.0004 | 0.0152 | 0.0227 | 0.010 | 0.002 | 0.0002 | 0.01 |
| 8 | 1 | 7 - 8 | 2033 | 3 | 0.0004 | 0.0152 | 0.0227 | 0.010 | 0.002 | 0.0002 | 0.01 |
| 9 | 1 | 8 - 9 | 2034 | 3 | 0.0004 | 0.0152 | 0.0227 | 0.010 | 0.002 | 0.0002 | 0.01 |
| 10 | 1 | 9 - 10 | 2035 | 3 | 0.0004 | 0.0152 | 0.0227 | 0.010 | 0.002 | 0.0002 | 0.01 |
| 11 | 1 | 10 - 11 | 2036 | 3 | 0.0004 | 0.0152 | 0.0227 | 0.010 | 0.002 | 0.0002 | 0.01 |
| 12 | 1 | 11 - 12 | 2037 | 3 | 0.0004 | 0.0152 | 0.0227 | 0.010 | 0.002 | 0.0002 | 0.01 |
| 13 | 1 | 12 - 13 | 2038 | 3 | 0.0004 | 0.0152 | 0.0227 | 0.010 | 0.002 | 0.0002 | 0.01 |
| 14 | 1 | 13 - 14 | 2039 | 3 | 0.0004 | 0.0152 | 0.0227 | 0.010 | 0.002 | 0.0002 | 0.01 |
| 15 | 1 | 14 - 15 | 2040 | 3 | 0.0004 | 0.0152 | 0.0227 | 0.010 | 0.002 | 0.0002 | 0.01 |
| 16 | 1 | 15 - 16 | 2041 | 3 | 0.0004 | 0.0152 | 0.0227 | 0.010 | 0.002 | 0.0002 | 0.01 |
| 17 | 1 | 16-17 | 2042 | 1 | 0.0004 | 0.0152 | 0.0227 | 0.001 | 0.000 | 0.0000 | 0.00 |
| 18 | 1 | 17-18 | 2043 | 1 | 0.0004 | 0.0152 | 0.0227 | 0.001 | 0.000 | 0.0000 | 0.00 |
| 19 | 1 | 18-19 | 2044 | 1 | 0.0004 | 0.0152 | 0.0227 | 0.001 | 0.000 | 0.0000 | 0.00 |
| 20 | 1 | 19-20 | 2045 | 1 | 0.0004 | 0.0152 | 0.0227 | 0.001 | 0.000 | 0.0000 | 0.00 |
| 21 | 1 | 20-21 | 2046 | 1 | 0.0004 | 0.0152 | 0.0227 | 0.001 | 0.000 | 0.0000 | 0.00 |
| 22 | 1 | 21-22 | 2047 | 1 | 0.0004 | 0.0152 | 0.0227 | 0.001 | 0.000 | 0.0000 | 0.00 |
| 23 | 1 | 22-23 | 2048 | 1 | 0.0004 | 0.0152 | 0.0227 | 0.001 | 0.000 | 0.0000 | 0.00 |
| 24 | 1 | 23-24 | 2049 | 1 | 0.0004 | 0.0152 | 0.0227 | 0.001 | 0.000 | 0.0000 | 0.00 |
| 25 | 1 | 24-25 | 2050 | 1 | 0.0004 | 0.0152 | 0.0227 | 0.001 | 0.000 | 0.0000 | 0.00 |
| 26 | 1 | 25-26 | 2051 | 1 | 0.0004 | 0.0152 | 0.0227 | 0.001 | 0.000 | 0.0000 | 0.00 |
| 27 | 1 | 26-27 | 2052 | 1 | 0.0004 | 0.0152 | 0.0227 | 0.001 | 0.000 | 0.0000 | 0.00 |
| 28 | 1 | 27-28 | 2053 | 1 | 0.0004 | 0.0152 | 0.0227 | 0.001 | 0.000 | 0.0000 | 0.00 |
| 29 | 1 | 28-29 | 2054 | 1 | 0.0004 | 0.0152 | 0.0227 | 0.001 | 0.000 | 0.0000 | 0.00 |
| 30 | 1 | 29-30 | 2055 | 1 | 0.0004 | 0.0152 | 0.0227 | 0.001 | 0.000 | 0.0000 | 0.00 |
| **Total Increased Cancer Risk** | | | | | | | | 0.29 | 0.065 | 0.006 | **0.36** |

| Maximum Hazard Index | Maximum Fugitive PM2.5 | Total PM2.5 |
|---|---|---|
| 0.0001 | 0.02 | 0.02 |

* Third trimester of pregnancy

# CT-EMFAC2021 Emissions Factors for Santa Clara County 2028

| | |
|---|---|
| File Name: | 1207 N Capitol - Highway - Santa Clara (SF) - 2028 - Annual.EF |
| CT-EMFAC2017 Version: | 1.0.2.0 |
| Run Date: | 10/17/2024 11:59 |
| Area: | Santa Clara (SF) |
| Analysis Year: | 2028 |
| Season: | Annual |

| Vehicle Category | VMT Fraction Across Category | Diesel VMT Fraction Within Category | Gas VMT Fraction Within Category |
|---|---|---|---|
| Truck 1 | 0.018 | 0.409 | 0.541 |
| Truck 2 | 0.036 | 0.886 | 0.044 |
| Non-Truck | 0.946 | 0.006 | 0.909 |

| | | |
|---|---|---|
| Road Type: | Freeway | |
| Silt Loading Factor: | CARB | 0.015 g/m2 |
| Precipitation Correction: | CARB | P = 63 days N = 365 days |

Fleet Average Running Exhaust Emission Factors (grams/veh-mile)

| Pollutant Name | <= 5 mph | 10 mph | 15 mph | 20 mph | 25 mph | 30 mph | 35 mph | 40 mph | 45 mph | 50 mph | 55 mph | 60 mph | 65 mph | 70 mph | 75 mph |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PM2.5 | 0.007508 | 0.004953 | 0.003386 | 0.002438 | 0.001857 | 0.001503 | 0.001297 | 0.001199 | 0.001186 | 0.001249 | 0.001381 | 0.001581 | 0.001854 | 0.001943 | 0.001943 |
| TOG | 0.116914 | 0.075727 | 0.050082 | 0.035575 | 0.026997 | 0.021578 | 0.018054 | 0.015789 | 0.014427 | 0.013791 | 0.0138 | 0.014583 | 0.016121 | 0.017208 | 0.017208 |
| Diesel PM | 0.001063 | 0.000951 | 0.000726 | 0.000571 | 0.000479 | 0.00043 | 0.000416 | 0.000437 | 0.000493 | 0.000583 | 0.000708 | 0.00086 | 0.00103 | 0.00104 | 0.00104 |
| DEOG | 0.00703 | 0.006166 | 0.003799 | 0.002594 | 0.002086 | 0.001746 | 0.001477 | 0.001271 | 0.001122 | 0.00103 | 0.000991 | 0.001043 | 0.001114 | 0.001116 | 0.001116 |

Fleet Average Running Loss Emission Factors (grams/veh-hour)

| Pollutant Name | Emission Factor |
|---|---|
| TOG | 0.916967 |

Fleet Average Tire Wear Factors (grams/veh-mile)

| Pollutant Name | Emission Factor |
|---|---|
| PM2.5 | 0.002191 |

Fleet Average Brake Wear Factors (grams/veh-mile)

| Pollutant Name | <= 5 mph | 10 mph | 15 mph | 20 mph | 25 mph | 30 mph | 35 mph | 40 mph | 45 mph | 50 mph | 55 mph | 60 mph | 65 mph | 70 mph | 75 mph |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PM2.5 | 0.00417 | 0.004703 | 0.005221 | 0.005725 | 0.005967 | 0.006032 | 0.005963 | 0.005422 | 0.00435 | 0.00331 | 0.002685 | 0.002388 | 0.002092 | 0.002092 | 0.002092 |

Fleet Average Road Dust Factors (grams/veh-mile)

| Pollutant Name | Emission Factor |
|---|---|
| PM2.5 | 0.008715 |

END

| | |
|---|---|
| File Name: | 1207 N Capitol - Roadways - Santa Clara (SF) - 2028 - Annual.EF |
| CT-EMFAC2017 Version: | 1.0.2.0 |
| Run Date: | 10/17/2024 12:03 |
| Area: | Santa Clara (SF) |
| Analysis Year: | 2028 |
| Season: | Annual |

| Vehicle Category | VMT Fraction Across Category | Diesel VMT Fraction Within Category | Gas VMT Fraction Within Category |
|---|---|---|---|
| Truck 1 | 0.017 | 0.409 | 0.541 |
| Truck 2 | 0.018 | 0.886 | 0.044 |
| Non-Truck | 0.965 | 0.006 | 0.909 |

| | | |
|---|---|---|
| Road Type: | Major/Collector | |
| Silt Loading Factor: | CARB | 0.032 g/m2 |
| Precipitation Correction: | CARB | P = 63 days N = 365 days |

Fleet Average Running Exhaust Emission Factors (grams/veh-mile)

| Pollutant Name | <= 5 mph | 10 mph | 15 mph | 20 mph | 25 mph | 30 mph | 35 mph | 40 mph | 45 mph |
|---|---|---|---|---|---|---|---|---|---|
| PM2.5 | 0.007344 | 0.004795 | 0.003267 | 0.002344 | 0.001775 | 0.001421 | 0.001204 | 0.001084 | 0.001039 |
| TOG | 0.10921 | 0.07058 | 0.047167 | 0.033585 | 0.025432 | 0.020279 | 0.01695 | 0.014832 | 0.013581 |
| Diesel PM | 0.000811 | 0.000709 | 0.000551 | 0.000438 | 0.000367 | 0.000324 | 0.000303 | 0.000303 | 0.000326 |
| DEOG | 0.0054 | 0.00462 | 0.002994 | 0.002109 | 0.001714 | 0.001443 | 0.001225 | 0.001054 | 0.000926 |

Fleet Average Running Loss Emission Factors (grams/veh-hour)

| Pollutant Name | Emission Factor |
|---|---|
| TOG | 0.932224 |

Fleet Average Tire Wear Factors (grams/veh-mile)

| Pollutant Name | Emission Factor |
|---|---|
| PM2.5 | 0.002102 |

Fleet Average Brake Wear Factors (grams/veh-mile)

| Pollutant Name | <= 5 mph | 10 mph | 15 mph | 20 mph | 25 mph | 30 mph | 35 mph | 40 mph | 45 mph |
|---|---|---|---|---|---|---|---|---|---|
| PM2.5 | 0.003475 | 0.004019 | 0.004554 | 0.005083 | 0.005365 | 0.00545 | 0.005467 | 0.004975 | 0.003942 |

Fleet Average Road Dust Factors (grams/veh-mile)

| Pollutant Name | Emission Factor |
|---|---|
| PM2.5 | 0.015304 |

END

# I-680 2028 Traffic Emissions and Health Risk Calculations

**Analysis Year =** ***2028***

| Vehicle Type | 2022 Caltrans Vehicles (veh/day) | 2028 Vehicles (veh/day) |
|---|---|---|
| Truck 1 (MDT) | 2,892 | 3,066 |
| Truck 2 (HDT) | 5,640 | 5,978 |
| Non-Truck | 149,468 | 158,436 |
| **All** | **158,000** | **167,480** |

| | |
|---|---|
| Increase From 2022 | 1.06 |
| **Vehicles/Direction** | **83,740** |
| Avg Vehicles/Hour/Direction | 3,489 |

**Traffic Data Year =** ***2022***

| ***2022 Caltrans Truck AADT (% trucks) and 2022 Caltrans Traffic Volumes*** | AADT Total | Total Truck | Trucks by Axle | | | |
|---|---|---|---|---|---|---|
| | | | 2 | 3 | 4 | 5 |
| I-680 | 158,000 | 8,532 | 2,892 | 939 | 538 | 4,164 |
| | | | 33.90% | 11.00% | 6.30% | 48.80% |
| Percent of Total Vehicles | | 5.40% | 1.83% | 0.59% | 0.34% | 2.64% |

Traffic Increase per Year (%) = *1.00%*

**1207 N Capitol Ave, San Jose, CA - Roadway Modeling Emissions**
**Interstate 680 Traffic**
**DPM Modeling - Roadway Links, Traffic Volumes, and DPM Emissions**
**Year = 2028**

| | | | | | | | | | | | Line Area | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Road Link | Description | Direction | No. Lanes | Link Length (m) | Link Length (mi) | Link Width (m) | Link Width (ft) | Release Height ( m) | Average Speed (mph) | Average Vehicles per Day | Area (sq m) | Emission (g/s/m2) | Initial Vertical height (m) | (Sigma z) Initial Vertical Dimension |
| DPM_NB680 | Northbound I-680 | SE-NW | 3 | 764 | 0.47 | 17.0 | 55.7 | 3.4 | variable | 83,740 | 12,962 | 3.662E-08 | 6.8 | 3.16 |
| DPM_SB680 | Southbound I-680 | NW-SE | 3 | 729 | 0.45 | 17.0 | 55.7 | 3.4 | variable | 83,740 | 12,369 | 3.837E-08 | 6.8 | 3.16 |
| | | | | | | | | | | 167,480 | | | | |

**Emission Factors - DPM**

| Speed Category | 1 | 2 | 3 | 4 |
|---|---|---|---|---|
| Travel Speed (mph) | 65 | 60 | 55 | 20 |
| Emissions per Vehicle (g/VMT) | 0.00103 | 0.00086 | 0.00071 | 0.000571 |

Emisson Factors from CT-EMFAC2021

**2028 Hourly Traffic Volumes and DPM Emissions - DPM_NB680**

| Hour | % Per Hour | VPH | g/s | Hour | % Per Hour | VPH | g/s | Hour | % Per Hour | VPH | g/s |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 3.96% | 3315 | 4.51E-04 | 9 | 6.46% | 5407 | 5.05E-04 | 17 | 5.61% | 4697 | 5.32E-04 |
| 2 | 2.66% | 2226 | 3.03E-04 | 10 | 7.36% | 6165 | 8.39E-04 | 18 | 3.24% | 2716 | 3.08E-04 |
| 3 | 2.88% | 2416 | 3.29E-04 | 11 | 6.40% | 5360 | 7.29E-04 | 19 | 2.22% | 1855 | 2.52E-04 |
| 4 | 3.28% | 2747 | 3.74E-04 | 12 | 6.97% | 5834 | 7.94E-04 | 20 | 0.86% | 718 | 9.77E-05 |
| 5 | 2.09% | 1752 | 2.38E-04 | 13 | 6.23% | 5218 | 7.10E-04 | 21 | 3.06% | 2566 | 3.49E-04 |
| 6 | 3.34% | 2794 | 3.80E-04 | 14 | 6.17% | 5171 | 7.03E-04 | 22 | 4.25% | 3560 | 4.84E-04 |
| 7 | 6.06% | 5076 | 6.91E-04 | 15 | 5.10% | 4271 | 5.81E-04 | 23 | 2.55% | 2131 | 2.90E-04 |
| 8 | 4.54% | 3805 | 3.55E-04 | 16 | 3.86% | 3229 | 4.39E-04 | 24 | 0.85% | 710 | 9.66E-05 |
| | | | | | | | | Total | | 83,740 | |

**2028 Hourly Traffic Volumes Per Direction and DPM Emissions - DPM_SB680**

| Hour | % Per Hour | VPH | g/mile | Hour | % Per Hour | VPH | g/mile | Hour | % Per Hour | VPH | g/mile |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 3.96% | 3315 | 4.30E-04 | 9 | 6.46% | 5407 | 5.85E-04 | 17 | 5.61% | 4697 | 3.37E-04 |
| 2 | 2.66% | 2226 | 2.89E-04 | 10 | 7.36% | 6165 | 8.00E-04 | 18 | 3.24% | 2716 | 1.95E-04 |
| 3 | 2.88% | 2416 | 3.14E-04 | 11 | 6.40% | 5360 | 6.96E-04 | 19 | 2.22% | 1855 | 2.41E-04 |
| 4 | 3.28% | 2747 | 3.57E-04 | 12 | 6.97% | 5834 | 7.57E-04 | 20 | 0.86% | 718 | 9.33E-05 |
| 5 | 2.09% | 1752 | 2.27E-04 | 13 | 6.23% | 5218 | 6.77E-04 | 21 | 3.06% | 2566 | 3.33E-04 |
| 6 | 3.34% | 2794 | 3.63E-04 | 14 | 6.17% | 5171 | 6.71E-04 | 22 | 4.25% | 3560 | 4.62E-04 |
| 7 | 6.06% | 5076 | 6.59E-04 | 15 | 5.10% | 4271 | 5.54E-04 | 23 | 2.55% | 2131 | 2.77E-04 |
| 8 | 4.54% | 3805 | 4.12E-04 | 16 | 3.86% | 3229 | 4.19E-04 | 24 | 0.85% | 710 | 9.22E-05 |
| | | | | | | | | Total | | 83,740 | |

**1207 N Capitol Ave, San Jose, CA - Roadway Modeling Emissions**
**Interstate 680 Traffic**
**PM2.5 Modeling - Roadway Links, Traffic Volumes, and PM2.5 Emissions**
**Year = 2028**

| | | | | | | | | | | | Line Area | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Road Link | Description | Direction | No. Lanes | Link Length (m) | Link Length (mi) | Link Width (m) | Link Width (ft) | Release Height ( m) | Average Speed (mph) | Average Vehicles per Day | Area (sq m) | Emission (g/s/m2) | Initial Vertical height (m) | (Sigma z) Initial Vertical Dimension |
| PM25_NB680 | Northbound I-680 | SE-NW | 3 | 764 | 0.47 | 17.0 | 56 | 1.3 | variable | 83,740 | 12,962 | 6.578E-08 | 2.6 | 1.21 |
| PM25_SB680 | Southbound I-680 | NW-SE | 3 | 729 | 0.45 | 17.0 | 56 | 1.3 | variable | 83,740 | 12,369 | 6.578E-08 | 2.6 | 1.21 |
| | | | | | | | | | Total | 167,480 | | | | |

**Emission Factors - PM2.5**

| Speed Category | 1 | 2 | 3 | 4 |
|---|---|---|---|---|
| Travel Speed (mph) | 65 | 60 | 55 | 20 |
| Emissions per Vehicle (g/VMT) | 0.00185 | 0.00158 | 0.00138 | 0.00244 |

Emisson Factors from CT-EMFAC2021

**2028 Hourly Traffic Volumes and PM2.5 Emissions - PM25_NB680**

| Hour | % Per Hour | VPH | g/s | Hour | % Per Hour | VPH | g/s | Hour | % Per Hour | VPH | g/s |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 1.15% | 962 | 2.35E-04 | 9 | 7.11% | 5956 | 1.08E-03 | 17 | 7.39% | 6190 | 1.29E-03 |
| 2 | 0.42% | 350 | 8.55E-05 | 10 | 4.39% | 3674 | 8.98E-04 | 18 | 8.18% | 6850 | 1.43E-03 |
| 3 | 0.40% | 339 | 8.28E-05 | 11 | 4.66% | 3906 | 9.55E-04 | 19 | 5.70% | 4773 | 1.17E-03 |
| 4 | 0.26% | 218 | 5.32E-05 | 12 | 5.89% | 4930 | 1.20E-03 | 20 | 4.27% | 3579 | 8.75E-04 |
| 5 | 0.49% | 412 | 1.01E-04 | 13 | 6.15% | 5153 | 1.26E-03 | 21 | 3.25% | 2726 | 6.66E-04 |
| 6 | 0.90% | 754 | 1.84E-04 | 14 | 6.04% | 5055 | 1.24E-03 | 22 | 3.30% | 2764 | 6.76E-04 |
| 7 | 3.79% | 3172 | 7.75E-04 | 15 | 7.01% | 5872 | 1.44E-03 | 23 | 2.46% | 2062 | 5.04E-04 |
| 8 | 7.76% | 6499 | 1.18E-03 | 16 | 7.14% | 5981 | 1.46E-03 | 24 | 1.87% | 1563 | 3.82E-04 |
| | | | | | | | | Total | | 83,740 | |

**2028 Hourly Traffic Volumes Per Direction and PM2.5 Emissions - PM25_SB680**

| Hour | % Per Hour | VPH | g/mile | Hour | % Per Hour | VPH | g/mile | Hour | % Per Hour | VPH | g/mile |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 1.15% | 962 | 2.24E-04 | 9 | 7.11% | 5956 | 1.18E-03 | 17 | 7.39% | 6190 | 1.90E-03 |
| 2 | 0.42% | 350 | 8.16E-05 | 10 | 4.39% | 3674 | 8.57E-04 | 18 | 8.18% | 6850 | 2.10E-03 |
| 3 | 0.40% | 339 | 7.90E-05 | 11 | 4.66% | 3906 | 9.11E-04 | 19 | 5.70% | 4773 | 1.11E-03 |
| 4 | 0.26% | 218 | 5.08E-05 | 12 | 5.89% | 4930 | 1.15E-03 | 20 | 4.27% | 3579 | 8.35E-04 |
| 5 | 0.49% | 412 | 9.61E-05 | 13 | 6.15% | 5153 | 1.20E-03 | 21 | 3.25% | 2726 | 6.36E-04 |
| 6 | 0.90% | 754 | 1.76E-04 | 14 | 6.04% | 5055 | 1.18E-03 | 22 | 3.30% | 2764 | 6.45E-04 |
| 7 | 3.79% | 3172 | 7.40E-04 | 15 | 7.01% | 5872 | 1.37E-03 | 23 | 2.46% | 2062 | 4.81E-04 |
| 8 | 7.76% | 6499 | 1.29E-03 | 16 | 7.14% | 5981 | 1.39E-03 | 24 | 1.87% | 1563 | 3.64E-04 |
| | | | | | | | | Total | | 83,740 | |

**1207 N Capitol Ave, San Jose, CA - Roadway Modeling Emissions**
**Interstate 680 Traffic**
**TOG Exhaust Modeling - Roadway Links, Traffic Volumes, and TOG Exhaust Emissions**
**Year = 2028**

| | | | | | | | | | | | Line Area | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Road Link | Description | Direction | No. Lanes | Link Length (m) | Link Length (mi) | Link Width (m) | Link Width (ft) | Release Height ( m) | Average Speed (mph) | Average Vehicles per Day | Area (sq m) | Emission (g/s/m2) | Initial Vertical height (m) | (Sigma z) Initial Vertical Dimensio |
| TEXH_NB680 | Northbound I-680 | SE-NW | 3 | 764 | 0.47 | 17.0 | 56 | 1.3 | variable | 83,740 | 12,962 | 5.325E-07 | 2.6 | 1.21 |
| TEXH_SB680 | Southbound I-680 | NW-SE | 3 | 729 | 0.45 | 17.0 | 56 | 1.3 | variable | 83,740 | 12,369 | 5.325E-07 | 2.6 | 1.21 |
| | | | | | | | | | Total | 167,480 | | | | |

**Emission Factors - TOG Exhaust**

| Speed Category | 1 | 2 | 3 | 4 |
|---|---|---|---|---|
| Travel Speed (mph) | 65 | 60 | 55 | 20 |
| All Vehicles TOG Emissions per Vehicle (g/VMT) | 0.01612 | 0.01458 | 0.01380 | 0.03558 |
| Diesel Vehicles TOG Emissions per Vehicle (g/VMT) | 0.00111 | 0.00104 | 0.00099 | 0.00259 |
| Gasoline Vehicles Emissions per Vehicle (g/VMT) | 0.01501 | 0.01354 | 0.01281 | 0.03298 |

Emisson Factors from CT-EMFAC2021

**2028 Hourly Traffic Volumes and TOG Exhaust Emissions - TEXH_NB680**

| Hour | % Per Hour | VPH | g/s | Hour | % Per Hour | VPH | g/s | Hour | % Per Hour | VPH | g/s |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 1.15% | 962 | 1.90E-03 | 9 | 7.11% | 5956 | 1.01E-02 | 17 | 7.39% | 6190 | 1.10E-02 |
| 2 | 0.42% | 350 | 6.92E-04 | 10 | 4.39% | 3674 | 7.27E-03 | 18 | 8.18% | 6850 | 1.22E-02 |
| 3 | 0.40% | 339 | 6.70E-04 | 11 | 4.66% | 3906 | 7.73E-03 | 19 | 5.70% | 4773 | 9.44E-03 |
| 4 | 0.26% | 218 | 4.31E-04 | 12 | 5.89% | 4930 | 9.75E-03 | 20 | 4.27% | 3579 | 7.08E-03 |
| 5 | 0.49% | 412 | 8.15E-04 | 13 | 6.15% | 5153 | 1.02E-02 | 21 | 3.25% | 2726 | 5.39E-03 |
| 6 | 0.90% | 754 | 1.49E-03 | 14 | 6.04% | 5055 | 1.00E-02 | 22 | 3.30% | 2764 | 5.47E-03 |
| 7 | 3.79% | 3172 | 6.27E-03 | 15 | 7.01% | 5872 | 1.16E-02 | 23 | 2.46% | 2062 | 4.08E-03 |
| 8 | 7.76% | 6499 | 1.10E-02 | 16 | 7.14% | 5981 | 1.18E-02 | 24 | 1.87% | 1563 | 3.09E-03 |
| | | | | | | | | Total | | 83,740 | |

**2028 Hourly Traffic Volumes Per Direction and TOG Exhaust Emissions - TEXH_SB680**

| Hour | % Per Hour | VPH | g/mile | Hour | % Per Hour | VPH | g/mile | Hour | % Per Hour | VPH | g/mile |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 1.15% | 962 | 1.82E-03 | 9 | 7.11% | 5956 | 1.01E-02 | 17 | 7.39% | 6190 | 2.57E-02 |
| 2 | 0.42% | 350 | 6.60E-04 | 10 | 4.39% | 3674 | 6.94E-03 | 18 | 8.18% | 6850 | 2.84E-02 |
| 3 | 0.40% | 339 | 6.40E-04 | 11 | 4.66% | 3906 | 7.37E-03 | 19 | 5.70% | 4773 | 9.01E-03 |
| 4 | 0.26% | 218 | 4.11E-04 | 12 | 5.89% | 4930 | 9.31E-03 | 20 | 4.27% | 3579 | 6.76E-03 |
| 5 | 0.49% | 412 | 7.78E-04 | 13 | 6.15% | 5153 | 9.73E-03 | 21 | 3.25% | 2726 | 5.14E-03 |
| 6 | 0.90% | 754 | 1.42E-03 | 14 | 6.04% | 5055 | 9.54E-03 | 22 | 3.30% | 2764 | 5.22E-03 |
| 7 | 3.79% | 3172 | 5.99E-03 | 15 | 7.01% | 5872 | 1.11E-02 | 23 | 2.46% | 2062 | 3.89E-03 |
| 8 | 7.76% | 6499 | 1.11E-02 | 16 | 7.14% | 5981 | 1.13E-02 | 24 | 1.87% | 1563 | 2.95E-03 |
| | | | | | | | | Total | | 83,740 | |

**1207 N Capitol Ave, San Jose, CA - Roadway Modeling Emissions**
**Interstate 680 Traffic**
**TOG Evaporative Emissions Modeling - Roadway Links, Traffic Volumes, and TOG Evaporative Emissions**
**Year = 2028**

| | | | | | | | | | | | Line Area | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Road Link | Description | Direction | No. Lanes | Link Length (m) | Link Length (mi) | Link Width (m) | Link Width (ft) | Release Height ( m) | Average Speed (mph) | Average Vehicles per Day | Area (sq m) | Emission (g/s/m2) | Initial Vertical height (m) | (Sigma z) Initial Vertical Dimensio |
| TEVAP_NB680 | Northbound I-680 | SE-NW | 3 | 764 | 0.47 | 17.0 | 56 | 1.3 | variable | 83,740 | 12,962 | 5.006E-07 | 2.6 | 1.21 |
| TEVAP_SB680 | Southbound I-680 | NW-SE | 3 | 729 | 0.45 | 17.0 | 56 | 1.3 | variable | 83,740 | 12,369 | 5.006E-07 | 2.6 | 1.21 |
| | | | | | | | | | Total | 167,480 | | | | |

**Emission Factors - PM2.5 - Evaporative TOG**

| Speed Category | 1 | 2 | 3 | 4 |
|---|---|---|---|---|
| Travel Speed (mph) | 65 | 60 | 55 | 20 |
| Emissions per Vehicle per Hour (g/hour) | 0.91697 | 0.91697 | 0.917 | 0.91697 |
| Emissions per Vehicle per Mile (g/VMT) | 0.01411 | 0.01528 | 0.0167 | 0.04585 |

Emisson Factors from CT-EMFAC2021

**2028 Hourly Traffic Volumes and TOG Evaporative Emissions - TEVAP_NB680**

| Hour | % Per Hour | VPH | g/s | Hour | % Per Hour | VPH | g/s | Hour | % Per Hour | VPH | g/s |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 1.15% | 962 | 1.79E-03 | 9 | 7.11% | 5956 | 1.31E-02 | 17 | 7.39% | 6190 | 1.25E-02 |
| 2 | 0.42% | 350 | 6.51E-04 | 10 | 4.39% | 3674 | 6.83E-03 | 18 | 8.18% | 6850 | 1.38E-02 |
| 3 | 0.40% | 339 | 6.30E-04 | 11 | 4.66% | 3906 | 7.26E-03 | 19 | 5.70% | 4773 | 8.88E-03 |
| 4 | 0.26% | 218 | 4.05E-04 | 12 | 5.89% | 4930 | 9.17E-03 | 20 | 4.27% | 3579 | 6.66E-03 |
| 5 | 0.49% | 412 | 7.66E-04 | 13 | 6.15% | 5153 | 9.58E-03 | 21 | 3.25% | 2726 | 5.07E-03 |
| 6 | 0.90% | 754 | 1.40E-03 | 14 | 6.04% | 5055 | 9.40E-03 | 22 | 3.30% | 2764 | 5.14E-03 |
| 7 | 3.79% | 3172 | 5.90E-03 | 15 | 7.01% | 5872 | 1.09E-02 | 23 | 2.46% | 2062 | 3.83E-03 |
| 8 | 7.76% | 6499 | 1.43E-02 | 16 | 7.14% | 5981 | 1.11E-02 | 24 | 1.87% | 1563 | 2.91E-03 |
| | | | | | | | | Total | | 83,740 | |

**2028 Hourly Traffic Volumes Per Direction and TOG Evaporative Emissions - TEVAP_SB680**

| Hour | % Per Hour | VPH | g/mile | Hour | % Per Hour | VPH | g/mile | Hour | % Per Hour | VPH | g/mile |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 1.15% | 962 | 1.71E-03 | 9 | 7.11% | 5956 | 1.15E-02 | 17 | 7.39% | 6190 | 3.57E-02 |
| 2 | 0.42% | 350 | 6.21E-04 | 10 | 4.39% | 3674 | 6.52E-03 | 18 | 8.18% | 6850 | 3.95E-02 |
| 3 | 0.40% | 339 | 6.01E-04 | 11 | 4.66% | 3906 | 6.93E-03 | 19 | 5.70% | 4773 | 8.47E-03 |
| 4 | 0.26% | 218 | 3.86E-04 | 12 | 5.89% | 4930 | 8.75E-03 | 20 | 4.27% | 3579 | 6.35E-03 |
| 5 | 0.49% | 412 | 7.31E-04 | 13 | 6.15% | 5153 | 9.14E-03 | 21 | 3.25% | 2726 | 4.84E-03 |
| 6 | 0.90% | 754 | 1.34E-03 | 14 | 6.04% | 5055 | 8.97E-03 | 22 | 3.30% | 2764 | 4.91E-03 |
| 7 | 3.79% | 3172 | 5.63E-03 | 15 | 7.01% | 5872 | 1.04E-02 | 23 | 2.46% | 2062 | 3.66E-03 |
| 8 | 7.76% | 6499 | 1.25E-02 | 16 | 7.14% | 5981 | 1.06E-02 | 24 | 1.87% | 1563 | 2.77E-03 |
| | | | | | | | | Total | | 83,740 | |

**1207 N Capitol Ave, San Jose, CA - Roadway Modeling Emissions**
**Interstate 680 Traffic**
**Fugitive Road PM2.5 Modeling - Roadway Links, Traffic Volumes, and Fugitive Road PM2.5 Emissions**
**Year = 2028**

| | | | | | | | | | | | Line Area | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Road Link | Description | Direction | No. Lanes | Link Length (m) | Link Length (mi) | Link Width (m) | Link Width (ft) | Release Height ( m) | Average Speed (mph) | Average Vehicles per Day | Area (sq m) | Emission (g/s/m2) | Initial Vertical height (m) | (Sigma z) Initial Vertical Dimension |
| FUG_NB680 | Northbound I-680 | SE-NW | 3 | 764 | 0.47 | 17.0 | 56 | 1.3 | variable | 83,740 | 12,962 | 4.612E-07 | 2.6 | 1.21 |
| FUG_SB680 | Southbound I-680 | NW-SE | 3 | 729 | 0.45 | 17.0 | 56 | 1.3 | variable | 83,740 | 12,369 | 4.612E-07 | 2.6 | 1.21 |
| | | | | | | | | | Total | 167,480 | | | | |

**Emission Factors - Fugitive PM2.5**

| Speed Category | 1 | 2 | 3 | 4 |
|---|---|---|---|---|
| Travel Speed (mph) | 65 | 60 | 55 | 20 |
| Tire Wear - Emissions per Vehicle (g/VMT) | 0.00219 | 0.00219 | 0.00219 | 0.00219 |
| Brake Wear - Emissions per Vehicle (g/VMT) | 0.00209 | 0.00239 | 0.00269 | 0.00573 |
| Road Dust - Emissions per Vehicle (g/VMT) | 0.00872 | 0.00872 | 0.00872 | 0.00872 |
| Total Fugitive PM2.5 - Emissions per Vehicle (g/VMT) | 0.01300 | 0.01329 | 0.0136 | 0.01663 |

Emisson Factors from CT-EMFAC2021

**2028 Hourly Traffic Volumes and Fugitive PM2.5 Emissions - FUG_NB680**

| Hour | % Per Hour | VPH | g/s | Hour | % Per Hour | VPH | g/s | Hour | % Per Hour | VPH | g/s |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 1.15% | 962 | 1.65E-03 | 9 | 7.11% | 5956 | 1.07E-02 | 17 | 7.39% | 6190 | 1.08E-02 |
| 2 | 0.42% | 350 | 5.99E-04 | 10 | 4.39% | 3674 | 6.29E-03 | 18 | 8.18% | 6850 | 1.20E-02 |
| 3 | 0.40% | 339 | 5.81E-04 | 11 | 4.66% | 3906 | 6.69E-03 | 19 | 5.70% | 4773 | 8.18E-03 |
| 4 | 0.26% | 218 | 3.73E-04 | 12 | 5.89% | 4930 | 8.45E-03 | 20 | 4.27% | 3579 | 6.13E-03 |
| 5 | 0.49% | 412 | 7.06E-04 | 13 | 6.15% | 5153 | 8.83E-03 | 21 | 3.25% | 2726 | 4.67E-03 |
| 6 | 0.90% | 754 | 1.29E-03 | 14 | 6.04% | 5055 | 8.66E-03 | 22 | 3.30% | 2764 | 4.74E-03 |
| 7 | 3.79% | 3172 | 5.43E-03 | 15 | 7.01% | 5872 | 1.01E-02 | 23 | 2.46% | 2062 | 3.53E-03 |
| 8 | 7.76% | 6499 | 1.16E-02 | 16 | 7.14% | 5981 | 1.02E-02 | 24 | 1.87% | 1563 | 2.68E-03 |
| | | | | | | | | Total | | 83,740 | |

**2028 Hourly Traffic Volumes Per Direction and Fugitive PM2.5 Emissions - FUG_SB680**

| Hour | % Per Hour | VPH | g/mile | Hour | % Per Hour | VPH | g/mile | Hour | % Per Hour | VPH | g/mile |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 1.15% | 962 | 1.57E-03 | 9 | 7.11% | 5956 | 9.96E-03 | 17 | 7.39% | 6190 | 1.29E-02 |
| 2 | 0.42% | 350 | 5.72E-04 | 10 | 4.39% | 3674 | 6.01E-03 | 18 | 8.18% | 6850 | 1.43E-02 |
| 3 | 0.40% | 339 | 5.54E-04 | 11 | 4.66% | 3906 | 6.39E-03 | 19 | 5.70% | 4773 | 7.80E-03 |
| 4 | 0.26% | 218 | 3.56E-04 | 12 | 5.89% | 4930 | 8.06E-03 | 20 | 4.27% | 3579 | 5.85E-03 |
| 5 | 0.49% | 412 | 6.74E-04 | 13 | 6.15% | 5153 | 8.42E-03 | 21 | 3.25% | 2726 | 4.46E-03 |
| 6 | 0.90% | 754 | 1.23E-03 | 14 | 6.04% | 5055 | 8.26E-03 | 22 | 3.30% | 2764 | 4.52E-03 |
| 7 | 3.79% | 3172 | 5.19E-03 | 15 | 7.01% | 5872 | 9.60E-03 | 23 | 2.46% | 2062 | 3.37E-03 |
| 8 | 7.76% | 6499 | 1.09E-02 | 16 | 7.14% | 5981 | 9.78E-03 | 24 | 1.87% | 1563 | 2.55E-03 |
| | | | | | | | | Total | | 83,740 | |

**1207 N. Capitol Ave, San Jose, CA - Interstate 680 Traffic - TACs & PM2.5**
**AERMOD Risk Modeling Parameters and Maximum Concentrations**
**On-Site 1st (1.5m) and 2nd (5.5m) Floor Receptor Heights**

| | |
|---|---|
| **Emission Year** | 2028 |
| **Receptor Information** | Maximum On-Site Receptor |
| Number of Receptors | 32 |
| Receptor Height | 1st (1.5m) and 2nd (5.5m) Floors |
| Receptor Distances | At each residential unit |
| | |
| **Meteorological Conditions** | |
| BAQMD San Jose Airport Met Data | 2013-2017 |
| Land Use Classification | Urban |
| Wind Speed | Variable |
| Wind Direction | Variable |

## On-Site Cancer Risk Maximum Concentrations

| Meteorological Data Years | Concentration (µg/m3) | | | |
|---|---|---|---|---|
| | DPM | Exhaust TOG | Evaporative TOG | |
| 2013-2017 | 0.0053 | 0.0792 | 0.0818 | 1st Floor |
| 2013-2017 | 0.0050 | 0.0752 | 0.0778 | 2nd Floor |

## On-Site PM2.5 Maximum Concentrations

| Meteorological Data Years | PM2.5 Concentration (µg/m3) | | | |
|---|---|---|---|---|
| | Total PM2.5 | Fugitive PM2.5 | Vehicle PM2.5 | |
| 2013-2017 | 0.0773 | 0.0681 | 0.0092 | 1st Floor |
| 2013-2017 | 0.0734 | 0.0647 | 0.0087 | 2nd Floor |

**1207 N. Capitol Ave, San Jose, CA - Interstate 680 Cancer Risk & PM2.5**
**Impacts at On-Site 1st Floor Receptors - 1.5m receptor heights**
**30 Year Residential Exposure**

### Cancer Risk Calculation Method

Cancer Risk (per million) = CPF x Inhalation Dose x ASF x ED/AT x FAH x 1.0E6

Where: CPF = Cancer potency factor $(mg/kg\text{-}day)^{-1}$
ASF = Age sensitivity factor for specified age group
ED = Exposure duration (years)
AT = Averaging time for lifetime cancer risk (years)
FAH = Fraction of time spent at home (unitless)

Inhalation Dose = $C_{air}$ x DBR x A x (EF/365) x $10^{-6}$

Where: $C_{air}$ = concentration in air $(\mu g/m^3)$
DBR = daily breathing rate (L/kg body weight-day)
A = Inhalation absorption factor
EF = Exposure frequency (days/year)
$10^{-6}$ = Conversion factor

**Cancer Potency Factors $(mg/kg\text{-}day)^{-1}$**

| TAC | CPF |
|---|---|
| DPM | 1.10E+00 |
| Vehicle TOG Exhaust | 6.28E-03 |
| Vehicle TOG Evaporative | 3.70E-04 |

**Values**

| | Infant/Child | | | Adult |
|---|---|---|---|---|
| Age --> | 3rd Trimester | 0 - 2 | 2 - 16 | 16 - 30 |
| Parameter | | | | |
| ASF = | 10 | 10 | 3 | 1 |
| DBR* = | 361 | 1090 | 572 | 261 |
| A = | 1 | 1 | 1 | 1 |
| EF = | 350 | 350 | 350 | 350 |
| AT = | 70 | 70 | 70 | 70 |
| FAH = | 1.00 | 1.00 | 1.00 | 0.73 |

* 95th percentile breathing rates for infants and 80th percentile for children and adults

### Construction Cancer Risk by Year - Maximum Impact Receptor Location

| Maximum - Exposure Information | | | | | Concentration (ug/m3) | | | Cancer Risk (per million) | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Exposure Year | Exposure Duration (years) | Age | Year | Age Sensitivity Factor | DPM | Exhaust TOG | Evaporative TOG | DPM | Exhaust TOG | Evaporative TOG | TOTAL |
| 0 | 0.25 | -0.25 - 0* | 2028 | 10 | 0.0053 | 0.0792 | 0.0818 | 0.073 | 0.006 | 0.0004 | 0.08 |
| 1 | 1 | 0 - 1 | 2028 | 10 | 0.0053 | 0.0792 | 0.0818 | 0.877 | 0.074 | 0.0045 | 0.96 |
| 2 | 1 | 1 - 2 | 2029 | 10 | 0.0053 | 0.0792 | 0.0818 | 0.877 | 0.074 | 0.0045 | 0.96 |
| 3 | 1 | 2 - 3 | 2030 | 3 | 0.0053 | 0.0792 | 0.0818 | 0.138 | 0.012 | 0.0007 | 0.15 |
| 4 | 1 | 3 - 4 | 2031 | 3 | 0.0053 | 0.0792 | 0.0818 | 0.138 | 0.012 | 0.0007 | 0.15 |
| 5 | 1 | 4 - 5 | 2032 | 3 | 0.0053 | 0.0792 | 0.0818 | 0.138 | 0.012 | 0.0007 | 0.15 |
| 6 | 1 | 5 - 6 | 2033 | 3 | 0.0053 | 0.0792 | 0.0818 | 0.138 | 0.012 | 0.0007 | 0.15 |
| 7 | 1 | 6 - 7 | 2034 | 3 | 0.0053 | 0.0792 | 0.0818 | 0.138 | 0.012 | 0.0007 | 0.15 |
| 8 | 1 | 7 - 8 | 2035 | 3 | 0.0053 | 0.0792 | 0.0818 | 0.138 | 0.012 | 0.0007 | 0.15 |
| 9 | 1 | 8 - 9 | 2036 | 3 | 0.0053 | 0.0792 | 0.0818 | 0.138 | 0.012 | 0.0007 | 0.15 |
| 10 | 1 | 9 - 10 | 2037 | 3 | 0.0053 | 0.0792 | 0.0818 | 0.138 | 0.012 | 0.0007 | 0.15 |
| 11 | 1 | 10 - 11 | 2038 | 3 | 0.0053 | 0.0792 | 0.0818 | 0.138 | 0.012 | 0.0007 | 0.15 |
| 12 | 1 | 11 - 12 | 2039 | 3 | 0.0053 | 0.0792 | 0.0818 | 0.138 | 0.012 | 0.0007 | 0.15 |
| 13 | 1 | 12 - 13 | 2040 | 3 | 0.0053 | 0.0792 | 0.0818 | 0.138 | 0.012 | 0.0007 | 0.15 |
| 14 | 1 | 13 - 14 | 2041 | 3 | 0.0053 | 0.0792 | 0.0818 | 0.138 | 0.012 | 0.0007 | 0.15 |
| 15 | 1 | 14 - 15 | 2042 | 3 | 0.0053 | 0.0792 | 0.0818 | 0.138 | 0.012 | 0.0007 | 0.15 |
| 16 | 1 | 15 - 16 | 2043 | 3 | 0.0053 | 0.0792 | 0.0818 | 0.138 | 0.012 | 0.0007 | 0.15 |
| 17 | 1 | 16-17 | 2044 | 1 | 0.0053 | 0.0792 | 0.0818 | 0.015 | 0.001 | 0.0001 | 0.02 |
| 18 | 1 | 17-18 | 2045 | 1 | 0.0053 | 0.0792 | 0.0818 | 0.015 | 0.001 | 0.0001 | 0.02 |
| 19 | 1 | 18-19 | 2046 | 1 | 0.0053 | 0.0792 | 0.0818 | 0.015 | 0.001 | 0.0001 | 0.02 |
| 20 | 1 | 19-20 | 2047 | 1 | 0.0053 | 0.0792 | 0.0818 | 0.015 | 0.001 | 0.0001 | 0.02 |
| 21 | 1 | 20-21 | 2048 | 1 | 0.0053 | 0.0792 | 0.0818 | 0.015 | 0.001 | 0.0001 | 0.02 |
| 22 | 1 | 21-22 | 2049 | 1 | 0.0053 | 0.0792 | 0.0818 | 0.015 | 0.001 | 0.0001 | 0.02 |
| 23 | 1 | 22-23 | 2050 | 1 | 0.0053 | 0.0792 | 0.0818 | 0.015 | 0.001 | 0.0001 | 0.02 |
| 24 | 1 | 23-24 | 2051 | 1 | 0.0053 | 0.0792 | 0.0818 | 0.015 | 0.001 | 0.0001 | 0.02 |
| 25 | 1 | 24-25 | 2052 | 1 | 0.0053 | 0.0792 | 0.0818 | 0.015 | 0.001 | 0.0001 | 0.02 |
| 26 | 1 | 25-26 | 2053 | 1 | 0.0053 | 0.0792 | 0.0818 | 0.015 | 0.001 | 0.0001 | 0.02 |
| 27 | 1 | 26-27 | 2054 | 1 | 0.0053 | 0.0792 | 0.0818 | 0.015 | 0.001 | 0.0001 | 0.02 |
| 28 | 1 | 27-28 | 2055 | 1 | 0.0053 | 0.0792 | 0.0818 | 0.015 | 0.001 | 0.0001 | 0.02 |
| 29 | 1 | 28-29 | 2056 | 1 | 0.0053 | 0.0792 | 0.0818 | 0.015 | 0.001 | 0.0001 | 0.02 |
| 30 | 1 | 29-30 | 2057 | 1 | 0.0053 | 0.0792 | 0.0818 | 0.015 | 0.001 | 0.0001 | 0.02 |
| **Total Increased Cancer Risk** | | | | | | | | 3.97 | 0.337 | 0.020 | **4.33** |

| Maximum Hazard Index | Maximum Fugitive PM2.5 | Total PM2.5 |
|---|---|---|
| 0.001 | 0.07 | 0.08 |

* Third trimester of pregnancy

**1207 N. Capitol Ave, San Jose, CA - Interstate 680 Cancer Risk & PM2.5**
**Impacts at On-Site 2nd Floor Receptors - 5.5m receptor heights**
**30 Year Residential Exposure**

### Cancer Risk Calculation Method

Cancer Risk (per million) = CPF x Inhalation Dose x ASF x ED/AT x FAH x 1.0E6

Where: CPF = Cancer potency factor $(mg/kg\text{-}day)^{-1}$
ASF = Age sensitivity factor for specified age group
ED = Exposure duration (years)
AT = Averaging time for lifetime cancer risk (years)
FAH = Fraction of time spent at home (unitless)

Inhalation Dose = $C_{air}$ x DBR x A x (EF/365) x $10^{-6}$

Where: $C_{air}$ = concentration in air $(\mu g/m^3)$
DBR = daily breathing rate (L/kg body weight-day)
A = Inhalation absorption factor
EF = Exposure frequency (days/year)
$10^{-6}$ = Conversion factor

**Cancer Potency Factors $(mg/kg\text{-}day)^{-1}$**

| TAC | CPF |
|---|---|
| DPM | 1.10E+00 |
| Vehicle TOG Exhaust | 6.28E-03 |
| Vehicle TOG Evaporative | 3.70E-04 |

**Values**

| | Infant/Child | | | Adult |
|---|---|---|---|---|
| Age --> | 3rd Trimester | 0 - 2 | 2 - 16 | 16 - 30 |
| Parameter | | | | |
| ASF = | 10 | 10 | 3 | 1 |
| DBR* = | 361 | 1090 | 572 | 261 |
| A = | 1 | 1 | 1 | 1 |
| EF = | 350 | 350 | 350 | 350 |
| AT = | 70 | 70 | 70 | 70 |
| FAH = | 1.00 | 1.00 | 1.00 | 0.73 |

* 95th percentile breathing rates for infants and 80th percentile for children and adults

### Construction Cancer Risk by Year - Maximum Impact Receptor Location

| Maximum - Exposure Information | | | | | Concentration (ug/m3) | | | Cancer Risk (per million) | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Exposure Year | Exposure Duration (years) | Age | Year | Age Sensitivity Factor | DPM | Exhaust TOG | Evaporative TOG | DPM | Exhaust TOG | Evaporative TOG | |
| 0 | 0.25 | -0.25 - 0* | 2028 | 10 | 0.0050 | 0.0752 | 0.0778 | 0.068 | 0.006 | 0.0004 | 0.07 |
| 1 | 1 | 0 - 1 | 2028 | 10 | 0.0050 | 0.0752 | 0.0778 | 0.818 | 0.071 | 0.0043 | 0.89 |
| 2 | 1 | 1 - 2 | 2029 | 10 | 0.0050 | 0.0752 | 0.0778 | 0.818 | 0.071 | 0.0043 | 0.89 |
| 3 | 1 | 2 - 3 | 2030 | 3 | 0.0050 | 0.0752 | 0.0778 | 0.129 | 0.011 | 0.0007 | 0.14 |
| 4 | 1 | 3 - 4 | 2031 | 3 | 0.0050 | 0.0752 | 0.0778 | 0.129 | 0.011 | 0.0007 | 0.14 |
| 5 | 1 | 4 - 5 | 2032 | 3 | 0.0050 | 0.0752 | 0.0778 | 0.129 | 0.011 | 0.0007 | 0.14 |
| 6 | 1 | 5 - 6 | 2033 | 3 | 0.0050 | 0.0752 | 0.0778 | 0.129 | 0.011 | 0.0007 | 0.14 |
| 7 | 1 | 6 - 7 | 2034 | 3 | 0.0050 | 0.0752 | 0.0778 | 0.129 | 0.011 | 0.0007 | 0.14 |
| 8 | 1 | 7 - 8 | 2035 | 3 | 0.0050 | 0.0752 | 0.0778 | 0.129 | 0.011 | 0.0007 | 0.14 |
| 9 | 1 | 8 - 9 | 2036 | 3 | 0.0050 | 0.0752 | 0.0778 | 0.129 | 0.011 | 0.0007 | 0.14 |
| 10 | 1 | 9 - 10 | 2037 | 3 | 0.0050 | 0.0752 | 0.0778 | 0.129 | 0.011 | 0.0007 | 0.14 |
| 11 | 1 | 10 - 11 | 2038 | 3 | 0.0050 | 0.0752 | 0.0778 | 0.129 | 0.011 | 0.0007 | 0.14 |
| 12 | 1 | 11 - 12 | 2039 | 3 | 0.0050 | 0.0752 | 0.0778 | 0.129 | 0.011 | 0.0007 | 0.14 |
| 13 | 1 | 12 - 13 | 2040 | 3 | 0.0050 | 0.0752 | 0.0778 | 0.129 | 0.011 | 0.0007 | 0.14 |
| 14 | 1 | 13 - 14 | 2041 | 3 | 0.0050 | 0.0752 | 0.0778 | 0.129 | 0.011 | 0.0007 | 0.14 |
| 15 | 1 | 14 - 15 | 2042 | 3 | 0.0050 | 0.0752 | 0.0778 | 0.129 | 0.011 | 0.0007 | 0.14 |
| 16 | 1 | 15 - 16 | 2043 | 3 | 0.0050 | 0.0752 | 0.0778 | 0.129 | 0.011 | 0.0007 | 0.14 |
| 17 | 1 | 16-17 | 2044 | 1 | 0.0050 | 0.0752 | 0.0778 | 0.014 | 0.001 | 0.0001 | 0.02 |
| 18 | 1 | 17-18 | 2045 | 1 | 0.0050 | 0.0752 | 0.0778 | 0.014 | 0.001 | 0.0001 | 0.02 |
| 19 | 1 | 18-19 | 2046 | 1 | 0.0050 | 0.0752 | 0.0778 | 0.014 | 0.001 | 0.0001 | 0.02 |
| 20 | 1 | 19-20 | 2047 | 1 | 0.0050 | 0.0752 | 0.0778 | 0.014 | 0.001 | 0.0001 | 0.02 |
| 21 | 1 | 20-21 | 2048 | 1 | 0.0050 | 0.0752 | 0.0778 | 0.014 | 0.001 | 0.0001 | 0.02 |
| 22 | 1 | 21-22 | 2049 | 1 | 0.0050 | 0.0752 | 0.0778 | 0.014 | 0.001 | 0.0001 | 0.02 |
| 23 | 1 | 22-23 | 2050 | 1 | 0.0050 | 0.0752 | 0.0778 | 0.014 | 0.001 | 0.0001 | 0.02 |
| 24 | 1 | 23-24 | 2051 | 1 | 0.0050 | 0.0752 | 0.0778 | 0.014 | 0.001 | 0.0001 | 0.02 |
| 25 | 1 | 24-25 | 2052 | 1 | 0.0050 | 0.0752 | 0.0778 | 0.014 | 0.001 | 0.0001 | 0.02 |
| 26 | 1 | 25-26 | 2053 | 1 | 0.0050 | 0.0752 | 0.0778 | 0.014 | 0.001 | 0.0001 | 0.02 |
| 27 | 1 | 26-27 | 2054 | 1 | 0.0050 | 0.0752 | 0.0778 | 0.014 | 0.001 | 0.0001 | 0.02 |
| 28 | 1 | 27-28 | 2055 | 1 | 0.0050 | 0.0752 | 0.0778 | 0.014 | 0.001 | 0.0001 | 0.02 |
| 29 | 1 | 28-29 | 2056 | 1 | 0.0050 | 0.0752 | 0.0778 | 0.014 | 0.001 | 0.0001 | 0.02 |
| 30 | 1 | 29-30 | 2057 | 1 | 0.0050 | 0.0752 | 0.0778 | 0.014 | 0.001 | 0.0001 | 0.02 |
| **Total Increased Cancer Risk** | | | | | | | | 3.71 | 0.320 | 0.019 | **4.05** |

| Maximum Hazard Index | Maximum Fugitive PM2.5 | Total PM2.5 |
|---|---|---|
| 0.001 | 0.06 | 0.07 |

* Third trimester of pregnancy

# N. Capitol Ave 2028 Traffic Emissions and Health Risk Calculations

**Analysis Year =** ***2028***

| Vehicle Type | 2025 Caltrans Vehicles (veh/day) | 2028 Vehicles (veh/day) |
|---|---|---|
| Truck 1 (MDT) | 343 | 353 |
| Truck 2 (HDT) | 363 | 374 |
| Non-Truck | 19,479 | 20,063 |
| **All** | **20,185** | **20,791** |

| | |
|---|---|
| Increase From 2025 | 1.03 |
| **Vehicles/Direction** | **10,395** |
| Avg Vehicles/Hour/Direction | 433 |

**Traffic Data Year =** ***2025***

| ***Project Traffic Analysis*** ***Background Plus Project*** | AADT Total |
|---|---|
| N. Captol Ave & Berryessa Road | 20,185 |
| | |

Percent of Total Vehicles

Traffic Increase per Year (%) = *1.00%*

**1207 N Capitol Ave Daycare, San Jose, CA - Roadway Modeling Emissions**
**North Capitol Avenue Traffic**
**DPM Modeling - Roadway Links, Traffic Volumes, and DPM Emissions**
**Year = 2028**

| | | | | | | | | | | | Line Area | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Road Link | Description | Direction | No. Lanes | Link Length (m) | Link Length (mi) | Link Width (m) | Link Width (ft) | Release Height ( m) | Average Speed (mph) | Average Vehicles per Day | Area (sq m) | Emission (g/s/m2) | Initial Vertical height (m) | (Sigma z) Initial Vertical Dimension |
| DPM_NBCAP | Northbound N Capitol | SE-NW | 2 | 893 | 0.55 | 13.3 | 43.7 | 3.4 | 30 | 10,395 | 11,889 | 1.819E-09 | 6.8 | 3.16 |
| DPM_SBCAP | Southbound N Capitol | NW-SE | 2 | 895 | 0.56 | 13.3 | 43.7 | 3.4 | 30 | 10,395 | 11,922 | 1.814E-09 | 6.8 | 3.16 |
| | | | | | | | | | | 20,791 | | | | |

**Emission Factors - DPM**

| Speed Category | 1 | 2 | 3 | 4 |
|---|---|---|---|---|
| Travel Speed (mph) | 30 | | | |
| Emissions per Vehicle (g/VMT) | 0.00032 | | | |

Emisson Factors from CT-EMFAC2021

**2028 Hourly Traffic Volumes and DPM Emissions - DPM_NBCAP**

| Hour | % Per Hour | VPH | g/s | Hour | % Per Hour | VPH | g/s | Hour | % Per Hour | VPH | g/s |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 3.96% | 412 | 2.06E-05 | 9 | 6.46% | 671 | 3.35E-05 | 17 | 5.61% | 583 | 2.91E-05 |
| 2 | 2.66% | 276 | 1.38E-05 | 10 | 7.36% | 765 | 3.82E-05 | 18 | 3.24% | 337 | 1.68E-05 |
| 3 | 2.88% | 300 | 1.50E-05 | 11 | 6.40% | 665 | 3.32E-05 | 19 | 2.22% | 230 | 1.15E-05 |
| 4 | 3.28% | 341 | 1.70E-05 | 12 | 6.97% | 724 | 3.62E-05 | 20 | 0.86% | 89 | 4.45E-06 |
| 5 | 2.09% | 218 | 1.09E-05 | 13 | 6.23% | 648 | 3.23E-05 | 21 | 3.06% | 318 | 1.59E-05 |
| 6 | 3.34% | 347 | 1.73E-05 | 14 | 6.17% | 642 | 3.21E-05 | 22 | 4.25% | 442 | 2.21E-05 |
| 7 | 6.06% | 630 | 3.15E-05 | 15 | 5.10% | 530 | 2.65E-05 | 23 | 2.55% | 265 | 1.32E-05 |
| 8 | 4.54% | 472 | 2.36E-05 | 16 | 3.86% | 401 | 2.00E-05 | 24 | 0.85% | 88 | 4.40E-06 |
| | | | | | | | | Total | | 10,395 | |

**2028 Hourly Traffic Volumes Per Direction and DPM Emissions - DPM_SBCAP**

| Hour | % Per Hour | VPH | g/mile | Hour | % Per Hour | VPH | g/mile | Hour | % Per Hour | VPH | g/mile |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 3.96% | 412 | 2.06E-05 | 9 | 6.46% | 671 | 3.36E-05 | 17 | 5.61% | 583 | 2.92E-05 |
| 2 | 2.66% | 276 | 1.38E-05 | 10 | 7.36% | 765 | 3.83E-05 | 18 | 3.24% | 337 | 1.69E-05 |
| 3 | 2.88% | 300 | 1.50E-05 | 11 | 6.40% | 665 | 3.33E-05 | 19 | 2.22% | 230 | 1.15E-05 |
| 4 | 3.28% | 341 | 1.71E-05 | 12 | 6.97% | 724 | 3.63E-05 | 20 | 0.86% | 89 | 4.47E-06 |
| 5 | 2.09% | 218 | 1.09E-05 | 13 | 6.23% | 648 | 3.24E-05 | 21 | 3.06% | 318 | 1.59E-05 |
| 6 | 3.34% | 347 | 1.74E-05 | 14 | 6.17% | 642 | 3.21E-05 | 22 | 4.25% | 442 | 2.21E-05 |
| 7 | 6.06% | 630 | 3.16E-05 | 15 | 5.10% | 530 | 2.65E-05 | 23 | 2.55% | 265 | 1.32E-05 |
| 8 | 4.54% | 472 | 2.37E-05 | 16 | 3.86% | 401 | 2.01E-05 | 24 | 0.85% | 88 | 4.42E-06 |
| | | | | | | | | Total | | 10,395 | |

**1207 N Capitol Ave Daycare, San Jose, CA - Roadway Modeling Emissions**
**North Capitol Avenue Traffic**
**PM2.5 Modeling - Roadway Links, Traffic Volumes, and PM2.5 Emissions**
**Year = 2028**

| | | | | | | | | | | | Line Area | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Road Link | Description | Direction | No. Lanes | Link Length (m) | Link Length (mi) | Link Width (m) | Link Width (ft) | Release Height ( m) | Average Speed (mph) | Average Vehicles per Day | Area (sq m) | Emission (g/s/m2) | Initial Vertical height (m) | (Sigma z) Initial Vertical Dimension |
| PM25_NBCAP | Northbound N Capitol | SE-NW | 2 | 893 | 0.55 | 13.3 | 44 | 1.3 | 30 | 10,395 | 11,889 | 7.978E-09 | 2.6 | 1.21 |
| PM25_SBCAP | Southbound N Capitol | NW-SE | 2 | 895 | 0.56 | 13.3 | 44 | 1.3 | 30 | 10,395 | 11,922 | 7.978E-09 | 2.6 | 1.21 |
| | | | | | | | | | Total | 20,791 | | | | |

**Emission Factors - PM2.5**

| | | | | |
|---|---|---|---|---|
| **Speed Category** | 1 | 2 | 3 | 4 |
| **Travel Speed (mph)** | 30 | | | |
| **Emissions per Vehicle (g/VMT)** | 0.00142 | | | |

Emisson Factors from CT-EMFAC2021

**2028 Hourly Traffic Volumes and PM2.5 Emissions - PM25_NBCAP**

| Hour | % Per Hour | VPH | g/s | Hour | % Per Hour | VPH | g/s | Hour | % Per Hour | VPH | g/s |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 1.15% | 119 | 2.62E-05 | 9 | 7.11% | 739 | 1.62E-04 | 17 | 7.39% | 768 | 1.68E-04 |
| 2 | 0.42% | 43 | 9.51E-06 | 10 | 4.39% | 456 | 9.99E-05 | 18 | 8.18% | 850 | 1.86E-04 |
| 3 | 0.40% | 42 | 9.21E-06 | 11 | 4.66% | 485 | 1.06E-04 | 19 | 5.70% | 593 | 1.30E-04 |
| 4 | 0.26% | 27 | 5.92E-06 | 12 | 5.89% | 612 | 1.34E-04 | 20 | 4.27% | 444 | 9.73E-05 |
| 5 | 0.49% | 51 | 1.12E-05 | 13 | 6.15% | 640 | 1.40E-04 | 21 | 3.25% | 338 | 7.41E-05 |
| 6 | 0.90% | 94 | 2.05E-05 | 14 | 6.04% | 627 | 1.37E-04 | 22 | 3.30% | 343 | 7.52E-05 |
| 7 | 3.79% | 394 | 8.62E-05 | 15 | 7.01% | 729 | 1.60E-04 | 23 | 2.46% | 256 | 5.60E-05 |
| 8 | 7.76% | 807 | 1.77E-04 | 16 | 7.14% | 743 | 1.63E-04 | 24 | 1.87% | 194 | 4.25E-05 |
| | | | | | | | | Total | | 10,395 | |

**2028 Hourly Traffic Volumes Per Direction and PM2.5 Emissions - PM25_SBCAP**

| Hour | % Per Hour | VPH | g/mile | Hour | % Per Hour | VPH | g/mile | Hour | % Per Hour | VPH | g/mile |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 1.15% | 119 | 2.62E-05 | 9 | 7.11% | 739 | 1.62E-04 | 17 | 7.39% | 768 | 1.69E-04 |
| 2 | 0.42% | 43 | 9.54E-06 | 10 | 4.39% | 456 | 1.00E-04 | 18 | 8.18% | 850 | 1.87E-04 |
| 3 | 0.40% | 42 | 9.24E-06 | 11 | 4.66% | 485 | 1.06E-04 | 19 | 5.70% | 593 | 1.30E-04 |
| 4 | 0.26% | 27 | 5.93E-06 | 12 | 5.89% | 612 | 1.34E-04 | 20 | 4.27% | 444 | 9.76E-05 |
| 5 | 0.49% | 51 | 1.12E-05 | 13 | 6.15% | 640 | 1.40E-04 | 21 | 3.25% | 338 | 7.43E-05 |
| 6 | 0.90% | 94 | 2.06E-05 | 14 | 6.04% | 627 | 1.38E-04 | 22 | 3.30% | 343 | 7.54E-05 |
| 7 | 3.79% | 394 | 8.65E-05 | 15 | 7.01% | 729 | 1.60E-04 | 23 | 2.46% | 256 | 5.62E-05 |
| 8 | 7.76% | 807 | 1.77E-04 | 16 | 7.14% | 743 | 1.63E-04 | 24 | 1.87% | 194 | 4.26E-05 |
| | | | | | | | | Total | | 10,395 | |

**1207 N Capitol Ave Daycare, San Jose, CA - Roadway Modeling Emissions**
**North Capitol Avenue Traffic**
**TOG Exhaust Modeling - Roadway Links, Traffic Volumes, and TOG Exhaust Emissions**
**Year = 2028**

| | | | | | | | | | | | Line Area | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Road Link | Description | Direction | No. Lanes | Link Length (m) | Link Length (mi) | Link Width (m) | Link Width (ft) | Release Height ( m) | Average Speed (mph) | Average Vehicles per Day | Area (sq m) | Emission (g/s/m2) | Initial Vertical height (m) | (Sigma z) Initial Vertical Dimensio |
| TEXH_NBCAP | Northbound N Capitol | SE-NW | 2 | 893 | 0.55 | 13.3 | 44 | 1.3 | 30 | 10,395 | 11,889 | 1.058E-07 | 2.6 | 1.21 |
| TEXH_SBCAP | Southbound N Capitol | NW-SE | 2 | 895 | 0.56 | 13.3 | 44 | 1.3 | 30 | 10,395 | 11,922 | 1.058E-07 | 2.6 | 1.21 |
| | | | | | | | | | Total | 20,791 | | | | |

**Emission Factors - TOG Exhaust**

| Speed Category | 1 | 2 | 3 | 4 |
|---|---|---|---|---|
| Travel Speed (mph) | 30 | | | |
| All Vehicles TOG Emissions per Vehicle (g/VMT) | 0.02028 | | | |
| Diesel Vehicles TOG Emissions per Vehicle (g/VMT) | 0.00144 | | | |
| Gasoline Vehicles Emissions per Vehicle (g/VMT) | 0.01884 | | | |

Emisson Factors from CT-EMFAC2021

**2028 Hourly Traffic Volumes and TOG Exhaust Emissions - TEXH_NBCAP**

| Hour | % Per Hour | VPH | g/s | Hour | % Per Hour | VPH | g/s | Hour | % Per Hour | VPH | g/s |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 1.15% | 119 | 3.47E-04 | 9 | 7.11% | 739 | 2.15E-03 | 17 | 7.39% | 768 | 2.23E-03 |
| 2 | 0.42% | 43 | 1.26E-04 | 10 | 4.39% | 456 | 1.32E-03 | 18 | 8.18% | 850 | 2.47E-03 |
| 3 | 0.40% | 42 | 1.22E-04 | 11 | 4.66% | 485 | 1.41E-03 | 19 | 5.70% | 593 | 1.72E-03 |
| 4 | 0.26% | 27 | 7.84E-05 | 12 | 5.89% | 612 | 1.78E-03 | 20 | 4.27% | 444 | 1.29E-03 |
| 5 | 0.49% | 51 | 1.48E-04 | 13 | 6.15% | 640 | 1.86E-03 | 21 | 3.25% | 338 | 9.82E-04 |
| 6 | 0.90% | 94 | 2.72E-04 | 14 | 6.04% | 627 | 1.82E-03 | 22 | 3.30% | 343 | 9.96E-04 |
| 7 | 3.79% | 394 | 1.14E-03 | 15 | 7.01% | 729 | 2.12E-03 | 23 | 2.46% | 256 | 7.43E-04 |
| 8 | 7.76% | 807 | 2.34E-03 | 16 | 7.14% | 743 | 2.16E-03 | 24 | 1.87% | 194 | 5.63E-04 |
| | | | | | | | | Total | | 10,395 | |

**2028 Hourly Traffic Volumes Per Direction and TOG Exhaust Emissions - TEXH_SBCAP**

| Hour | % Per Hour | VPH | g/mile | Hour | % Per Hour | VPH | g/mile | Hour | % Per Hour | VPH | g/mile |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 1.15% | 119 | 3.48E-04 | 9 | 7.11% | 739 | 2.15E-03 | 17 | 7.39% | 768 | 2.24E-03 |
| 2 | 0.42% | 43 | 1.26E-04 | 10 | 4.39% | 456 | 1.33E-03 | 18 | 8.18% | 850 | 2.48E-03 |
| 3 | 0.40% | 42 | 1.22E-04 | 11 | 4.66% | 485 | 1.41E-03 | 19 | 5.70% | 593 | 1.72E-03 |
| 4 | 0.26% | 27 | 7.87E-05 | 12 | 5.89% | 612 | 1.78E-03 | 20 | 4.27% | 444 | 1.29E-03 |
| 5 | 0.49% | 51 | 1.49E-04 | 13 | 6.15% | 640 | 1.86E-03 | 21 | 3.25% | 338 | 9.85E-04 |
| 6 | 0.90% | 94 | 2.73E-04 | 14 | 6.04% | 627 | 1.83E-03 | 22 | 3.30% | 343 | 9.99E-04 |
| 7 | 3.79% | 394 | 1.15E-03 | 15 | 7.01% | 729 | 2.12E-03 | 23 | 2.46% | 256 | 7.45E-04 |
| 8 | 7.76% | 807 | 2.35E-03 | 16 | 7.14% | 743 | 2.16E-03 | 24 | 1.87% | 194 | 5.65E-04 |
| | | | | | | | | Total | | 10,395 | |

**1207 N Capitol Ave Daycare, San Jose, CA - Roadway Modeling Emissions**
**North Capitol Avenue Traffic**
**TOG Evaporative Emissions Modeling - Roadway Links, Traffic Volumes, and TOG Evaporative Emissions**
**Year = 2028**

| | | | | | | | | | | | Line Area | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Road Link | Description | Direction | No. Lanes | Link Length (m) | Link Length (mi) | Link Width (m) | Link Width (ft) | Release Height ( m) | Average Speed (mph) | Average Vehicles per Day | Area (sq m) | Emission (g/s/m2) | Initial Vertical height (m) | (Sigma z) Initial Vertical Dimensio |
| TEVAP_NBCAP | Northbound N Capitol | SE-NW | 2 | 893 | 0.55 | 13.3 | 44 | 1.3 | 30 | 10,395 | 11,889 | 1.745E-07 | 2.6 | 1.21 |
| TEVAP_SBCAP | Southbound N Capitol | NW-SE | 2 | 895 | 0.56 | 13.3 | 44 | 1.3 | 30 | 10,395 | 11,922 | 1.745E-07 | 2.6 | 1.21 |
| | | | | | | | | | Total | 20,791 | | | | |

**Emission Factors - PM2.5 - Evaporative TOG**

| Speed Category | 1 | 2 | 3 | 4 |
|---|---|---|---|---|
| Travel Speed (mph) | 30 | 0 | 0 | 0 |
| Emissions per Vehicle per Hour (g/hour) | 0.93222 | | | |
| Emissions per Vehicle per Mile (g/VMT) | 0.03107 | | | |

Emisson Factors from CT-EMFAC2021

**2028 Hourly Traffic Volumes and TOG Evaporative Emissions - TEVAP_NBCAP**

| Hour | % Per Hour | VPH | g/s | Hour | % Per Hour | VPH | g/s | Hour | % Per Hour | VPH | g/s |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 1.15% | 119 | 5.72E-04 | 9 | 7.11% | 739 | 3.54E-03 | 17 | 7.39% | 768 | 3.68E-03 |
| 2 | 0.42% | 43 | 2.08E-04 | 10 | 4.39% | 456 | 2.18E-03 | 18 | 8.18% | 850 | 4.07E-03 |
| 3 | 0.40% | 42 | 2.02E-04 | 11 | 4.66% | 485 | 2.32E-03 | 19 | 5.70% | 593 | 2.84E-03 |
| 4 | 0.26% | 27 | 1.29E-04 | 12 | 5.89% | 612 | 2.93E-03 | 20 | 4.27% | 444 | 2.13E-03 |
| 5 | 0.49% | 51 | 2.45E-04 | 13 | 6.15% | 640 | 3.06E-03 | 21 | 3.25% | 338 | 1.62E-03 |
| 6 | 0.90% | 94 | 4.48E-04 | 14 | 6.04% | 627 | 3.01E-03 | 22 | 3.30% | 343 | 1.64E-03 |
| 7 | 3.79% | 394 | 1.89E-03 | 15 | 7.01% | 729 | 3.49E-03 | 23 | 2.46% | 256 | 1.23E-03 |
| 8 | 7.76% | 807 | 3.86E-03 | 16 | 7.14% | 743 | 3.56E-03 | 24 | 1.87% | 194 | 9.29E-04 |
| | | | | | | | | Total | | 10,395 | |

**2028 Hourly Traffic Volumes Per Direction and TOG Evaporative Emissions - TEVAP_SBCAP**

| Hour | % Per Hour | VPH | g/mile | Hour | % Per Hour | VPH | g/mile | Hour | % Per Hour | VPH | g/mile |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 1.15% | 119 | 5.74E-04 | 9 | 7.11% | 739 | 3.55E-03 | 17 | 7.39% | 768 | 3.69E-03 |
| 2 | 0.42% | 43 | 2.09E-04 | 10 | 4.39% | 456 | 2.19E-03 | 18 | 8.18% | 850 | 4.08E-03 |
| 3 | 0.40% | 42 | 2.02E-04 | 11 | 4.66% | 485 | 2.33E-03 | 19 | 5.70% | 593 | 2.85E-03 |
| 4 | 0.26% | 27 | 1.30E-04 | 12 | 5.89% | 612 | 2.94E-03 | 20 | 4.27% | 444 | 2.13E-03 |
| 5 | 0.49% | 51 | 2.46E-04 | 13 | 6.15% | 640 | 3.07E-03 | 21 | 3.25% | 338 | 1.62E-03 |
| 6 | 0.90% | 94 | 4.50E-04 | 14 | 6.04% | 627 | 3.01E-03 | 22 | 3.30% | 343 | 1.65E-03 |
| 7 | 3.79% | 394 | 1.89E-03 | 15 | 7.01% | 729 | 3.50E-03 | 23 | 2.46% | 256 | 1.23E-03 |
| 8 | 7.76% | 807 | 3.87E-03 | 16 | 7.14% | 743 | 3.57E-03 | 24 | 1.87% | 194 | 9.32E-04 |
| | | | | | | | | Total | | 10,395 | |

**1207 N Capitol Ave Daycare, San Jose, CA - Roadway Modeling Emissions**
**North Capitol Avenue Traffic**
**Fugitive Road PM2.5 Modeling - Roadway Links, Traffic Volumes, and Fugitive Road PM2.5 Emissions**
**Year = 2028**

| | | | | | | | | | | | Line Area | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Road Link | Description | Direction | No. Lanes | Link Length (m) | Link Length (mi) | Link Width (m) | Link Width (ft) | Release Height ( m) | Average Speed (mph) | Average Vehicles per Day | Area (sq m) | Emission (g/s/m2) | Initial Vertical height (m) | (Sigma z) Initial Vertical Dimension |
| FUG_NBCAP | Northbound N Capitol | SE-NW | 2 | 893 | 0.55 | 13.3 | 44 | 1.3 | 30 | 10,395 | 11,889 | 1.283E-07 | 2.6 | 1.21 |
| FUG_SBCAP | Southbound N Capitol | NW-SE | 2 | 895 | 0.56 | 13.3 | 44 | 1.3 | 30 | 10,395 | 11,922 | 1.283E-07 | 2.6 | 1.21 |
| | | | | | | | | | Total | 20,791 | | | | |

**Emission Factors - Fugitive PM2.5**

| Speed Category | 1 | 2 | 3 | 4 |
|---|---|---|---|---|
| Travel Speed (mph) | 30 | | | |
| Tire Wear - Emissions per Vehicle (g/VMT) | 0.00210 | | | |
| Brake Wear - Emissions per Vehicle (g/VMT) | 0.00545 | | | |
| Road Dust - Emissions per Vehicle (g/VMT) | 0.01530 | | | |
| Total Fugitive PM2.5 - Emissions per Vehicle (g/VMT) | 0.02286 | | | |

Emisson Factors from CT-EMFAC2021

**2028 Hourly Traffic Volumes and Fugitive PM2.5 Emissions - FUG_NBCAP**

| Hour | % Per Hour | VPH | g/s | Hour | % Per Hour | VPH | g/s | Hour | % Per Hour | VPH | g/s |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 1.15% | 119 | 4.21E-04 | 9 | 7.11% | 739 | 2.60E-03 | 17 | 7.39% | 768 | 2.71E-03 |
| 2 | 0.42% | 43 | 1.53E-04 | 10 | 4.39% | 456 | 1.61E-03 | 18 | 8.18% | 850 | 3.00E-03 |
| 3 | 0.40% | 42 | 1.48E-04 | 11 | 4.66% | 485 | 1.71E-03 | 19 | 5.70% | 593 | 2.09E-03 |
| 4 | 0.26% | 27 | 9.52E-05 | 12 | 5.89% | 612 | 2.16E-03 | 20 | 4.27% | 444 | 1.57E-03 |
| 5 | 0.49% | 51 | 1.80E-04 | 13 | 6.15% | 640 | 2.25E-03 | 21 | 3.25% | 338 | 1.19E-03 |
| 6 | 0.90% | 94 | 3.30E-04 | 14 | 6.04% | 627 | 2.21E-03 | 22 | 3.30% | 343 | 1.21E-03 |
| 7 | 3.79% | 394 | 1.39E-03 | 15 | 7.01% | 729 | 2.57E-03 | 23 | 2.46% | 256 | 9.02E-04 |
| 8 | 7.76% | 807 | 2.84E-03 | 16 | 7.14% | 743 | 2.62E-03 | 24 | 1.87% | 194 | 6.83E-04 |
| | | | | | | | | Total | | 10,395 | |

**2028 Hourly Traffic Volumes Per Direction and Fugitive PM2.5 Emissions - FUG_SBCAP**

| Hour | % Per Hour | VPH | g/mile | Hour | % Per Hour | VPH | g/mile | Hour | % Per Hour | VPH | g/mile |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 1.15% | 119 | 4.22E-04 | 9 | 7.11% | 739 | 2.61E-03 | 17 | 7.39% | 768 | 2.71E-03 |
| 2 | 0.42% | 43 | 1.53E-04 | 10 | 4.39% | 456 | 1.61E-03 | 18 | 8.18% | 850 | 3.00E-03 |
| 3 | 0.40% | 42 | 1.49E-04 | 11 | 4.66% | 485 | 1.71E-03 | 19 | 5.70% | 593 | 2.09E-03 |
| 4 | 0.26% | 27 | 9.54E-05 | 12 | 5.89% | 612 | 2.16E-03 | 20 | 4.27% | 444 | 1.57E-03 |
| 5 | 0.49% | 51 | 1.81E-04 | 13 | 6.15% | 640 | 2.26E-03 | 21 | 3.25% | 338 | 1.20E-03 |
| 6 | 0.90% | 94 | 3.31E-04 | 14 | 6.04% | 627 | 2.22E-03 | 22 | 3.30% | 343 | 1.21E-03 |
| 7 | 3.79% | 394 | 1.39E-03 | 15 | 7.01% | 729 | 2.58E-03 | 23 | 2.46% | 256 | 9.04E-04 |
| 8 | 7.76% | 807 | 2.85E-03 | 16 | 7.14% | 743 | 2.62E-03 | 24 | 1.87% | 194 | 6.85E-04 |
| | | | | | | | | Total | | 10,395 | |

**1207 N. Capitol Ave, San Jose, CA - N. Capitol Ave Traffic - TACs & PM2.5**
**AERMOD Risk Modeling Parameters and Maximum Concentrations**
**On-Site 1st (1.5m) and 2nd (5.5m) Floor Receptor Heights**

| | |
|---|---|
| **Emission Year** | 2028 |
| **Receptor Information** | Maximum On-Site Receptor |
| Number of Receptors | 32 |
| Receptor Height | 1st (1.5m) and 2nd (5.5m) Floors |
| Receptor Distances | At each residential unit |
| | |
| **Meteorological Conditions** | |
| BAQMD San Jose Airport Met Data | 2013-2017 |
| Land Use Classification | Urban |
| Wind Speed | Variable |
| Wind Direction | Variable |

## On-Site Cancer Risk Maximum Concentrations

| Meteorological Data Years | Concentration (µg/m3) | | | |
|---|---|---|---|---|
| | DPM | Exhaust TOG | Evaporative TOG | |
| 2013-2017 | 0.0022 | 0.1295 | 0.2135 | 1st Floor |
| 2013-2017 | 0.0018 | 0.0773 | 0.1274 | 2nd Floor |

## On-Site PM2.5 Maximum Concentrations

| Meteorological Data Years | PM2.5 Concentration (µg/m3) | | | |
|---|---|---|---|---|
| | Total PM2.5 | Fugitive PM2.5 | Vehicle PM2.5 | |
| 2013-2017 | 0.1671 | 0.1573 | 0.0098 | 1st Floor |
| 2013-2017 | 0.0997 | 0.0939 | 0.0058 | 2nd Floor |

**1207 N. Capitol Ave, San Jose, CA - N. Capitol Ave Cancer Risk & PM2.5 Impacts at On-Site 1st Floor Receptors - 1.5m receptor heights**
**30 Year Residential Exposure**

### Cancer Risk Calculation Method

Cancer Risk (per million) = CPF x Inhalation Dose x ASF x ED/AT x FAH x 1.0E6

Where: CPF = Cancer potency factor $(mg/kg\text{-}day)^{-1}$
ASF = Age sensitivity factor for specified age group
ED = Exposure duration (years)
AT = Averaging time for lifetime cancer risk (years)
FAH = Fraction of time spent at home (unitless)

Inhalation Dose = $C_{air}$ x DBR x A x (EF/365) x $10^{-6}$

Where: $C_{air}$ = concentration in air $(\mu g/m^3)$
DBR = daily breathing rate (L/kg body weight-day)
A = Inhalation absorption factor
EF = Exposure frequency (days/year)
$10^{-6}$ = Conversion factor

**Cancer Potency Factors $(mg/kg\text{-}day)^{-1}$**

| TAC | CPF |
|---|---|
| DPM | 1.10E+00 |
| Vehicle TOG Exhaust | 6.28E-03 |
| Vehicle TOG Evaporative | 3.70E-04 |

**Values**

| | Infant/Child | | | Adult |
|---|---|---|---|---|
| Age --> | 3rd Trimester | 0 - 2 | 2 - 16 | 16 - 30 |
| Parameter | | | | |
| ASF = | 10 | 10 | 3 | 1 |
| DBR* = | 361 | 1090 | 572 | 261 |
| A = | 1 | 1 | 1 | 1 |
| EF = | 350 | 350 | 350 | 350 |
| AT = | 70 | 70 | 70 | 70 |
| FAH = | 1.00 | 1.00 | 1.00 | 0.73 |

* 95th percentile breathing rates for infants and 80th percentile for children and adults

### Construction Cancer Risk by Year - Maximum Impact Receptor Location

| Maximum - Exposure Information | | | | | Concentration (ug/m3) | | | Cancer Risk (per million) | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Exposure Year | Exposure Duration (years) | Age | Year | Age Sensitivity Factor | DPM | Exhaust TOG | Evaporative TOG | DPM | Exhaust TOG | Evaporative TOG | |
| 0 | 0.25 | -0.25 - 0* | 2028 | 10 | 0.0022 | 0.1295 | 0.2135 | 0.030 | 0.010 | 0.0010 | 0.04 |
| 1 | 1 | 0 - 1 | 2028 | 10 | 0.0022 | 0.1295 | 0.2135 | 0.366 | 0.121 | 0.0118 | 0.50 |
| 2 | 1 | 1 - 2 | 2029 | 10 | 0.0022 | 0.1295 | 0.2135 | 0.366 | 0.121 | 0.0118 | 0.50 |
| 3 | 1 | 2 - 3 | 2030 | 3 | 0.0022 | 0.1295 | 0.2135 | 0.058 | 0.019 | 0.0019 | 0.08 |
| 4 | 1 | 3 - 4 | 2031 | 3 | 0.0022 | 0.1295 | 0.2135 | 0.058 | 0.019 | 0.0019 | 0.08 |
| 5 | 1 | 4 - 5 | 2032 | 3 | 0.0022 | 0.1295 | 0.2135 | 0.058 | 0.019 | 0.0019 | 0.08 |
| 6 | 1 | 5 - 6 | 2033 | 3 | 0.0022 | 0.1295 | 0.2135 | 0.058 | 0.019 | 0.0019 | 0.08 |
| 7 | 1 | 6 - 7 | 2034 | 3 | 0.0022 | 0.1295 | 0.2135 | 0.058 | 0.019 | 0.0019 | 0.08 |
| 8 | 1 | 7 - 8 | 2035 | 3 | 0.0022 | 0.1295 | 0.2135 | 0.058 | 0.019 | 0.0019 | 0.08 |
| 9 | 1 | 8 - 9 | 2036 | 3 | 0.0022 | 0.1295 | 0.2135 | 0.058 | 0.019 | 0.0019 | 0.08 |
| 10 | 1 | 9 - 10 | 2037 | 3 | 0.0022 | 0.1295 | 0.2135 | 0.058 | 0.019 | 0.0019 | 0.08 |
| 11 | 1 | 10 - 11 | 2038 | 3 | 0.0022 | 0.1295 | 0.2135 | 0.058 | 0.019 | 0.0019 | 0.08 |
| 12 | 1 | 11 - 12 | 2039 | 3 | 0.0022 | 0.1295 | 0.2135 | 0.058 | 0.019 | 0.0019 | 0.08 |
| 13 | 1 | 12 - 13 | 2040 | 3 | 0.0022 | 0.1295 | 0.2135 | 0.058 | 0.019 | 0.0019 | 0.08 |
| 14 | 1 | 13 - 14 | 2041 | 3 | 0.0022 | 0.1295 | 0.2135 | 0.058 | 0.019 | 0.0019 | 0.08 |
| 15 | 1 | 14 - 15 | 2042 | 3 | 0.0022 | 0.1295 | 0.2135 | 0.058 | 0.019 | 0.0019 | 0.08 |
| 16 | 1 | 15 - 16 | 2043 | 3 | 0.0022 | 0.1295 | 0.2135 | 0.058 | 0.019 | 0.0019 | 0.08 |
| 17 | 1 | 16-17 | 2044 | 1 | 0.0022 | 0.1295 | 0.2135 | 0.006 | 0.002 | 0.0002 | 0.01 |
| 18 | 1 | 17-18 | 2045 | 1 | 0.0022 | 0.1295 | 0.2135 | 0.006 | 0.002 | 0.0002 | 0.01 |
| 19 | 1 | 18-19 | 2046 | 1 | 0.0022 | 0.1295 | 0.2135 | 0.006 | 0.002 | 0.0002 | 0.01 |
| 20 | 1 | 19-20 | 2047 | 1 | 0.0022 | 0.1295 | 0.2135 | 0.006 | 0.002 | 0.0002 | 0.01 |
| 21 | 1 | 20-21 | 2048 | 1 | 0.0022 | 0.1295 | 0.2135 | 0.006 | 0.002 | 0.0002 | 0.01 |
| 22 | 1 | 21-22 | 2049 | 1 | 0.0022 | 0.1295 | 0.2135 | 0.006 | 0.002 | 0.0002 | 0.01 |
| 23 | 1 | 22-23 | 2050 | 1 | 0.0022 | 0.1295 | 0.2135 | 0.006 | 0.002 | 0.0002 | 0.01 |
| 24 | 1 | 23-24 | 2051 | 1 | 0.0022 | 0.1295 | 0.2135 | 0.006 | 0.002 | 0.0002 | 0.01 |
| 25 | 1 | 24-25 | 2052 | 1 | 0.0022 | 0.1295 | 0.2135 | 0.006 | 0.002 | 0.0002 | 0.01 |
| 26 | 1 | 25-26 | 2053 | 1 | 0.0022 | 0.1295 | 0.2135 | 0.006 | 0.002 | 0.0002 | 0.01 |
| 27 | 1 | 26-27 | 2054 | 1 | 0.0022 | 0.1295 | 0.2135 | 0.006 | 0.002 | 0.0002 | 0.01 |
| 28 | 1 | 27-28 | 2055 | 1 | 0.0022 | 0.1295 | 0.2135 | 0.006 | 0.002 | 0.0002 | 0.01 |
| 29 | 1 | 28-29 | 2056 | 1 | 0.0022 | 0.1295 | 0.2135 | 0.006 | 0.002 | 0.0002 | 0.01 |
| 30 | 1 | 29-30 | 2057 | 1 | 0.0022 | 0.1295 | 0.2135 | 0.006 | 0.002 | 0.0002 | 0.01 |
| **Total Increased Cancer Risk** | | | | | | | | 1.66 | 0.550 | 0.053 | **2.26** |

| Maximum Hazard Index | Maximum Fugitive PM2.5 | Total PM2.5 |
|---|---|---|
| 0.0004 | 0.16 | 0.17 |

* Third trimester of pregnancy

**1207 N. Capitol Ave, San Jose, CA - N. Capitol Ave Cancer Risk & PM2.5**
**Impacts at On-Site 2nd Floor Receptors - 5.5m receptor heights**
**30 Year Residential Exposure**

### Cancer Risk Calculation Method

Cancer Risk (per million) = CPF x Inhalation Dose x ASF x ED/AT x FAH x 1.0E6

Where: CPF = Cancer potency factor $(mg/kg\text{-}day)^{-1}$
ASF = Age sensitivity factor for specified age group
ED = Exposure duration (years)
AT = Averaging time for lifetime cancer risk (years)
FAH = Fraction of time spent at home (unitless)

Inhalation Dose = $C_{air}$ x DBR x A x (EF/365) x $10^{-6}$

Where: $C_{air}$ = concentration in air $(\mu g/m^3)$
DBR = daily breathing rate (L/kg body weight-day)
A = Inhalation absorption factor
EF = Exposure frequency (days/year)
$10^{-6}$ = Conversion factor

**Cancer Potency Factors $(mg/kg\text{-}day)^{-1}$**

| TAC | CPF |
|---|---|
| DPM | 1.10E+00 |
| Vehicle TOG Exhaust | 6.28E-03 |
| Vehicle TOG Evaporative | 3.70E-04 |

**Values**

| | Infant/Child | | | Adult |
|---|---|---|---|---|
| Age --> | 3rd Trimester | 0 - 2 | 2 - 16 | 16 - 30 |
| Parameter | | | | |
| ASF = | 10 | 10 | 3 | 1 |
| DBR* = | 361 | 1090 | 572 | 261 |
| A = | 1 | 1 | 1 | 1 |
| EF = | 350 | 350 | 350 | 350 |
| AT = | 70 | 70 | 70 | 70 |
| FAH = | 1.00 | 1.00 | 1.00 | 0.73 |

* 95th percentile breathing rates for infants and 80th percentile for children and adults

### Construction Cancer Risk by Year - Maximum Impact Receptor Location

| Maximum - Exposure Information | | | | | Concentration (ug/m3) | | | Cancer Risk (per million) | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Exposure Year | Exposure Duration (years) | Age | Year | Age Sensitivity Factor | DPM | Exhaust TOG | Evaporative TOG | DPM | Exhaust TOG | Evaporative TOG | TOTAL |
| 0 | 0.25 | -0.25 - 0* | 2028 | 10 | 0.0018 | 0.0773 | 0.1274 | 0.024 | 0.006 | 0.0006 | 0.03 |
| 1 | 1 | 0 - 1 | 2028 | 10 | 0.0018 | 0.0773 | 0.1274 | 0.291 | 0.073 | 0.0070 | 0.37 |
| 2 | 1 | 1 - 2 | 2029 | 10 | 0.0018 | 0.0773 | 0.1274 | 0.291 | 0.073 | 0.0070 | 0.37 |
| 3 | 1 | 2 - 3 | 2030 | 3 | 0.0018 | 0.0773 | 0.1274 | 0.046 | 0.011 | 0.0011 | 0.06 |
| 4 | 1 | 3 - 4 | 2031 | 3 | 0.0018 | 0.0773 | 0.1274 | 0.046 | 0.011 | 0.0011 | 0.06 |
| 5 | 1 | 4 - 5 | 2032 | 3 | 0.0018 | 0.0773 | 0.1274 | 0.046 | 0.011 | 0.0011 | 0.06 |
| 6 | 1 | 5 - 6 | 2033 | 3 | 0.0018 | 0.0773 | 0.1274 | 0.046 | 0.011 | 0.0011 | 0.06 |
| 7 | 1 | 6 - 7 | 2034 | 3 | 0.0018 | 0.0773 | 0.1274 | 0.046 | 0.011 | 0.0011 | 0.06 |
| 8 | 1 | 7 - 8 | 2035 | 3 | 0.0018 | 0.0773 | 0.1274 | 0.046 | 0.011 | 0.0011 | 0.06 |
| 9 | 1 | 8 - 9 | 2036 | 3 | 0.0018 | 0.0773 | 0.1274 | 0.046 | 0.011 | 0.0011 | 0.06 |
| 10 | 1 | 9 - 10 | 2037 | 3 | 0.0018 | 0.0773 | 0.1274 | 0.046 | 0.011 | 0.0011 | 0.06 |
| 11 | 1 | 10 - 11 | 2038 | 3 | 0.0018 | 0.0773 | 0.1274 | 0.046 | 0.011 | 0.0011 | 0.06 |
| 12 | 1 | 11 - 12 | 2039 | 3 | 0.0018 | 0.0773 | 0.1274 | 0.046 | 0.011 | 0.0011 | 0.06 |
| 13 | 1 | 12 - 13 | 2040 | 3 | 0.0018 | 0.0773 | 0.1274 | 0.046 | 0.011 | 0.0011 | 0.06 |
| 14 | 1 | 13 - 14 | 2041 | 3 | 0.0018 | 0.0773 | 0.1274 | 0.046 | 0.011 | 0.0011 | 0.06 |
| 15 | 1 | 14 - 15 | 2042 | 3 | 0.0018 | 0.0773 | 0.1274 | 0.046 | 0.011 | 0.0011 | 0.06 |
| 16 | 1 | 15 - 16 | 2043 | 3 | 0.0018 | 0.0773 | 0.1274 | 0.046 | 0.011 | 0.0011 | 0.06 |
| 17 | 1 | 16-17 | 2044 | 1 | 0.0018 | 0.0773 | 0.1274 | 0.005 | 0.001 | 0.0001 | 0.01 |
| 18 | 1 | 17-18 | 2045 | 1 | 0.0018 | 0.0773 | 0.1274 | 0.005 | 0.001 | 0.0001 | 0.01 |
| 19 | 1 | 18-19 | 2046 | 1 | 0.0018 | 0.0773 | 0.1274 | 0.005 | 0.001 | 0.0001 | 0.01 |
| 20 | 1 | 19-20 | 2047 | 1 | 0.0018 | 0.0773 | 0.1274 | 0.005 | 0.001 | 0.0001 | 0.01 |
| 21 | 1 | 20-21 | 2048 | 1 | 0.0018 | 0.0773 | 0.1274 | 0.005 | 0.001 | 0.0001 | 0.01 |
| 22 | 1 | 21-22 | 2049 | 1 | 0.0018 | 0.0773 | 0.1274 | 0.005 | 0.001 | 0.0001 | 0.01 |
| 23 | 1 | 22-23 | 2050 | 1 | 0.0018 | 0.0773 | 0.1274 | 0.005 | 0.001 | 0.0001 | 0.01 |
| 24 | 1 | 23-24 | 2051 | 1 | 0.0018 | 0.0773 | 0.1274 | 0.005 | 0.001 | 0.0001 | 0.01 |
| 25 | 1 | 24-25 | 2052 | 1 | 0.0018 | 0.0773 | 0.1274 | 0.005 | 0.001 | 0.0001 | 0.01 |
| 26 | 1 | 25-26 | 2053 | 1 | 0.0018 | 0.0773 | 0.1274 | 0.005 | 0.001 | 0.0001 | 0.01 |
| 27 | 1 | 26-27 | 2054 | 1 | 0.0018 | 0.0773 | 0.1274 | 0.005 | 0.001 | 0.0001 | 0.01 |
| 28 | 1 | 27-28 | 2055 | 1 | 0.0018 | 0.0773 | 0.1274 | 0.005 | 0.001 | 0.0001 | 0.01 |
| 29 | 1 | 28-29 | 2056 | 1 | 0.0018 | 0.0773 | 0.1274 | 0.005 | 0.001 | 0.0001 | 0.01 |
| 30 | 1 | 29-30 | 2057 | 1 | 0.0018 | 0.0773 | 0.1274 | 0.005 | 0.001 | 0.0001 | 0.01 |
| **Total Increased Cancer Risk** | | | | | | | | 1.32 | 0.329 | 0.032 | **1.68** |

| Maximum Hazard Index | Maximum Fugitive PM2.5 | Total PM2.5 |
|---|---|---|
| 0.0004 | 0.09 | 0.10 |

* Third trimester of pregnancy

# Berryessa Road 2028 Traffic Emissions and Health Risk Calculations

**Analysis Year =** ***2028***

| Vehicle Type | 2025 Caltrans Vehicles (veh/day) | 2028 Vehicles (veh/day) |
|---|---|---|
| Truck 1 (MDT) | 526 | 541 |
| Truck 2 (HDT) | 556 | 573 |
| Non-Truck | 29,833 | 30,728 |
| **All** | **30,915** | **31,842** |

| | |
|---|---|
| Increase From 2025 | 1.03 |
| **Vehicles/Direction** | **15,921** |
| Avg Vehicles/Hour/Direction | 663 |

**Traffic Data Year =** ***2025***

| ***Project Traffic Analysis*** ***Background Plus Project*** | AADT Total |
|---|---|
| N. Captol Ave & Berryessa Road | 30,915 |
| | |

Percent of Total Vehicles

Traffic Increase per Year (%) = *1.00%*

**1207 N Capitol Ave Daycare, San Jose, CA - Roadway Modeling Emissions**
**Berryessa Road Traffic**
**DPM Modeling - Roadway Links, Traffic Volumes, and DPM Emissions**
**Year = 2028**

| | | | | | | | | | | | Line Area | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Road Link | Description | Direction | No. Lanes | Link Length (m) | Link Length (mi) | Link Width (m) | Link Width (ft) | Release Height ( m) | Average Speed (mph) | Average Vehicles per Day | Area (sq m) | Emission (g/s/m2) | Initial Vertical height (m) | (Sigma z) Initial Vertical Dimension |
| DPM_BERRY | Berryessa Road | SW-NE | 2 | 713 | 0.44 | 13.3 | 43.7 | 3.4 | 30 | 31,842 | 9,500 | 5.572E-09 | 6.8 | 3.16 |
| | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | |

**Emission Factors - DPM**

| | | | | |
|---|---|---|---|---|
| **Speed Category** | 1 | 2 | 3 | 4 |
| **Travel Speed (mph)** | 30 | | | |
| **Emissions per Vehicle (g/VMT)** | 0.00032 | | | |

Emisson Factors from CT-EMFAC2021

**2028 Hourly Traffic Volumes and DPM Emissions - DPM_BERRY**

| Hour | % Per Hour | VPH | g/s | Hour | % Per Hour | VPH | g/s | Hour | % Per Hour | VPH | g/s |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 3.96% | 1261 | 5.03E-05 | 9 | 6.46% | 2056 | 8.20E-05 | 17 | 5.61% | 1786 | 7.13E-05 |
| 2 | 2.66% | 846 | 3.38E-05 | 10 | 7.36% | 2344 | 9.35E-05 | 18 | 3.24% | 1033 | 4.12E-05 |
| 3 | 2.88% | 919 | 3.66E-05 | 11 | 6.40% | 2038 | 8.13E-05 | 19 | 2.22% | 705 | 2.81E-05 |
| 4 | 3.28% | 1045 | 4.17E-05 | 12 | 6.97% | 2218 | 8.85E-05 | 20 | 0.86% | 273 | 1.09E-05 |
| 5 | 2.09% | 666 | 2.66E-05 | 13 | 6.23% | 1984 | 7.92E-05 | 21 | 3.06% | 976 | 3.89E-05 |
| 6 | 3.34% | 1063 | 4.24E-05 | 14 | 6.17% | 1966 | 7.84E-05 | 22 | 4.25% | 1354 | 5.40E-05 |
| 7 | 6.06% | 1930 | 7.70E-05 | 15 | 5.10% | 1624 | 6.48E-05 | 23 | 2.55% | 810 | 3.23E-05 |
| 8 | 4.54% | 1447 | 5.77E-05 | 16 | 3.86% | 1228 | 4.90E-05 | 24 | 0.85% | 270 | 1.08E-05 |
| | | | | | | | | Total | | 31,842 | |

**1207 N Capitol Ave Daycare, San Jose, CA - Roadway Modeling Emissions**
**Berryessa Road Traffic**
**PM2.5 Modeling - Roadway Links, Traffic Volumes, and PM2.5 Emissions**
**Year = 2028**

| | | | | | | | | | | | Line Area | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Road Link | Description | Direction | No. Lanes | Link Length (m) | Link Length (mi) | Link Width (m) | Link Width (ft) | Release Height ( m) | Average Speed (mph) | Average Vehicles per Day | Area (sq m) | Emission (g/s/m2) | Initial Vertical height (m) | (Sigma z) Initial Vertical Dimension |
| PM25_BERRY | Berryessa Road | SW-NE | 2 | 713 | 0.44 | 13.3 | 44 | 1.3 | 30 | 31,842 | 9,500 | 2.444E-08 | 2.6 | 1.21 |
| | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | |

**Emission Factors - PM2.5**

| Speed Category | 1 | 2 | 3 | 4 |
|---|---|---|---|---|
| Travel Speed (mph) | 30 | | | |
| Emissions per Vehicle (g/VMT) | 0.00142 | | | |

Emisson Factors from CT-EMFAC2021

**2028 Hourly Traffic Volumes and PM2.5 Emissions - PM25_BERRY**

| Hour | % Per Hour | VPH | g/s | Hour | % Per Hour | VPH | g/s | Hour | % Per Hour | VPH | g/s |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 1.15% | 366 | 6.40E-05 | 9 | 7.11% | 2265 | 3.96E-04 | 17 | 7.39% | 2354 | 4.12E-04 |
| 2 | 0.42% | 133 | 2.33E-05 | 10 | 4.39% | 1397 | 2.44E-04 | 18 | 8.18% | 2605 | 4.56E-04 |
| 3 | 0.40% | 129 | 2.26E-05 | 11 | 4.66% | 1485 | 2.60E-04 | 19 | 5.70% | 1815 | 3.18E-04 |
| 4 | 0.26% | 83 | 1.45E-05 | 12 | 5.89% | 1875 | 3.28E-04 | 20 | 4.27% | 1361 | 2.38E-04 |
| 5 | 0.49% | 157 | 2.74E-05 | 13 | 6.15% | 1959 | 3.43E-04 | 21 | 3.25% | 1036 | 1.81E-04 |
| 6 | 0.90% | 287 | 5.02E-05 | 14 | 6.04% | 1922 | 3.36E-04 | 22 | 3.30% | 1051 | 1.84E-04 |
| 7 | 3.79% | 1206 | 2.11E-04 | 15 | 7.01% | 2233 | 3.91E-04 | 23 | 2.46% | 784 | 1.37E-04 |
| 8 | 7.76% | 2471 | 4.32E-04 | 16 | 7.14% | 2274 | 3.98E-04 | 24 | 1.87% | 594 | 1.04E-04 |
| | | | | | | | | Total | | 31,842 | |

**1207 N Capitol Ave Daycare, San Jose, CA - Roadway Modeling Emissions**
**Berryessa Road Traffic**
**TOG Exhaust Modeling - Roadway Links, Traffic Volumes, and TOG Exhaust Emissions**
**Year = 2028**

| | | | | | | | | | | | Line Area | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Road Link | Description | Direction | No. Lanes | Link Length (m) | Link Length (mi) | Link Width (m) | Link Width (ft) | Release Height ( m) | Average Speed (mph) | Average Vehicles per Day | Area (sq m) | Emission (g/s/m2) | Initial Vertical height (m) | (Sigma z) Initial Vertical Dimensio |
| TEXH_BERRY | Berryessa Road | SW-NE | 2 | 713 | 0.44 | 13.3 | 44 | 1.3 | 30 | 31,842 | 9,500 | 3.240E-07 | 2.6 | 1.21 |
| | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | |

**Emission Factors - TOG Exhaust**

| Speed Category | 1 | 2 | 3 | 4 |
|---|---|---|---|---|
| Travel Speed (mph) | 30 | | | |
| All Vehicles TOG Emissions per Vehicle (g/VMT) | 0.02028 | | | |
| Diesel Vehicles TOG Emissions per Vehicle (g/VMT) | 0.00144 | | | |
| Gasoline Vehicles Emissions per Vehicle (g/VMT) | 0.01884 | | | |

Emisson Factors from CT-EMFAC2021

**2028 Hourly Traffic Volumes and TOG Exhaust Emissions - TEXH_BERRY**

| Hour | % Per Hour | VPH | g/s | Hour | % Per Hour | VPH | g/s | Hour | % Per Hour | VPH | g/s |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 1.15% | 366 | 8.49E-04 | 9 | 7.11% | 2265 | 5.25E-03 | 17 | 7.39% | 2354 | 5.46E-03 |
| 2 | 0.42% | 133 | 3.09E-04 | 10 | 4.39% | 1397 | 3.24E-03 | 18 | 8.18% | 2605 | 6.04E-03 |
| 3 | 0.40% | 129 | 2.99E-04 | 11 | 4.66% | 1485 | 3.44E-03 | 19 | 5.70% | 1815 | 4.21E-03 |
| 4 | 0.26% | 83 | 1.92E-04 | 12 | 5.89% | 1875 | 4.35E-03 | 20 | 4.27% | 1361 | 3.16E-03 |
| 5 | 0.49% | 157 | 3.63E-04 | 13 | 6.15% | 1959 | 4.54E-03 | 21 | 3.25% | 1036 | 2.40E-03 |
| 6 | 0.90% | 287 | 6.65E-04 | 14 | 6.04% | 1922 | 4.46E-03 | 22 | 3.30% | 1051 | 2.44E-03 |
| 7 | 3.79% | 1206 | 2.80E-03 | 15 | 7.01% | 2233 | 5.18E-03 | 23 | 2.46% | 784 | 1.82E-03 |
| 8 | 7.76% | 2471 | 5.73E-03 | 16 | 7.14% | 2274 | 5.28E-03 | 24 | 1.87% | 594 | 1.38E-03 |
| | | | | | | | | Total | | 31,842 | |

**1207 N Capitol Ave Daycare, San Jose, CA - Roadway Modeling Emissions**
**Berryessa Road Traffic**
**TOG Evaporative Emissions Modeling - Roadway Links, Traffic Volumes, and TOG Evaporative Emissions**
**Year = 2028**

| | | | | | | | | | | | Line Area | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Road Link | Description | Direction | No. Lanes | Link Length (m) | Link Length (mi) | Link Width (m) | Link Width (ft) | Release Height ( m) | Average Speed (mph) | Average Vehicles per Day | Area (sq m) | Emission (g/s/m2) | Initial Vertical height (m) | (Sigma z) Initial Vertical Dimensio |
| TEVAP_BERRY | Berryessa Road | SW-NE | 2 | 713 | 0.44 | 13.3 | 44 | 1.3 | 30 | 31,842 | 9,500 | 5.344E-07 | 2.6 | 1.21 |
| | | | | | | | | | | | | | | |

**Emission Factors - PM2.5 - Evaporative TOG**

| Speed Category | 1 | 2 | 3 | 4 |
|---|---|---|---|---|
| Travel Speed (mph) | 30 | 0 | 0 | 0 |
| Emissions per Vehicle per Hour (g/hour) | 0.93222 | | | |
| Emissions per Vehicle per Mile (g/VMT) | 0.03107 | | | |

Emisson Factors from CT-EMFAC2021

## 2028 Hourly Traffic Volumes and TOG Evaporative Emissions - TEVAP_BERRY

| Hour | % Per Hour | VPH | g/s | Hour | % Per Hour | VPH | g/s | Hour | % Per Hour | VPH | g/s |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 1.15% | 366 | 1.40E-03 | 9 | 7.11% | 2265 | 8.67E-03 | 17 | 7.39% | 2354 | 9.01E-03 |
| 2 | 0.42% | 133 | 5.09E-04 | 10 | 4.39% | 1397 | 5.35E-03 | 18 | 8.18% | 2605 | 9.97E-03 |
| 3 | 0.40% | 129 | 4.93E-04 | 11 | 4.66% | 1485 | 5.68E-03 | 19 | 5.70% | 1815 | 6.95E-03 |
| 4 | 0.26% | 83 | 3.17E-04 | 12 | 5.89% | 1875 | 7.17E-03 | 20 | 4.27% | 1361 | 5.21E-03 |
| 5 | 0.49% | 157 | 6.00E-04 | 13 | 6.15% | 1959 | 7.50E-03 | 21 | 3.25% | 1036 | 3.97E-03 |
| 6 | 0.90% | 287 | 1.10E-03 | 14 | 6.04% | 1922 | 7.36E-03 | 22 | 3.30% | 1051 | 4.02E-03 |
| 7 | 3.79% | 1206 | 4.62E-03 | 15 | 7.01% | 2233 | 8.55E-03 | 23 | 2.46% | 784 | 3.00E-03 |
| 8 | 7.76% | 2471 | 9.46E-03 | 16 | 7.14% | 2274 | 8.70E-03 | 24 | 1.87% | 594 | 2.27E-03 |
| | | | | | | | | Total | | 31,842 | |

**1207 N Capitol Ave Daycare, San Jose, CA - Roadway Modeling Emissions**
**Berryessa Road Traffic**
**Fugitive Road PM2.5 Modeling - Roadway Links, Traffic Volumes, and Fugitive Road PM2.5 Emissions**
**Year = 2028**

| | | | | | | | | | | | Line Area | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Road Link | Description | Direction | No. Lanes | Link Length (m) | Link Length (mi) | Link Width (m) | Link Width (ft) | Release Height ( m) | Average Speed (mph) | Average Vehicles per Day | Area (sq m) | Emission (g/s/m2) | Initial Vertical height (m) | (Sigma z) Initial Vertical Dimension |
| FUG_BERRY | Berryessa Road | SW-NE | 2 | 713 | 0.44 | 13.3 | 44 | 1.3 | 30 | 31,842 | 9,500 | 3.931E-07 | 2.6 | 1.21 |
| | | | | | | | | | | | | | | |

**Emission Factors - Fugitive PM2.5**

| Speed Category | 1 | 2 | 3 | 4 |
|---|---|---|---|---|
| Travel Speed (mph) | 30 | | | |
| Tire Wear - Emissions per Vehicle (g/VMT) | 0.00210 | | | |
| Brake Wear - Emissions per Vehicle (g/VMT) | 0.00545 | | | |
| Road Dust - Emissions per Vehicle (g/VMT) | 0.01530 | | | |
| Total Fugitive PM2.5 - Emissions per Vehicle (g/VMT) | 0.02286 | | | |

Emisson Factors from CT-EMFAC2021

## 2028 Hourly Traffic Volumes and Fugitive PM2.5 Emissions - FUG_BERRY

| Hour | % Per Hour | VPH | g/s | Hour | % Per Hour | VPH | g/s | Hour | % Per Hour | VPH | g/s |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 1.15% | 366 | 1.03E-03 | 9 | 7.11% | 2265 | 6.38E-03 | 17 | 7.39% | 2354 | 6.62E-03 |
| 2 | 0.42% | 133 | 3.74E-04 | 10 | 4.39% | 1397 | 3.93E-03 | 18 | 8.18% | 2605 | 7.33E-03 |
| 3 | 0.40% | 129 | 3.63E-04 | 11 | 4.66% | 1485 | 4.18E-03 | 19 | 5.70% | 1815 | 5.11E-03 |
| 4 | 0.26% | 83 | 2.33E-04 | 12 | 5.89% | 1875 | 5.28E-03 | 20 | 4.27% | 1361 | 3.83E-03 |
| 5 | 0.49% | 157 | 4.41E-04 | 13 | 6.15% | 1959 | 5.51E-03 | 21 | 3.25% | 1036 | 2.92E-03 |
| 6 | 0.90% | 287 | 8.07E-04 | 14 | 6.04% | 1922 | 5.41E-03 | 22 | 3.30% | 1051 | 2.96E-03 |
| 7 | 3.79% | 1206 | 3.39E-03 | 15 | 7.01% | 2233 | 6.29E-03 | 23 | 2.46% | 784 | 2.21E-03 |
| 8 | 7.76% | 2471 | 6.96E-03 | 16 | 7.14% | 2274 | 6.40E-03 | 24 | 1.87% | 594 | 1.67E-03 |
| | | | | | | | | Total | | 31,842 | |

**1207 N. Capitol Ave, San Jose, CA - Berryessa Road Traffic - TACs & PM2.5**
**AERMOD Risk Modeling Parameters and Maximum Concentrations**
**On-Site 1st (1.5m) and 2nd (5.5m) Floor Receptor Heights**

| | |
|---|---|
| **Emission Year** | 2028 |
| **Receptor Information** | Maximum On-Site Receptor |
| Number of Receptors | 32 |
| Receptor Height | 1st (1.5m) and 2nd (5.5m) Floors |
| Receptor Distances | At each residential unit |
| | |
| **Meteorological Conditions** | |
| BAQMD San Jose Airport Met Data | 2013-2017 |
| Land Use Classification | Urban |
| Wind Speed | Variable |
| Wind Direction | Variable |

## On-Site Cancer Risk Maximum Concentrations

| Meteorological Data Years | Concentration (µg/m3) | | | |
|---|---|---|---|---|
| | DPM | Exhaust TOG | Evaporative TOG | |
| 2013-2017 | 0.0005 | 0.0198 | 0.0327 | 1st Floor |
| 2013-2017 | 0.0005 | 0.0191 | 0.0316 | 2nd Floor |

## On-Site PM2.5 Maximum Concentrations

| Meteorological Data Years | PM2.5 Concentration (µg/m3) | | | |
|---|---|---|---|---|
| | Total PM2.5 | Fugitive PM2.5 | Vehicle PM2.5 | |
| 2013-2017 | 0.0255 | 0.0240 | 0.0015 | 1st Floor |
| 2013-2017 | 0.0246 | 0.0232 | 0.0014 | 2nd Floor |

**1207 N. Capitol Ave, San Jose, CA - Berryessa Road Cancer Risk & PM2.5**
**Impacts at On-Site 1st Floor Receptors - 1.5m receptor heights**
**30 Year Residential Exposure**

### Cancer Risk Calculation Method

Cancer Risk (per million) = CPF x Inhalation Dose x ASF x ED/AT x FAH x 1.0E6

Where: CPF = Cancer potency factor $(mg/kg\text{-}day)^{-1}$
ASF = Age sensitivity factor for specified age group
ED = Exposure duration (years)
AT = Averaging time for lifetime cancer risk (years)
FAH = Fraction of time spent at home (unitless)

Inhalation Dose = $C_{air}$ x DBR x A x (EF/365) x $10^{-6}$

Where: $C_{air}$ = concentration in air $(\mu g/m^3)$
DBR = daily breathing rate (L/kg body weight-day)
A = Inhalation absorption factor
EF = Exposure frequency (days/year)
$10^{-6}$ = Conversion factor

**Cancer Potency Factors $(mg/kg\text{-}day)^{-1}$**

| TAC | CPF |
|---|---|
| DPM | 1.10E+00 |
| Vehicle TOG Exhaust | 6.28E-03 |
| Vehicle TOG Evaporative | 3.70E-04 |

**Values**

| | Infant/Child | | | Adult |
|---|---|---|---|---|
| Age --> | 3rd Trimester | 0 - 2 | 2 - 16 | 16 - 30 |
| Parameter | | | | |
| ASF = | 10 | 10 | 3 | 1 |
| DBR* = | 361 | 1090 | 572 | 261 |
| A = | 1 | 1 | 1 | 1 |
| EF = | 350 | 350 | 350 | 350 |
| AT = | 70 | 70 | 70 | 70 |
| FAH = | 1.00 | 1.00 | 1.00 | 0.73 |

* 95th percentile breathing rates for infants and 80th percentile for children and adults

### Construction Cancer Risk by Year - Maximum Impact Receptor Location

| Maximum - Exposure Information | | | | | Concentration (ug/m3) | | | Cancer Risk (per million) | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Exposure Year | Exposure Duration (years) | Age | Year | Age Sensitivity Factor | DPM | Exhaust TOG | Evaporative TOG | DPM | Exhaust TOG | Evaporative TOG | TOTAL |
| 0 | 0.25 | -0.25 - 0* | 2028 | 10 | 0.0005 | 0.0198 | 0.0327 | 0.007 | 0.002 | 0.0001 | 0.01 |
| 1 | 1 | 0 - 1 | 2028 | 10 | 0.0005 | 0.0198 | 0.0327 | 0.080 | 0.019 | 0.0018 | 0.10 |
| 2 | 1 | 1 - 2 | 2029 | 10 | 0.0005 | 0.0198 | 0.0327 | 0.080 | 0.019 | 0.0018 | 0.10 |
| 3 | 1 | 2 - 3 | 2030 | 3 | 0.0005 | 0.0198 | 0.0327 | 0.013 | 0.003 | 0.0003 | 0.02 |
| 4 | 1 | 3 - 4 | 2031 | 3 | 0.0005 | 0.0198 | 0.0327 | 0.013 | 0.003 | 0.0003 | 0.02 |
| 5 | 1 | 4 - 5 | 2032 | 3 | 0.0005 | 0.0198 | 0.0327 | 0.013 | 0.003 | 0.0003 | 0.02 |
| 6 | 1 | 5 - 6 | 2033 | 3 | 0.0005 | 0.0198 | 0.0327 | 0.013 | 0.003 | 0.0003 | 0.02 |
| 7 | 1 | 6 - 7 | 2034 | 3 | 0.0005 | 0.0198 | 0.0327 | 0.013 | 0.003 | 0.0003 | 0.02 |
| 8 | 1 | 7 - 8 | 2035 | 3 | 0.0005 | 0.0198 | 0.0327 | 0.013 | 0.003 | 0.0003 | 0.02 |
| 9 | 1 | 8 - 9 | 2036 | 3 | 0.0005 | 0.0198 | 0.0327 | 0.013 | 0.003 | 0.0003 | 0.02 |
| 10 | 1 | 9 - 10 | 2037 | 3 | 0.0005 | 0.0198 | 0.0327 | 0.013 | 0.003 | 0.0003 | 0.02 |
| 11 | 1 | 10 - 11 | 2038 | 3 | 0.0005 | 0.0198 | 0.0327 | 0.013 | 0.003 | 0.0003 | 0.02 |
| 12 | 1 | 11 - 12 | 2039 | 3 | 0.0005 | 0.0198 | 0.0327 | 0.013 | 0.003 | 0.0003 | 0.02 |
| 13 | 1 | 12 - 13 | 2040 | 3 | 0.0005 | 0.0198 | 0.0327 | 0.013 | 0.003 | 0.0003 | 0.02 |
| 14 | 1 | 13 - 14 | 2041 | 3 | 0.0005 | 0.0198 | 0.0327 | 0.013 | 0.003 | 0.0003 | 0.02 |
| 15 | 1 | 14 - 15 | 2042 | 3 | 0.0005 | 0.0198 | 0.0327 | 0.013 | 0.003 | 0.0003 | 0.02 |
| 16 | 1 | 15 - 16 | 2043 | 3 | 0.0005 | 0.0198 | 0.0327 | 0.013 | 0.003 | 0.0003 | 0.02 |
| 17 | 1 | 16-17 | 2044 | 1 | 0.0005 | 0.0198 | 0.0327 | 0.001 | 0.000 | 0.0000 | 0.00 |
| 18 | 1 | 17-18 | 2045 | 1 | 0.0005 | 0.0198 | 0.0327 | 0.001 | 0.000 | 0.0000 | 0.00 |
| 19 | 1 | 18-19 | 2046 | 1 | 0.0005 | 0.0198 | 0.0327 | 0.001 | 0.000 | 0.0000 | 0.00 |
| 20 | 1 | 19-20 | 2047 | 1 | 0.0005 | 0.0198 | 0.0327 | 0.001 | 0.000 | 0.0000 | 0.00 |
| 21 | 1 | 20-21 | 2048 | 1 | 0.0005 | 0.0198 | 0.0327 | 0.001 | 0.000 | 0.0000 | 0.00 |
| 22 | 1 | 21-22 | 2049 | 1 | 0.0005 | 0.0198 | 0.0327 | 0.001 | 0.000 | 0.0000 | 0.00 |
| 23 | 1 | 22-23 | 2050 | 1 | 0.0005 | 0.0198 | 0.0327 | 0.001 | 0.000 | 0.0000 | 0.00 |
| 24 | 1 | 23-24 | 2051 | 1 | 0.0005 | 0.0198 | 0.0327 | 0.001 | 0.000 | 0.0000 | 0.00 |
| 25 | 1 | 24-25 | 2052 | 1 | 0.0005 | 0.0198 | 0.0327 | 0.001 | 0.000 | 0.0000 | 0.00 |
| 26 | 1 | 25-26 | 2053 | 1 | 0.0005 | 0.0198 | 0.0327 | 0.001 | 0.000 | 0.0000 | 0.00 |
| 27 | 1 | 26-27 | 2054 | 1 | 0.0005 | 0.0198 | 0.0327 | 0.001 | 0.000 | 0.0000 | 0.00 |
| 28 | 1 | 27-28 | 2055 | 1 | 0.0005 | 0.0198 | 0.0327 | 0.001 | 0.000 | 0.0000 | 0.00 |
| 29 | 1 | 28-29 | 2056 | 1 | 0.0005 | 0.0198 | 0.0327 | 0.001 | 0.000 | 0.0000 | 0.00 |
| 30 | 1 | 29-30 | 2057 | 1 | 0.0005 | 0.0198 | 0.0327 | 0.001 | 0.000 | 0.0000 | 0.00 |
| **Total Increased Cancer Risk** | | | | | | | | 0.36 | 0.084 | 0.008 | **0.46** |

| Maximum Hazard Index | Maximum Fugitive PM2.5 | Total PM2.5 |
|---|---|---|
| 0.0001 | 0.02 | 0.03 |

* Third trimester of pregnancy

**1207 N. Capitol Ave, San Jose, CA - Berryessa Road Cancer Risk & PM2.5**
**Impacts at On-Site 2nd Floor Receptors - 5.5m receptor heights**
**30 Year Residential Exposure**

### Cancer Risk Calculation Method

Cancer Risk (per million) = CPF x Inhalation Dose x ASF x ED/AT x FAH x 1.0E6

Where: CPF = Cancer potency factor $(mg/kg\text{-}day)^{-1}$
ASF = Age sensitivity factor for specified age group
ED = Exposure duration (years)
AT = Averaging time for lifetime cancer risk (years)
FAH = Fraction of time spent at home (unitless)

Inhalation Dose = $C_{air}$ x DBR x A x (EF/365) x $10^{-6}$

Where: $C_{air}$ = concentration in air $(\mu g/m^3)$
DBR = daily breathing rate (L/kg body weight-day)
A = Inhalation absorption factor
EF = Exposure frequency (days/year)
$10^{-6}$ = Conversion factor

**Cancer Potency Factors $(mg/kg\text{-}day)^{-1}$**

| TAC | CPF |
|---|---|
| DPM | 1.10E+00 |
| Vehicle TOG Exhaust | 6.28E-03 |
| Vehicle TOG Evaporative | 3.70E-04 |

**Values**

| | Infant/Child | | | Adult |
|---|---|---|---|---|
| Age --> | 3rd Trimester | 0 - 2 | 2 - 16 | 16 - 30 |
| Parameter | | | | |
| ASF = | 10 | 10 | 3 | 1 |
| DBR* = | 361 | 1090 | 572 | 261 |
| A = | 1 | 1 | 1 | 1 |
| EF = | 350 | 350 | 350 | 350 |
| AT = | 70 | 70 | 70 | 70 |
| FAH = | 1.00 | 1.00 | 1.00 | 0.73 |

* 95th percentile breathing rates for infants and 80th percentile for children and adults

### Construction Cancer Risk by Year - Maximum Impact Receptor Location

| Maximum - Exposure Information | | | | | Concentration (ug/m3) | | | Cancer Risk (per million) | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Exposure Year | Exposure Duration (years) | Age | Year | Age Sensitivity Factor | DPM | Exhaust TOG | Evaporative TOG | DPM | Exhaust TOG | Evaporative TOG | TOTAL |
| 0 | 0.25 | -0.25 - 0* | 2028 | 10 | 0.0005 | 0.0191 | 0.0316 | 0.007 | 0.001 | 0.0001 | 0.01 |
| 1 | 1 | 0 - 1 | 2028 | 10 | 0.0005 | 0.0191 | 0.0316 | 0.080 | 0.018 | 0.0017 | 0.10 |
| 2 | 1 | 1 - 2 | 2029 | 10 | 0.0005 | 0.0191 | 0.0316 | 0.080 | 0.018 | 0.0017 | 0.10 |
| 3 | 1 | 2 - 3 | 2030 | 3 | 0.0005 | 0.0191 | 0.0316 | 0.013 | 0.003 | 0.0003 | 0.02 |
| 4 | 1 | 3 - 4 | 2031 | 3 | 0.0005 | 0.0191 | 0.0316 | 0.013 | 0.003 | 0.0003 | 0.02 |
| 5 | 1 | 4 - 5 | 2032 | 3 | 0.0005 | 0.0191 | 0.0316 | 0.013 | 0.003 | 0.0003 | 0.02 |
| 6 | 1 | 5 - 6 | 2033 | 3 | 0.0005 | 0.0191 | 0.0316 | 0.013 | 0.003 | 0.0003 | 0.02 |
| 7 | 1 | 6 - 7 | 2034 | 3 | 0.0005 | 0.0191 | 0.0316 | 0.013 | 0.003 | 0.0003 | 0.02 |
| 8 | 1 | 7 - 8 | 2035 | 3 | 0.0005 | 0.0191 | 0.0316 | 0.013 | 0.003 | 0.0003 | 0.02 |
| 9 | 1 | 8 - 9 | 2036 | 3 | 0.0005 | 0.0191 | 0.0316 | 0.013 | 0.003 | 0.0003 | 0.02 |
| 10 | 1 | 9 - 10 | 2037 | 3 | 0.0005 | 0.0191 | 0.0316 | 0.013 | 0.003 | 0.0003 | 0.02 |
| 11 | 1 | 10 - 11 | 2038 | 3 | 0.0005 | 0.0191 | 0.0316 | 0.013 | 0.003 | 0.0003 | 0.02 |
| 12 | 1 | 11 - 12 | 2039 | 3 | 0.0005 | 0.0191 | 0.0316 | 0.013 | 0.003 | 0.0003 | 0.02 |
| 13 | 1 | 12 - 13 | 2040 | 3 | 0.0005 | 0.0191 | 0.0316 | 0.013 | 0.003 | 0.0003 | 0.02 |
| 14 | 1 | 13 - 14 | 2041 | 3 | 0.0005 | 0.0191 | 0.0316 | 0.013 | 0.003 | 0.0003 | 0.02 |
| 15 | 1 | 14 - 15 | 2042 | 3 | 0.0005 | 0.0191 | 0.0316 | 0.013 | 0.003 | 0.0003 | 0.02 |
| 16 | 1 | 15 - 16 | 2043 | 3 | 0.0005 | 0.0191 | 0.0316 | 0.013 | 0.003 | 0.0003 | 0.02 |
| 17 | 1 | 16-17 | 2044 | 1 | 0.0005 | 0.0191 | 0.0316 | 0.001 | 0.000 | 0.0000 | 0.00 |
| 18 | 1 | 17-18 | 2045 | 1 | 0.0005 | 0.0191 | 0.0316 | 0.001 | 0.000 | 0.0000 | 0.00 |
| 19 | 1 | 18-19 | 2046 | 1 | 0.0005 | 0.0191 | 0.0316 | 0.001 | 0.000 | 0.0000 | 0.00 |
| 20 | 1 | 19-20 | 2047 | 1 | 0.0005 | 0.0191 | 0.0316 | 0.001 | 0.000 | 0.0000 | 0.00 |
| 21 | 1 | 20-21 | 2048 | 1 | 0.0005 | 0.0191 | 0.0316 | 0.001 | 0.000 | 0.0000 | 0.00 |
| 22 | 1 | 21-22 | 2049 | 1 | 0.0005 | 0.0191 | 0.0316 | 0.001 | 0.000 | 0.0000 | 0.00 |
| 23 | 1 | 22-23 | 2050 | 1 | 0.0005 | 0.0191 | 0.0316 | 0.001 | 0.000 | 0.0000 | 0.00 |
| 24 | 1 | 23-24 | 2051 | 1 | 0.0005 | 0.0191 | 0.0316 | 0.001 | 0.000 | 0.0000 | 0.00 |
| 25 | 1 | 24-25 | 2052 | 1 | 0.0005 | 0.0191 | 0.0316 | 0.001 | 0.000 | 0.0000 | 0.00 |
| 26 | 1 | 25-26 | 2053 | 1 | 0.0005 | 0.0191 | 0.0316 | 0.001 | 0.000 | 0.0000 | 0.00 |
| 27 | 1 | 26-27 | 2054 | 1 | 0.0005 | 0.0191 | 0.0316 | 0.001 | 0.000 | 0.0000 | 0.00 |
| 28 | 1 | 27-28 | 2055 | 1 | 0.0005 | 0.0191 | 0.0316 | 0.001 | 0.000 | 0.0000 | 0.00 |
| 29 | 1 | 28-29 | 2056 | 1 | 0.0005 | 0.0191 | 0.0316 | 0.001 | 0.000 | 0.0000 | 0.00 |
| 30 | 1 | 29-30 | 2057 | 1 | 0.0005 | 0.0191 | 0.0316 | 0.001 | 0.000 | 0.0000 | 0.00 |
| **Total Increased Cancer Risk** | | | | | | | | 0.36 | 0.081 | 0.008 | **0.45** |

| Maximum Hazard Index | Maximum Fugitive PM2.5 | Total PM2.5 |
|---|---|---|
| 0.0001 | 0.02 | 0.02 |

* Third trimester of pregnancy

# 2022 CARB & CAPCOA Gasoline Service Station Industrywide Risk Assessment Look-up Tool
## Version 1.0 - February 18, 2022

| Required Value | User Defined Input | Instructions |
|---|---|---|
| Annual Throughput (gallons/year) | 7600000 | Enter your gas station's annual throughput in gallons of gasoline dispensed per year. |
| Hourly Dispensing Throughput (gallons/hour) | 2000 | The tool will calculate the maximum hourly vehicle fueling throughput based on annual throughput as defined by Table 10 of the 2020 Gasoline Service Station Industrywide Risk Assessment Technical Guidance Document (Technical Guidance). If a different value is desired please enter it into cell L4. |
| Hourly Loading Throughput (gallons/hour) | 8800 | The tool will calculate the maximum hourly loading throughput based on annual throughput as defined by Table 10 of the Technical Guidance. If a different value is desired please enter it into cell L5. |
| Meteorological Data | San Jose | Select appropriate meteorological data. Met sets provided include 2 rural (Redding and Lancaster) and 4 urban (Fresno, Ontario, San Diego, and San Jose) locations. Use whichever best correlates to your location. If you would like to use site-specific meteorological data please refer to the Variable Met Tool. |
| Distance to Nearest Resident (meters) | 275 | Enter the distance to the nearest residential receptor in meters as measured from the edge of the station canopy. Please note that the value must be between 10 and 1000 meters. The distance you input will round down to the nearest receptor distance used in the Technical Guidance (e.g., 19m will return value at 10m distance). |
| Distance to Nearest Business (meters) | 275 | Enter the distance to the nearest worker receptor in meters as measured from the edge of the station canopy. Please note that the value must be between 10 and 1000 meters. The distance you input will round down to the nearest receptor distance used in the Technical Guidance (e.g., 19m will return value at 10m distance). |
| Distance to Acute Receptor (meters) | 275 | Enter the distance where acute impacts are expected in meters as measured from the edge of the station canopy. This can be the distance to the property boundary, nearest resident, nearest worker, or any other user defined location. Please note that the value must be between 10 and 1000 meters. The distance you input will round down to the nearest receptor distance used in the Technical Guidance (e.g., 19m will return value at 10m distance). |
| Control Scenario | EVR Phase I & EVR Phase II | Select the appropriate control scenario for your gas station. Please refer to technical Guidance for an explanation of the different control scenarios. Almost all gas stations in California are equipped with EVR Phase I and EVR Phase II controls. |
| Include Building Downwash Adjustments | yes | Building downwash may over estimate risk results. High results should be investigated further through site-specific health risk assessment. |

| Risk Value | Results |
|---|---|
| Max Residential Cancer Risk (chances/million) | 0.91 |
| Max Worker Cancer Risk (chances/million) | 0.07 |
| Chronic HI | 0.00 |
| Acute HI | 0.05 |

# 2022 CARB & CAPCOA Gasoline Service Station Industrywide Risk Assessment Look-up Tool
## Version 1.0 - February 18, 2022

| Required Value | User Defined Input | Instructions |
|---|---|---|
| Annual Throughput (gallons/year) | 2400000 | Enter your gas station's annual throughput in gallons of gasoline dispensed per year. |
| Hourly Dispensing Throughput (gallons/hour) | 700 | The tool will calculate the maximum hourly vehicle fueling throughput based on annual throughput as defined by Table 10 of the 2020 Gasoline Service Station Industrywide Risk Assessment Technical Guidance Document (Technical Guidance). If a different value is desired please enter it into cell L4. |
| Hourly Loading Throughput (gallons/hour) | 8800 | The tool will calculate the maximum hourly loading throughput based on annual throughput as defined by Table 10 of the Technical Guidance. If a different value is desired please enter it into cell L5. |
| Meteorological Data | San Jose | Select appropriate meteorological data. Met sets provided include 2 rural (Redding and Lancaster) and 4 urban (Fresno, Ontario, San Diego, and San Jose) locations. Use whichever best correlates to your location. If you would like to use site-specific meteorological data please refer to the Variable Met Tool. |
| Distance to Nearest Resident (meters) | 365 | Enter the distance to the nearest residential receptor in meters as measured from the edge of the station canopy. Please note that the value must be between 10 and 1000 meters. The distance you input will round down to the nearest receptor distance used in the Technical Guidance (e.g., 19m will return value at 10m distance). |
| Distance to Nearest Business (meters) | 365 | Enter the distance to the nearest worker receptor in meters as measured from the edge of the station canopy. Please note that the value must be between 10 and 1000 meters. The distance you input will round down to the nearest receptor distance used in the Technical Guidance (e.g., 19m will return value at 10m distance). |
| Distance to Acute Receptor (meters) | 365 | Enter the distance where acute impacts are expected in meters as measured from the edge of the station canopy. This can be the distance to the property boundary, nearest resident, nearest worker, or any other user defined location. Please note that the value must be between 10 and 1000 meters. The distance you input will round down to the nearest receptor distance used in the Technical Guidance (e.g., 19m will return value at 10m distance). |
| Control Scenario | EVR Phase I & EVR Phase II | Select the appropriate control scenario for your gas station. Please refer to technical Guidance for an explanation of the different control scenarios. Almost all gas stations in California are equipped with EVR Phase I and EVR Phase II controls. |
| Include Building Downwash Adjustments | yes | Building downwash may over estimate risk results. High results should be investigated further through site-specific health risk assessment. |

| Risk Value | Results |
|---|---|
| Max Residential Cancer Risk (chances/million) | 0.16 |
| Max Worker Cancer Risk (chances/million) | 0.01 |
| Chronic HI | 0.00 |
| Acute HI | 0.01 |

# 2022 CARB & CAPCOA Gasoline Service Station Industrywide Risk Assessment Look-up Tool
## Version 1.0 - February 18, 2022

| Required Value | User Defined Input | Instructions |
|---|---|---|
| Annual Throughput (gallons/year) | 8410000 | Enter your gas station's annual throughput in gallons of gasoline dispensed per year. |
| Hourly Dispensing Throughput (gallons/hour) | 2000 | The tool will calculate the maximum hourly vehicle fueling throughput based on annual throughput as defined by Table 10 of the 2020 Gasoline Service Station Industrywide Risk Assessment Technical Guidance Document (Technical Guidance). If a different value is desired please enter it into cell L4. |
| Hourly Loading Throughput (gallons/hour) | 8800 | The tool will calculate the maximum hourly loading throughput based on annual throughput as defined by Table 10 of the Technical Guidance. If a different value is desired please enter it into cell L5. |
| Meteorological Data | San Jose | Select appropriate meteorological data. Met sets provided include 2 rural (Redding and Lancaster) and 4 urban (Fresno, Ontario, San Diego, and San Jose) locations. Use whichever best correlates to your location. If you would like to use site-specific meteorological data please refer to the Variable Met Tool. |
| Distance to Nearest Resident (meters) | 370 | Enter the distance to the nearest residential receptor in meters as measured from the edge of the station canopy. Please note that the value must be between 10 and 1000 meters. The distance you input will round down to the nearest receptor distance used in the Technical Guidance (e.g., 19m will return value at 10m distance). |
| Distance to Nearest Business (meters) | 370 | Enter the distance to the nearest worker receptor in meters as measured from the edge of the station canopy. Please note that the value must be between 10 and 1000 meters. The distance you input will round down to the nearest receptor distance used in the Technical Guidance (e.g., 19m will return value at 10m distance). |
| Distance to Acute Receptor (meters) | 370 | Enter the distance where acute impacts are expected in meters as measured from the edge of the station canopy. This can be the distance to the property boundary, nearest resident, nearest worker, or any other user defined location. Please note that the value must be between 10 and 1000 meters. The distance you input will round down to the nearest receptor distance used in the Technical Guidance (e.g., 19m will return value at 10m distance). |
| Control Scenario | EVR Phase I & EVR Phase II | Select the appropriate control scenario for your gas station. Please refer to technical Guidance for an explanation of the different control scenarios. Almost all gas stations in California are equipped with EVR Phase I and EVR Phase II controls. |
| Include Building Downwash Adjustments | yes | Building downwash may over estimate risk results. High results should be investigated further through site-specific health risk assessment. |

| Risk Value | Results |
|---|---|
| Max Residential Cancer Risk (chances/million) | 0.57 |
| Max Worker Cancer Risk (chances/million) | 0.05 |
| Chronic HI | 0.00 |
| Acute HI | 0.02 |

# 2022 CARB & CAPCOA Gasoline Service Station Industrywide Risk Assessment Look-up Tool
## Version 1.0 - February 18, 2022

| Required Value | User Defined Input | Instructions |
|---|---|---|
| Annual Throughput (gallons/year) | 8410000 | Enter your gas station's annual throughput in gallons of gasoline dispensed per year. |
| Hourly Dispensing Throughput (gallons/hour) | 2000 | The tool will calculate the maximum hourly vehicle fueling throughput based on annual throughput as defined by Table 10 of the 2020 Gasoline Service Station Industrywide Risk Assessment Technical Guidance Document (Technical Guidance). If a different value is desired please enter it into cell L4. |
| Hourly Loading Throughput (gallons/hour) | 8800 | The tool will calculate the maximum hourly loading throughput based on annual throughput as defined by Table 10 of the Technical Guidance. If a different value is desired please enter it into cell L5. |
| Meteorological Data | San Jose | Select appropriate meteorological data. Met sets provided include 2 rural (Redding and Lancaster) and 4 urban (Fresno, Ontario, San Diego, and San Jose) locations. Use whichever best correlates to your location. If you would like to use site-specific meteorological data please refer to the Variable Met Tool. |
| Distance to Nearest Resident (meters) | 275 | Enter the distance to the nearest residential receptor in meters as measured from the edge of the station canopy. Please note that the value must be between 10 and 1000 meters. The distance you input will round down to the nearest receptor distance used in the Technical Guidance (e.g., 19m will return value at 10m distance). |
| Distance to Nearest Business (meters) | 275 | Enter the distance to the nearest worker receptor in meters as measured from the edge of the station canopy. Please note that the value must be between 10 and 1000 meters. The distance you input will round down to the nearest receptor distance used in the Technical Guidance (e.g., 19m will return value at 10m distance). |
| Distance to Acute Receptor (meters) | 275 | Enter the distance where acute impacts are expected in meters as measured from the edge of the station canopy. This can be the distance to the property boundary, nearest resident, nearest worker, or any other user defined location. Please note that the value must be between 10 and 1000 meters. The distance you input will round down to the nearest receptor distance used in the Technical Guidance (e.g., 19m will return value at 10m distance). |
| Control Scenario | EVR Phase I & EVR Phase II | Select the appropriate control scenario for your gas station. Please refer to technical Guidance for an explanation of the different control scenarios. Almost all gas stations in California are equipped with EVR Phase I and EVR Phase II controls. |
| Include Building Downwash Adjustments | yes | Building downwash may over estimate risk results. High results should be investigated further through site-specific health risk assessment. |

| Risk Value | Results |
|---|---|
| Max Residential Cancer Risk (chances/million) | 1.00 |
| Max Worker Cancer Risk (chances/million) | 0.08 |
| Chronic HI | 0.00 |
| Acute HI | 0.05 |

# 2022 CARB & CAPCOA Gasoline Service Station Industrywide Risk Assessment Look-up Tool
## Version 1.0 - February 18, 2022

| Required Value | User Defined Input | Instructions |
|---|---|---|
| Annual Throughput (gallons/year) | 2400000 | Enter your gas station's annual throughput in gallons of gasoline dispensed per year. |
| Hourly Dispensing Throughput (gallons/hour) | 700 | The tool will calculate the maximum hourly vehicle fueling throughput based on annual throughput as defined by Table 10 of the 2020 Gasoline Service Station Industrywide Risk Assessment Technical Guidance Document (Technical Guidance). If a different value is desired please enter it into cell L4. |
| Hourly Loading Throughput (gallons/hour) | 8800 | The tool will calculate the maximum hourly loading throughput based on annual throughput as defined by Table 10 of the Technical Guidance. If a different value is desired please enter it into cell L5. |
| Meteorological Data | San Jose | Select appropriate meteorological data. Met sets provided include 2 rural (Redding and Lancaster) and 4 urban (Fresno, Ontario, San Diego, and San Jose) locations. Use whichever best correlates to your location. If you would like to use site-specific meteorological data please refer to the Variable Met Tool. |
| Distance to Nearest Resident (meters) | 265 | Enter the distance to the nearest residential receptor in meters as measured from the edge of the station canopy. Please note that the value must be between 10 and 1000 meters. The distance you input will round down to the nearest receptor distance used in the Technical Guidance (e.g., 19m will return value at 10m distance). |
| Distance to Nearest Business (meters) | 265 | Enter the distance to the nearest worker receptor in meters as measured from the edge of the station canopy. Please note that the value must be between 10 and 1000 meters. The distance you input will round down to the nearest receptor distance used in the Technical Guidance (e.g., 19m will return value at 10m distance). |
| Distance to Acute Receptor (meters) | 265 | Enter the distance where acute impacts are expected in meters as measured from the edge of the station canopy. This can be the distance to the property boundary, nearest resident, nearest worker, or any other user defined location. Please note that the value must be between 10 and 1000 meters. The distance you input will round down to the nearest receptor distance used in the Technical Guidance (e.g., 19m will return value at 10m distance). |
| Control Scenario | EVR Phase I & EVR Phase II | Select the appropriate control scenario for your gas station. Please refer to technical Guidance for an explanation of the different control scenarios. Almost all gas stations in California are equipped with EVR Phase I and EVR Phase II controls. |
| Include Building Downwash Adjustments | yes | Building downwash may over estimate risk results. High results should be investigated further through site-specific health risk assessment. |

| Risk Value | Results |
|---|---|
| Max Residential Cancer Risk (chances/million) | 0.29 |
| Max Worker Cancer Risk (chances/million) | 0.02 |
| Chronic HI | 0.00 |
| Acute HI | 0.03 |

# 2022 CARB & CAPCOA Gasoline Service Station Industrywide Risk Assessment Look-up Tool
## Version 1.0 - February 18, 2022

| Required Value | User Defined Input | Instructions |
|---|---|---|
| Annual Throughput (gallons/year) | 7600000 | Enter your gas station's annual throughput in gallons of gasoline dispensed per year. |
| Hourly Dispensing Throughput (gallons/hour) | 2000 | The tool will calculate the maximum hourly vehicle fueling throughput based on annual throughput as defined by Table 10 of the 2020 Gasoline Service Station Industrywide Risk Assessment Technical Guidance Document (Technical Guidance). If a different value is desired please enter it into cell L4. |
| Hourly Loading Throughput (gallons/hour) | 8800 | The tool will calculate the maximum hourly loading throughput based on annual throughput as defined by Table 10 of the Technical Guidance. If a different value is desired please enter it into cell L5. |
| Meteorological Data | San Jose | Select appropriate meteorological data. Met sets provided include 2 rural (Redding and Lancaster) and 4 urban (Fresno, Ontario, San Diego, and San Jose) locations. Use whichever best correlates to your location. If you would like to use site-specific meteorological data please refer to the Variable Met Tool. |
| Distance to Nearest Resident (meters) | 180 | Enter the distance to the nearest residential receptor in meters as measured from the edge of the station canopy. Please note that the value must be between 10 and 1000 meters. The distance you input will round down to the nearest receptor distance used in the Technical Guidance (e.g., 19m will return value at 10m distance). |
| Distance to Nearest Business (meters) | 180 | Enter the distance to the nearest worker receptor in meters as measured from the edge of the station canopy. Please note that the value must be between 10 and 1000 meters. The distance you input will round down to the nearest receptor distance used in the Technical Guidance (e.g., 19m will return value at 10m distance). |
| Distance to Acute Receptor (meters) | 180 | Enter the distance where acute impacts are expected in meters as measured from the edge of the station canopy. This can be the distance to the property boundary, nearest resident, nearest worker, or any other user defined location. Please note that the value must be between 10 and 1000 meters. The distance you input will round down to the nearest receptor distance used in the Technical Guidance (e.g., 19m will return value at 10m distance). |
| Control Scenario | EVR Phase I & EVR Phase II | Select the appropriate control scenario for your gas station. Please refer to technical Guidance for an explanation of the different control scenarios. Almost all gas stations in California are equipped with EVR Phase I and EVR Phase II controls. |
| Include Building Downwash Adjustments | yes | Building downwash may over estimate risk results. High results should be investigated further through site-specific health risk assessment. |

| Risk Value | Results |
|---|---|
| Max Residential Cancer Risk (chances/million) | 1.86 |
| Max Worker Cancer Risk (chances/million) | 0.15 |
| Chronic HI | 0.01 |
| Acute HI | 0.15 |